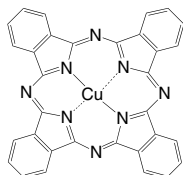


**LT-E201** | CuPC

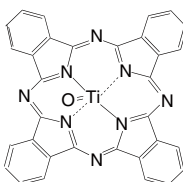
Copper(II) phthalocyanine

CAS No.	: 147-14-8
Grade	: Sublimed >99%
Formula	: C <sub>32</sub> H <sub>16</sub> CuN <sub>8</sub>
M.W.	: 576.08 g/mole
UV	: 345, 631 nm (in CH <sub>2</sub> Cl <sub>2</sub> )
PL	: 404 nm (film)
TGA	: >430°C (0.5% weight loss)

**LT-E206** | TiOPC

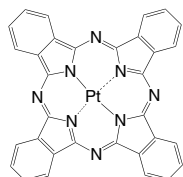
Titanium oxide phthalocyanine

CAS No.	: 26201-32-1
Grade	: Sublimed >99%
Formula	: C <sub>32</sub> H <sub>16</sub> N <sub>8</sub> O <sub>2</sub> Ti
M.W.	: 576.39 g/mole
UV	: 349,692 nm (in CH <sub>2</sub> Cl <sub>2</sub> )
PL	: 392 nm (film)
TGA	: >440°C (0.5% weight loss)

**LT-N219** | PtPC

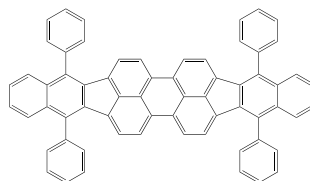
Phthalocyanine platinum

CAS No.	: 14075-08-2
Grade	: Sublimed >99% (TGA)
Formula	: C <sub>32</sub> H <sub>16</sub> N <sub>8</sub> Pt
M.W.	: 707.6 g/mole
UV	: 228, 270 nm (in CH <sub>2</sub> Cl <sub>2</sub> )
PL	: 372.5 nm (in CH <sub>2</sub> Cl <sub>2</sub> )
TGA	: >460 °C (0.5% weight loss)

**LT-N4003** | DBP

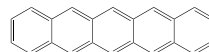
Dibenzo{[f,f']-4,4',7,7'-tetraphenyl}diindeno[1,2,3-cd:1',2',3'-lm]perylene

CAS No.	: 175606-05-0
Grade	: Sublimed >99% (HPLC)
Formula	: C <sub>64</sub> H <sub>36</sub>
M.W.	: 804.97 g/mole
UV	: 333 nm (in THF)
PL	: 610 nm (in THF)
TGA	: >350 °C (0.5% weight loss)

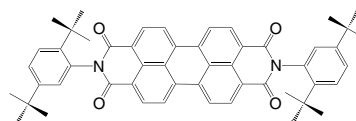
**LT-S901** | Pentacene

Pentacene

CAS No.	: 135-48-8
Grade	: Sublimed >99%
Formula	: C <sub>22</sub> H <sub>14</sub>
M.W.	: 278.35 g/mole
UV	: 300 nm (in CH <sub>2</sub> Cl <sub>2</sub> )
PL	: 509 nm (in CH <sub>2</sub> Cl <sub>2</sub> )
TGA	: >290 °C (0.5% weight loss)

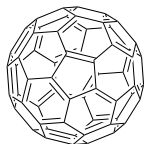
**LT-S902** | PDCDT*N,N'*-Bis(2,5-di-*tert*-butylphenyl)-3,4,9,10-perylene dicarboximide

CAS No.	: 83054-80-2
Grade	: Sublimed >99%
Formula	: C <sub>52</sub> H <sub>50</sub> N <sub>2</sub> O <sub>4</sub>
M.W.	: 766.96 g/mole
UV	: 524 nm (in CH <sub>2</sub> Cl <sub>2</sub> )
PL	: 544, 574 nm (in CH <sub>2</sub> Cl <sub>2</sub> )
TGA	: >350 °C (0.5% weight loss)



LT-S903 | C<sub>60</sub>Fullerene-C<sub>60</sub>

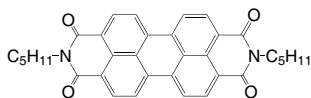
CAS No. : 99685-96-8  
 Grade : >99.5% (HPLC)  
 Formula : C<sub>60</sub>  
 M.W. : 720.64 g/mole  
 UV : 251 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 TGA : >450 °C (0.5% weight loss)



## LT-S904 | PenPTC

*N,N'*-Dipentyl-3,4,9,10-perylene dicarboximide

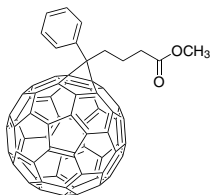
CAS No. : 76372-75-3  
 Grade : Sublimed >99%  
 Formula : C<sub>34</sub>H<sub>30</sub>N<sub>2</sub>O<sub>4</sub>  
 M.W. : 530.61 g/mole  
 UV : 523 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 PL : 535, 573 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 TGA : >350 °C (0.5% weight loss)



## LT-S905 | PCBM

(6,6)-Phenyl C<sub>61</sub> butyric acid methyl ester

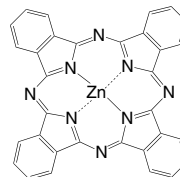
CAS No. : 160848-22-6  
 Grade : >99.5% (HPLC)  
 Formula : C<sub>72</sub>H<sub>14</sub>O<sub>2</sub>  
 M.W. : 910.88 g/mole  
 UV : 258, 328 nm (in THF)



## LT-S906 | ZnPC

Zinc phthalocyanine

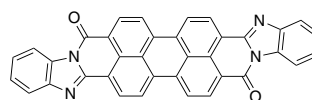
CAS No. : 14320-04-8  
 Grade : Sublimed >99%  
 Formula : C<sub>32</sub>H<sub>16</sub>N<sub>8</sub>Zn  
 M.W. : 577.92 g/mole  
 PL : 534 nm (in CH<sub>2</sub>Cl<sub>2</sub>)



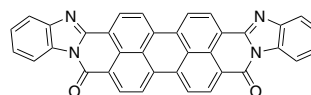
## LT-S918 | PTCBI

Bisbenzimidazo[2,1-a:1',2'-b]anthra[2,1,9-def:6,5,10-d'e'f'] diisoguinoline-10,21-dione, with *cis* isomer

CAS No. : 79534-91-1  
 Grade : Sublimed >99%  
 Formula : C<sub>36</sub>H<sub>16</sub>N<sub>4</sub>O<sub>2</sub>  
 M.W. : 536.54 g/mole  
 PL : 414 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 TGA : >420 °C (0.5% weight loss)



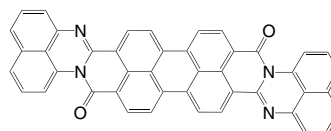
+



## LT-S919 | ADIDI

Anthra[2',1',9'':4,5,6'':5'',10'':4',5',6']diisoquino[2,1-a:2',1'-a'] dipiperidine-12,25-dione, with *cis* isomer

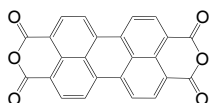
CAS No. : 6859-32-1  
 Grade : Sublimed >99%  
 Formula : C<sub>44</sub>H<sub>20</sub>N<sub>4</sub>O<sub>2</sub>  
 M.W. : 636.66 g/mole  
 PL : 413 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 TGA : >430 °C (0.5% weight loss)



## LT-S920 | PTCDA

3,4,9,10-Perylenetetracarboxylic dianhydride

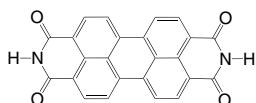
CAS No. : 128-69-8  
 Grade : Sublimed >99%  
 Formula :  $C_{24}H_8O_6$   
 M.W. : 392.32 g/mole  
 PL : 413 nm (in  $CH_2Cl_2$ )  
 TGA : >450 °C (0.5% weight loss)



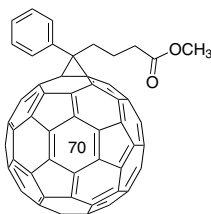
## LT-S921 | PTCDI

3,4,9,10-Perylenetetracarboxylic diimide

CAS No. : 81-33-4  
 Grade : Sublimed >99%  
 Formula :  $C_{24}H_{10}N_2O_4$   
 M.W. : 390.35 g/mole  
 PL : 413 nm (in  $CH_2Cl_2$ )  
 TGA : >450 °C (0.5% weight loss)

LT-S923 | PC<sub>71</sub>BM(6,6)-Phenyl C<sub>71</sub> butyric acid methyl ester, mixture of isomers

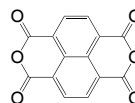
CAS No. : 609771-63-3  
 Grade : >99% (HPLC)  
 Formula :  $C_{82}H_{14}O_2$   
 M.W. : 1030.93 g/mole  
 UV : 372 nm (in Toluene)  
 TGA : >360 °C (0.5% weight loss)



## LT-S924 | NTCDA

1,4,5,8-Naphthalenetetracarboxylic dianhydride

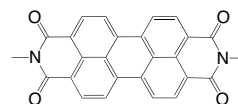
CAS No. : 81-30-1  
 Grade : Sublimed >99%  
 Formula :  $C_{14}H_4O_6$   
 M.W. : 268.18 g/mole  
 UV : 366 nm (in  $CH_2Cl_2$ )  
 PL : 394 nm (in  $CH_2Cl_2$ )



## LT-S925 | MePTC

*N,N'*-Dimethyl-3,4,9,10-perylene dicarboximide

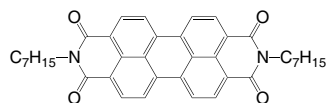
CAS No. : 5521-31-3  
 Grade : Sublimed product  
 Formula :  $C_{26}H_{14}N_2O_4$   
 M.W. : 418.4 g/mole  
 UV : 522 nm (in  $CH_2Cl_2$ )  
 PL : 571 nm (in  $CH_2Cl_2$ )  
 TGA : >440 °C (0.5% weight loss)



## LT-S926 | HepPTC

*N,N'*-Diheptyl-3,4,9,10-perylene dicarboximide

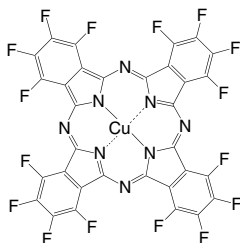
CAS No. : 95689-91-1  
 Grade : Sublimed >99%  
 Formula :  $C_{38}H_{38}N_2O_4$   
 M.W. : 586.72 g/mole  
 UV : 524 nm (in  $CH_2Cl_2$ )  
 PL : 537, 571 nm (in  $CH_2Cl_2$ )  
 TGA : >390 °C (0.5% weight loss)



LT-S928 | F<sub>16</sub>CuPC

Copper(II) 1,2,3,4,8,9,10,11,15,16,17,18,22,23,24,25-hexadecafluoro-29H,31H-phthalocyanine

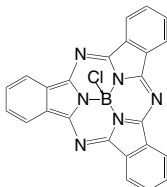
CAS No. : 14916-87-1  
 Grade : Sublimed product  
 Formula : C<sub>32</sub>CuF<sub>16</sub>N<sub>8</sub>  
 M.W. : 863.93 g/mole  
 UV : 690 nm (in THF)  
 TGA : >400 °C (0.5% weight loss)



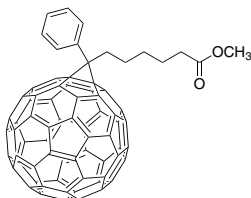
## LT-S943 | SubPC

Boron subphthalocyanine chloride

CAS No. : 36530-06-0  
 Grade : Sublimed >99%  
 Formula : C<sub>24</sub>H<sub>12</sub>BN<sub>6</sub>Cl  
 M.W. : 430.66 g/mole  
 UV : 565 nm (in DMF)  
 PL : 577 nm (in DMF)  
 TGA : >340 °C (0.5% weight loss)

LT-S946 | PC<sub>61</sub>HM(6,6)-Phenyl-C<sub>61</sub> methyl-hexanoate

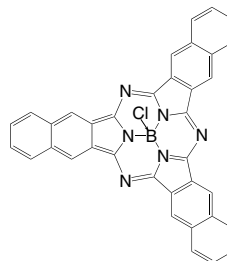
CAS No. : 1242279-48-6  
 Grade : >99% (HPLC)  
 Formula : C<sub>74</sub>H<sub>18</sub>O<sub>2</sub>  
 M.W. : 938.93 g/mole  
 UV : 328 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 TGA : >350 °C (0.5% weight loss)



## LT-S947 | SubNC

Boron sub-2,3-naphthalocyanine chloride

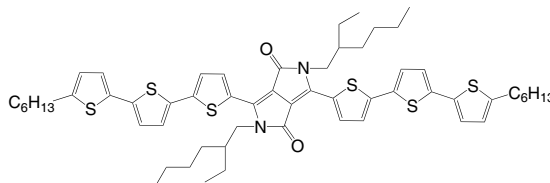
CAS No. : 142710-56-3  
 Grade : Sublimed >99%  
 Formula : C<sub>36</sub>H<sub>18</sub>BClN<sub>6</sub>  
 M.W. : 580.83 g/mole  
 UV : 658 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 TGA : >370 °C (0.5% weight loss)



## LT-S952 | SMDPPEH

2,5-Di-(2-ethylhexyl)-3,6-bis-(5'-n-hexyl-[2,2',5',2'']terthiophen-5-yl)-pyrrolo[3,4-c]pyrrole-1,4-dione

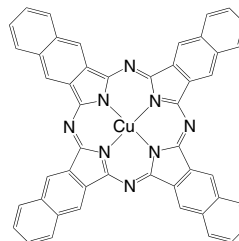
CAS No. : 1093468-95-1  
 Grade : >98% (NMR)  
 Formula : C<sub>58</sub>H<sub>72</sub>N<sub>2</sub>O<sub>2</sub>S<sub>6</sub>  
 M.W. : 1021.59 g/mole  
 UV : 644 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 TGA : >370 °C (0.5% weight loss)



## LT-S962 | CuNC

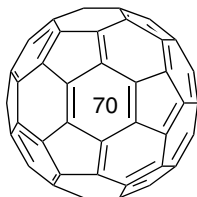
Copper(II) 2,3-naphthalocyanine

CAS No. : 33273-09-5  
 Grade : Sublimed >99% (TGA)  
 Formula : C<sub>48</sub>H<sub>24</sub>CuN<sub>8</sub>  
 M.W. : 776.30 g/mole  
 UV : 681 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 TGA : >430 °C (0.5% weight loss)



LT-S967 | C<sub>70</sub>(5,6)-Fullerene-C<sub>70</sub>

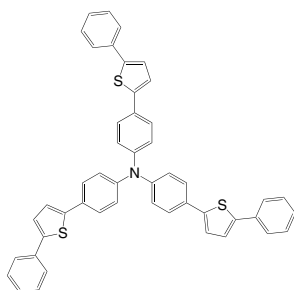
CAS No.	: 115383-22-7
Grade	: >99% (HPLC)
Formula	: C <sub>70</sub>
M.W.	: 840.75 g/mole
UV	: 344, 382 nm (in CH <sub>2</sub> Cl <sub>2</sub> )
TGA	: >450 °C (0.5% weight loss)



## LT-S984 | TPTPA

Tris(4-(5-phenylthiophen-2-yl)phenyl)amine

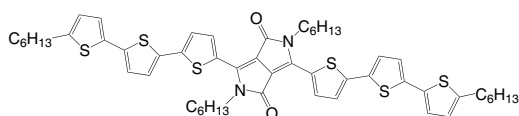
CAS No.	: 803727-09-5
Grade	: Sublimed >99% (HPLC)
Formula	: C <sub>48</sub> H <sub>33</sub> NS <sub>3</sub>
M.W.	: 719.98 g/mole
UV	: 416 nm (in CH <sub>2</sub> Cl <sub>2</sub> )
TGA	: >270 °C (0.5% weight loss)



## LT-S985 | SMDPPH

2,5-Dihexyl-3,6-bis-(5''-n-hexyl-[2,2',5',2'']terthiophen-5-yl)-pyrrolo[3,4-c]pyrrole-1,4-dione

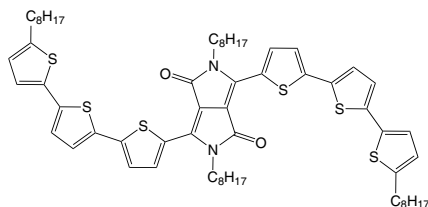
CAS No.	: 1077629-69-6
Grade	: >98% (NMR)
Formula	: C <sub>54</sub> H <sub>64</sub> N <sub>2</sub> O <sub>2</sub> S <sub>6</sub>
M.W.	: 965.49 g/mole
UV	: 644 nm (in CH <sub>2</sub> Cl <sub>2</sub> )
TGA	: >310 °C (0.5% weight loss)



## LT-S986 | SMDPPO

2,5-Dioctyl-3,6-bis-(5''-n-hexyl-[2,2',5',2'']terthiophen-5-yl)-pyrrolo[3,4-c]pyrrole-1,4-dione

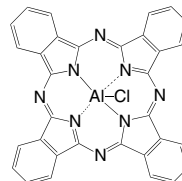
CAS No.	: 1435933-95-1
Grade	: >98% (NMR)
Formula	: C <sub>58</sub> H <sub>72</sub> N <sub>2</sub> O <sub>2</sub> S <sub>6</sub>
M.W.	: 1021.59 g/mole
UV	: 644 nm (in CH <sub>2</sub> Cl <sub>2</sub> )
TGA	: >280 °C (0.5% weight loss)



## LT-S9025 | AIPCCI

Aluminum phthalocyanine chloride

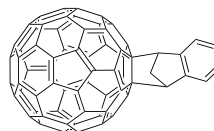
CAS No.	: 14154-42-8
Grade	: Sublimed >99%
Formula	: C <sub>32</sub> H <sub>16</sub> AlClN <sub>8</sub>
M.W.	: 574.97 g/mole
UV	: 675 nm (in DMF)
TGA	: >370 °C (0.5% weight loss)



## LT-S9029 | ICMA

C<sub>60</sub> derivative, indene-C<sub>60</sub> monoadduct

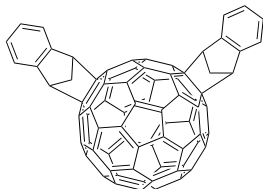
CAS No.	: 186682-36-0
Grade	: >99% (HPLC)
Formula	: C <sub>69</sub> H <sub>8</sub>
M.W.	: 836.82 g/mole
UV	: 318 nm (in CH <sub>2</sub> Cl <sub>2</sub> )
TGA	: >200 °C (0.5% weight loss)



## LT-S9030 | ICBA

C<sub>60</sub> derivative, indene-C<sub>60</sub> bisadduct, mixture of isomers

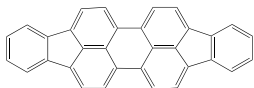
CAS No.	: 1207461-57-1
Grade	: >99% (HPLC)
Formula	: C <sub>78</sub> H <sub>16</sub>
M.W.	: 952.26 g/mole
UV	: 318 nm (in CH <sub>2</sub> Cl <sub>2</sub> )
TGA	: >200 °C (0.5% weight loss)



## LT-S9036 | DIP

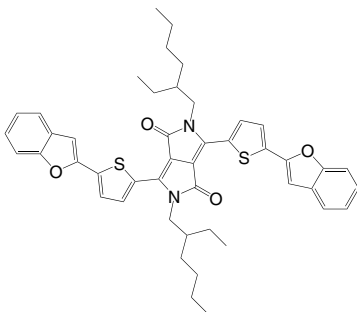
Diindeno[1,2,3-cd:1',2',3'-lm]perylene

CAS No.	: 188-94-3
Grade	: Sublimed product
Formula	: C <sub>32</sub> H <sub>16</sub>
M.W.	: 400.47 g/mole
UV	: 494, 532 nm (in CH <sub>2</sub> Cl <sub>2</sub> )
TGA	: >230 °C (0.5% weight loss)

LT-S9040 | DPP(TBFu)<sub>2</sub>

3,6-Bis(5-(benzofuran-2-yl)thiophen-2-yl)-2,5-bis(2-ethylhexyl)pyrrolo[3,4-c]pyrrole-1,4(2H,5H)-dione

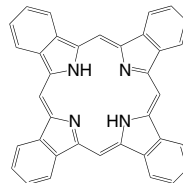
CAS No.	: 1241836-03-2
Grade	: >99% (NMR)
Formula	: C <sub>46</sub> H <sub>48</sub> N <sub>2</sub> O <sub>4</sub> S <sub>2</sub>
M.W.	: 757.01 g/mole
UV	: 584, 629 nm (in CH <sub>2</sub> Cl <sub>2</sub> )
TGA	: >330 °C (0.5% weight loss)



## LT-S9044 | BP

Tetrabenzoporphine

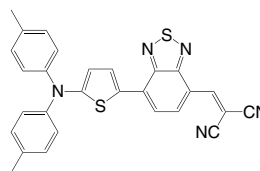
CAS No.	: 52952-31-5
Grade	: Sublimed product
Formula	: C <sub>36</sub> H <sub>22</sub> N <sub>4</sub>
M.W.	: 510.59 g/mole
TGA	: >200 °C (0.5% weight loss)



## LT-S9046 | DTDCTB

2-((7-(5-(Di-p-tolylamino)thiophen-2-yl)benzo[c][1,2,5]thiadiazol-4-yl)methylene)malononitrile

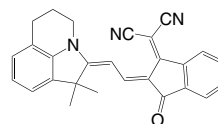
CAS No.	: 1335150-09-8
Grade	: >99% (HPLC)
Formula	: C <sub>28</sub> H <sub>19</sub> N <sub>5</sub> S <sub>2</sub>
M.W.	: 489.61 g/mole
UV	: 398, 622 nm (in CH <sub>2</sub> Cl <sub>2</sub> )
TGA	: >280 °C (0.5% weight loss)



## LT-S9047 | HB194

2-((Z)-2-((E)-2-(1,1-Dimethyl-5,6-dihydro-1H-pyrrolo[3,2,1-ij]quinolin-2(4H)-ylidene)ethylidene)-3-oxo-2,3-dihydro-1H-inden-1-ylidene)malononitrile

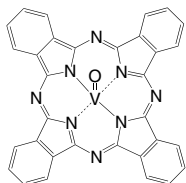
CAS No.	: 1207961-82-7
Grade	: >99% (HPLC)
Formula	: C <sub>27</sub> H <sub>21</sub> N <sub>3</sub> O
M.W.	: 403.48 g/mole
UV	: 481, 577 nm (in CH <sub>2</sub> Cl <sub>2</sub> )
TGA	: >280 °C (0.5% weight loss)



## LT-S9053 | VOPC

Oxyvanadium phthalocyanine

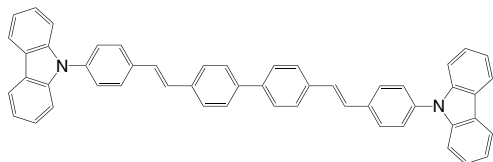
CAS No. : 13930-88-6  
 Grade : Sublimed product  
 Formula :  $C_{32}H_{16}N_8OV$   
 M.W. : 579.47 g/mole  
 UV : 338, 684 nm (in  $CH_2Cl_2$ )



## LT-S9058 | BSB4

4,4'-Bis(4-(9H-carbazol-9-yl)styryl)biphenyl

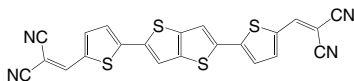
CAS No. : 850594-34-2  
 Grade : Sublimed >99%  
 Formula :  $C_{52}H_{36}N_2$   
 M.W. : 688.86 g/mole  
 UV : 367 nm (in THF)  
 PL : 424, 444 nm (in THF)  
 TGA : >320 °C (0.5% weight loss)



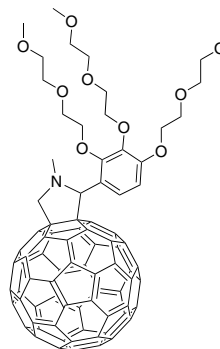
## LT-S9061 | FT2TDMN

2,2'-(5,5'-(Thieno[3,2-b]thiophene-2,5-diyl)bis(thiophene-5,2-diyl))bis(methan-1-yl-1-ylidene)dimalononitrile

CAS No. : 1432613-96-1  
 Grade : Sublimed >99%  
 Formula :  $C_{22}H_8N_4S_4$   
 M.W. : 456.59 g/mole  
 UV : 499 nm (in Toluene)  
 TGA : >350 °C (0.5% weight loss)

LT-S9071 | PrC<sub>60</sub>MA*C*<sub>60</sub>,*N,N,N*-trimethyl-1-(2,3,4-tris(2-(2-methoxyethoxy)ethoxy)phenyl)methanaminium monoadduct

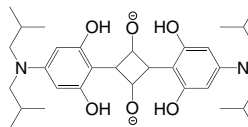
CAS No. : 1373957-22-2  
 Grade : >99% (HPLC)  
 Formula :  $C_{84}H_{41}NO_9$   
 M.W. : 1208.26 g/mole  
 TGA : >300 °C (0.5% weight loss)



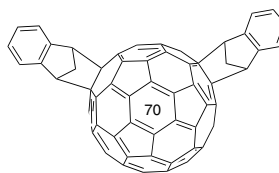
## LT-S9074 | DIBSQ

2,4-Bis(4-(diisobutylamino)-2,6-dihydroxyphenyl)cyclobutane-1,3-bis(olate)

CAS No. : 432493-75-9  
 Grade : >99% (HPLC)  
 Formula :  $C_{32}H_{48}N_2O_6$   
 M.W. : 556.7 g/mole  
 TGA : >270 °C (0.5% weight loss)

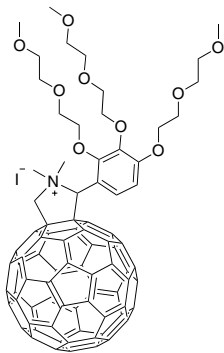
LT-S9078 | IC<sub>70</sub>BAIndene-C<sub>70</sub> bisadduct, mixture of isomers

CAS No. : 1563175-93-8  
 Grade : >99% (HPLC)  
 Formula :  $C_{88}H_{16}$   
 M.W. : 1073.04 g/mole  
 UV : 290 nm (in  $CH_2Cl_2$ )  
 TGA : >180 °C (0.5% weight loss)



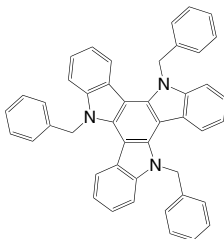
**LT-S9079** | PrC<sub>60</sub>MA Iodide saltC<sub>60</sub>,N,N,N-Trimethyl-1-(2,3,4-tris(2-(2-methoxyethoxy)ethoxy)phenyl)dimethanaminium monoadduct iodide salt

CAS No. : 1373957-23-3  
 Grade : >99% (HPLC)  
 Formula : C<sub>85</sub>H<sub>44</sub>INO<sub>9</sub>  
 M.W. : 1350.16 g/mole

**LT-S9084** | TBDI

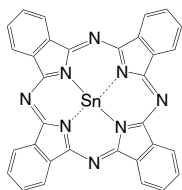
5,10,15-Tribenzyl-10,15-dihydro-5H-diindolo[3,2-a:3',2'-c]carbazole

CAS No. : 1092536-44-1  
 Grade : Sublimed >99% (HPLC)  
 Formula : C<sub>45</sub>H<sub>33</sub>N<sub>3</sub>  
 M.W. : 615.76 g/mole  
 TGA : >270 °C (0.5% weight loss)

**LT-S9086** | SnPC

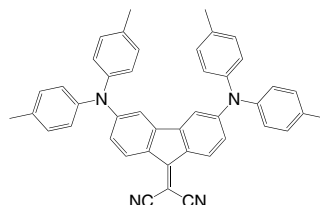
Tin(II) phthalocyanine

CAS No. : 15304-57-1  
 Grade : Sublimed >99%  
 Formula : C<sub>32</sub>H<sub>16</sub>N<sub>8</sub>Sn  
 M.W. : 631.23 g/mole

**LT-S9089** | 3,6-DTNFMN

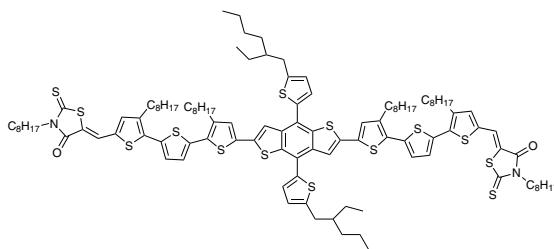
2-(3,6-Bis(di-p-tolylamino)-9H-fluoren-9-ylidene)malononitrile

CAS No. : 1527494-19-4  
 Grade : Sublimed >99% (HPLC)  
 Formula : C<sub>44</sub>H<sub>34</sub>N<sub>4</sub>  
 M.W. : 618.77 g/mole  
 UV : 291, 493 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 TGA : >280 °C (0.5% weight loss)

**LT-S9123** | SMPV1

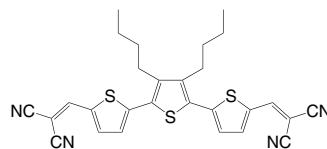
2,6-Bis[2,5-bis(3-octylrhodanine)-(3,3-dioctyl-2,2':5,2''-terthiophene)]-4,8-bis((5-ethylhexyl)thiophen-2-yl)benzo[1,2-b:4,5-b']dithiophene

CAS No. : 1651168-29-4  
 Grade : >99% (NMR)  
 Formula : C<sub>114</sub>H<sub>152</sub>N<sub>2</sub>O<sub>2</sub>S<sub>14</sub>  
 M.W. : 2031.35 g/mole  
 UV : 360, 504 nm (in CH<sub>2</sub>Cl<sub>2</sub>)

**LT-S9125** | DCV3T

3',4'-Dibutyl-5,5''-bis(dicyanovinyl)-2,2':5',2''-terthiophene

CAS No. : 908588-68-1  
 Grade : >99% (HPLC)  
 Formula : C<sub>28</sub>H<sub>24</sub>N<sub>4</sub>S<sub>3</sub>  
 M.W. : 512.71 g/mole  
 UV : 498 nm (in CH<sub>2</sub>Cl<sub>2</sub>)

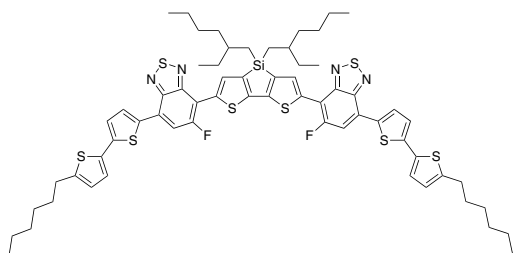




**LT-S9138** | F-DTS, DTS(FBTTh2)2 **NEW**

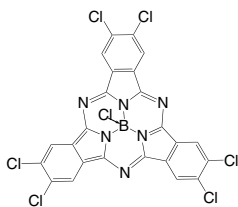
7,7'-[4,4-Bis(2-ethylhexyl)-4H-silolo[3,2-b:4,5-b']dithiophene-2,6-diyl]bis[6-fluoro-4-(5'-hexyl-[2,2'-bithiophen]-5-yl)benzo[c][1,2,5]thiadiazole]

CAS No. : 1402460-84-7  
 Grade : >99%  
 Formula : C<sub>64</sub>H<sub>72</sub>F<sub>2</sub>N<sub>4</sub>S<sub>8</sub>Si  
 M.W. : 1219.89 g/mole

**LT-S9149** | Cl<sub>6</sub>SubPC

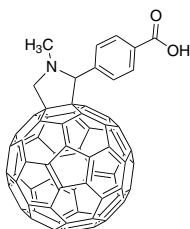
2,3,9,10,16,17-Hexachlorinated boron subphthalocyanine chloride

CAS No. : 309963-65-3  
 Grade : Sublimed >99%  
 Formula : C<sub>24</sub>H<sub>6</sub>BCl<sub>7</sub>N<sub>6</sub>  
 M.W. : 637.33 g/mole  
 UV : 578 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 TGA : >300 °C (0.5% weight loss)

**LT-S9161** | C<sub>60</sub>-COOH-SAM

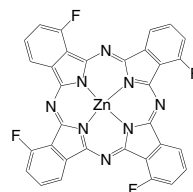
4-(1',5'-Dihydro-1'-methyl-2'H-[5,6]fullereno-C<sub>60</sub>-1h-[1,9-c]-pyrrol-2'-yl)benzoic acid

CAS No. : 631918-72-4  
 Grade : >99%  
 Formula : C<sub>70</sub>H<sub>11</sub>NO<sub>2</sub>  
 M.W. : 897.84 g/mole  
 UV : 345 nm (in CH<sub>2</sub>Cl<sub>2</sub>)

**LT-S9171** | F<sub>4</sub>ZnPC

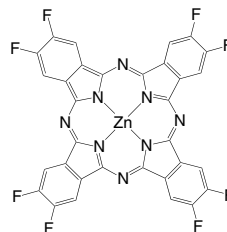
Zinc(II)-1,8,15,22-tetrafluoro-29H,31H-phthalocyanine, mixture of isomers

CAS No. : 1120355-28-3  
 Grade : Sublimed >99%  
 Formula : C<sub>32</sub>H<sub>12</sub>F<sub>4</sub>N<sub>8</sub>Zn  
 M.W. : 649.89 g/mole  
 UV : 681 nm (in CHCl<sub>3</sub>)  
 TGA : >250 °C (0.5% weight loss)

**LT-S9172** | F<sub>8</sub>ZnPC

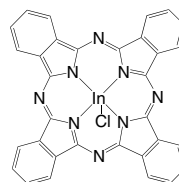
Zinc(II)-2,3,9,10,16,17,23,24-octafluoro-29H,31H-phthalocyanine

CAS No. : 676519-80-5  
 Grade : Sublimed >99%  
 Formula : C<sub>32</sub>H<sub>8</sub>F<sub>8</sub>N<sub>8</sub>Zn  
 M.W. : 721.86 g/mole  
 UV : 338, 656 nm (in DMF)  
 TGA : >300 °C (0.5% weight loss)

**LT-S9176** | InClPC

Indium(III) phthalocyanine chloride

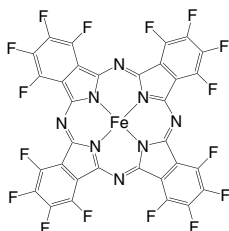
CAS No. : 19631-19-7  
 Grade : Sublimed >99%  
 Formula : C<sub>32</sub>H<sub>16</sub>ClInN<sub>8</sub>  
 M.W. : 662.79 g/mole  
 UV : 358, 683 nm (in CHCl<sub>3</sub>)  
 TGA : >300 °C (0.5% weight loss)



LT-S9177 | F<sub>16</sub>FePC

Iron(II) 1,2,3,4,8,9,10,11,15,16,17,18,22,23,24,25-hexadecafluoro-29H,31H-phthalocyanine

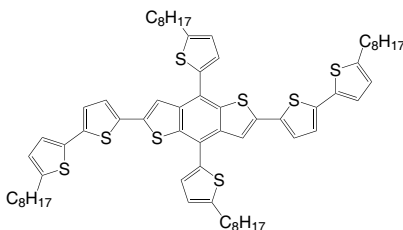
CAS No. : 23844-93-1  
 Grade : Sublimed >99%  
 Formula : C<sub>32</sub>F<sub>16</sub>FeN<sub>8</sub>  
 M.W. : 856.22 g/mole  
 UV : 333, 627 nm (in Acetone)  
 TGA : >300 °C (0.5% weight loss)



## LT-S9179 | BDT2TH

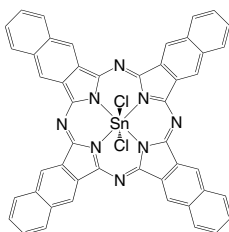
2,6-Bis[(5'-octyl)[2,2'-bithiophene]][4,8-bis(5-octyl-2-thienyl)benzo[1,2-b:4,5-b']dithiophene]

Grade : >99% (NMR)  
 Formula : C<sub>66</sub>H<sub>82</sub>S<sub>8</sub>  
 M.W. : 1131.88 g/mole  
 UV : 249, 359, 442 nm (in CHCl<sub>3</sub>)

LT-S9180 | SnNCCL<sub>2</sub>

Tin(IV) 2,3-naphthalocyanine dichloride

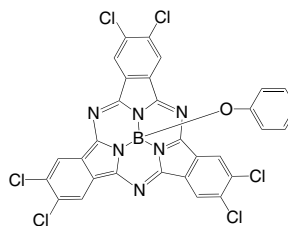
CAS No. : 26857-61-4  
 Grade : Sublimed product  
 Formula : C<sub>48</sub>H<sub>24</sub>Cl<sub>2</sub>N<sub>8</sub>Sn  
 M.W. : 902.37 g/mole  
 TGA : >300 °C (0.5% weight loss)



## LT-S9181 | PhO-BSubPC

[2,3,9,10,16,17-Hexachloro-7,12,14,19-diimino-21,5-nitrilo-5H-tribenzo[*c,h,m*][1,6,11]triazacyclopentadecinato(2)-N22,N23,N24]phenoxy-Boron

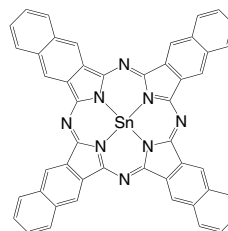
CAS No. : 1309390-01-9  
 Grade : >99% (HPLC)  
 Formula : C<sub>30</sub>H<sub>11</sub>BCl<sub>6</sub>N<sub>6</sub>O  
 M.W. : 694.98 g/mole  
 UV : 267, 318, 569 nm (in CHCl<sub>3</sub>)



## LT-S9182 | SnNC

Tin(II) 2,3-naphthalocyanine

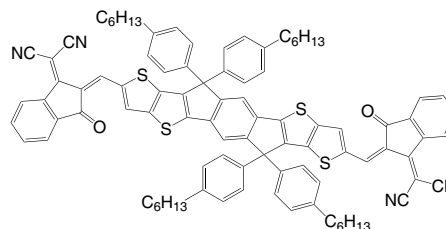
CAS No. : 110479-58-8  
 Grade : Sublimed product  
 Formula : C<sub>48</sub>H<sub>24</sub>N<sub>8</sub>Sn  
 M.W. : 831.47 g/mole  
 TGA : >300 °C (0.5% weight loss)



## LT-S9212 | ITIC

3,9-Bis(2-methylene-(3-(1,1-dicyanomethylene)-indanone))-5,5,11,11-tetrakis(4-hexylphenyl)-dithieno[2,3-d':2',3'-d']-s-indaceno[1,2-b:5,6-b']-dithiophene

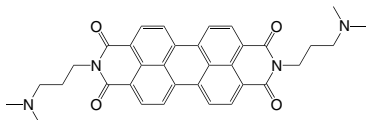
CAS No. : 1664293-06-4  
 Grade : >99% (HPLC)  
 Formula : C<sub>94</sub>H<sub>82</sub>N<sub>4</sub>O<sub>2</sub>S<sub>4</sub>  
 M.W. : 1427.94 g/mole



**LT-S9268** | PDIN

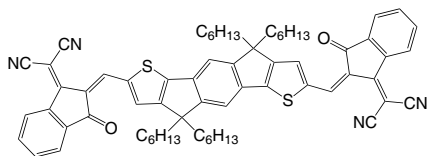
2,9-Bis(3-(dimethylamino)propyl)anthra[2,1,9-def:6,5,10-d'e'f']diisoquinoline-1,3,8,10(2*H*,9*H*)-tetraone

CAS No. : 117901-97-0  
 Formula : C<sub>34</sub>H<sub>32</sub>N<sub>4</sub>O<sub>4</sub>  
 M.W. : 560.64 g/mole  
 HOMO : -6.05 eV  
 LUMO : -3.72 eV

**LT-S9279** | IDIC

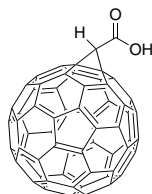
2,2'-[(4,4,9,9-Tetrahexyl-4,9-dihydro-s-indaceno[1,2-b:5,6-b']-dithiophene-2,7-diyl)bis[methylidyne(3-oxo-1*H*-indene-2,1(3*H*)-diylidene)]]bis-propanedinitrile

CAS No. : 1883441-92-6  
 Grade : >98% (HPLC)  
 Formula : C<sub>66</sub>H<sub>66</sub>N<sub>4</sub>O<sub>2</sub>S<sub>2</sub>  
 M.W. : 1011.39 g/mole  
 UV : 664 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 HOMO : -5.69 eV  
 LUMO : -3.91 eV  
 PCE : 8.71%(with PDBT-T<sub>1</sub>)

**LT-S9281** | C<sub>60</sub>-COOH

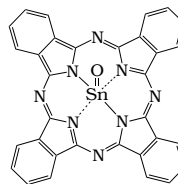
3*H*-Cyclopropa[1,9][5,6]fullerene-C<sub>60</sub>-Ih-3'-carboxylic acid

CAS No. : 155116-19-1  
 Grade : >99%  
 Formula : C<sub>62</sub>H<sub>2</sub>O<sub>2</sub>  
 M.W. : 778.68 g/mole

**LT-S9284** | SnOPC

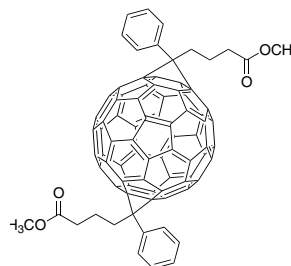
Oxo-phthalocyaninato-tin (IV)

CAS No. : 57156-42-0  
 Grade : Sublimed >99%  
 Formula : C<sub>32</sub>H<sub>16</sub>N<sub>8</sub>OSn  
 M.W. : 647.23 g/mole

**LT-S9422** | Bis PC<sub>62</sub>BM

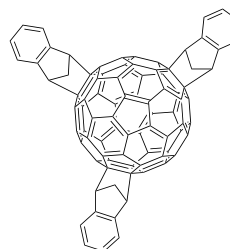
3'*H*,3''*H*-Dicyclopropa[1,9:16,17][5,6]-fullerene-C<sub>60</sub>-Ih-3',3''-dibutanoic acid, 3',3''-diphenyl-3',3''-dimethyl ester, stereoisomer

CAS No. : 1048679-01-1  
 Grade : >99.5%  
 Formula : C<sub>84</sub>H<sub>28</sub>O<sub>4</sub>  
 M.W. : 1101.12 g/mole

**LT-S9423** | IC<sub>60</sub>TA

1',1''',4',4'''-Hexahydrotri[1,4]methanonaphtho[2',3':1,2'',3''':23,42;2''',3''':32,50][5,6]fullerene-C<sub>60</sub>-Ih

CAS No. : 1363385-54-9  
 Grade : >96%  
 Formula : C<sub>87</sub>H<sub>24</sub>  
 M.W. : 1069.12 g/mole

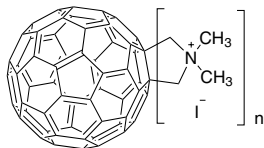


### LT-S9424

C60-(N,N-dimethyl pyrrolidinium iodide) Adduct

Grade : >99%

Formula :  $C_{60}(C_4H_{10}NI)_n$

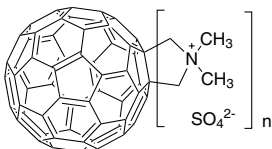


### LT-S9425

C60-n-(N,N-dimethylpyrrolidinium sulfate)

Grade : >99%

Formula :  $C_{60}(C_4H_{10}NSO_4)_n$

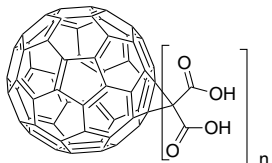


### LT-S9426

C<sub>60</sub>-(malonic acid)<sub>n</sub>

Grade : >99% n > 5

Formula :  $C_{60}(C_3H_2O_4)_n$

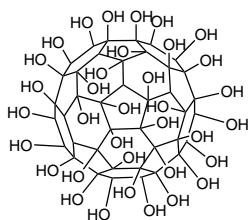


### LT-S9427

Fullerol C<sub>60</sub>(OH)<sub>n</sub>

Grade : >99.5% n = 30-50

Formula :  $C_{60}(OH)_n$



### LT-S9428

Bis-PC<sub>72</sub>BM

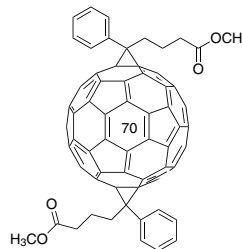
3'H,3''H-Dicyclopropa[8,25:53,54][5,6]-fullerene-C<sub>70</sub>-D5h(6)-3',3''-dibutanoic acid,3',3''-diphenyl-,3',3''-dimethyl ester

CAS No. : 1244023-34-4

Grade : >98%

Formula :  $C_{94}H_{28}O_4$

M.W. : 1221.23 g/mole

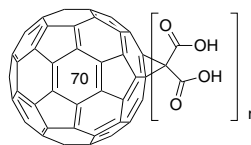


### LT-S9429

C<sub>70</sub>-(malonic acid)<sub>n</sub>

Grade : >99%

Formula :  $C_{70}(C_3H_2O_4)_n$



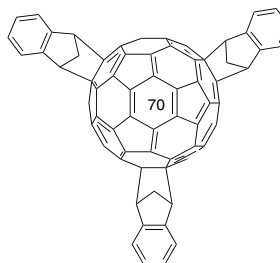
### LT-S9431

IC<sub>70</sub>TA

Indene C70 Tris Adduct

Grade : >96%

Formula :  $C_{97}H_{24}$

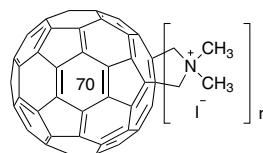


### LT-S9432

C70-(N,N-dimethyl pyrrolidinium iodide) Adduct

Grade : >99%

Formula :  $C_{70}(C_4H_{10}NI)_n$



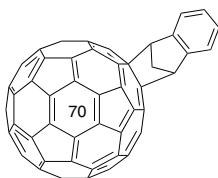
LT-S9433 | IC<sub>70</sub>MA1',4'-Dihydro-1,4-methanonaphtho[2',3':8,25]fullerene-C<sub>70</sub>-D<sub>3</sub>h(6)

CAS No. : 1287237-10-8

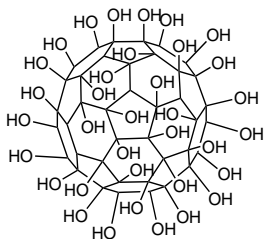
Grade : &gt;98%

Formula : C<sub>79</sub>H<sub>8</sub>

M.W. : 956.91 g/mole

LT-S9434 | Fullerol C<sub>70</sub>(OH)<sub>n</sub>

Grade : &gt;99.5% water soluble, &gt;50 mg/ml

Formula : C<sub>70</sub>(OH)<sub>n</sub>

## LT-S9447 | IT-4F,ITIC-2F

2,2'-[[[6,6,12,12-Tetrakis(4-hexylphenyl)-6,12-dihydrodithieno[2,3-d:2',3'-d']-s-indaceno[1,2-b:5,6-b']dithiophene-2,8-diyl]]bis[methyldiyne(5,6-difluoro-3-oxo-1H-indene-2,1(3H)-diylidene)]]bis[propanedinitrile]

CAS No. : 2097998-59-7

Grade : &gt;98% (HPLC)

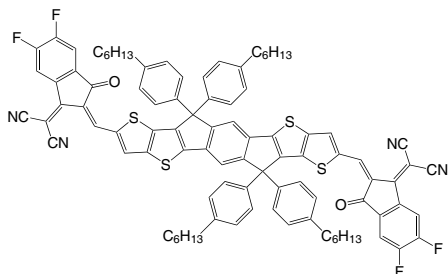
Formula : C<sub>94</sub>H<sub>78</sub>F<sub>4</sub>N<sub>4</sub>O<sub>2</sub>S<sub>4</sub>

M.W. : 1499.9 g/mole

HOMO : -5.69 eV

LUMO : -4.07 eV

PCE : 13.1% (with PBDB-T-SF)e



## LT-S9466 | FBR

5,5'-[(9,9-Dioctyl-9H-fluorene-2,7-diyl)bis(2,1,3-benzothiazole-7,4-diylmethyldiyne)]bis[3-ethyl-2-thioxo-4-thiazolidinone]

CAS No. : 1644381-95-2

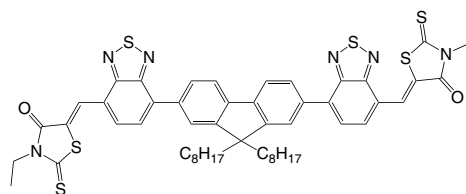
Grade : &gt;98%

Formula : C<sub>53</sub>H<sub>56</sub>N<sub>6</sub>O<sub>2</sub>S<sub>6</sub>

M.W. : 1001.44 g/mole

HOMO : -5.7 eV

LUMO : -3.57 eV

PCE : 4.11% (with P<sub>3</sub>HT)

## LT-S9468 | IDFBF

(5Z,5'Z)-5,5'-((7,7'-(6,6,12,12-Tetraoctyl-6,12-dihydroindeno[1,2-b]fluorene-2,8-diyl)bis(benzo[c][1,2,5]thiadiazole-7,4-diyl))bis(methanylylidene))bis(3-ethyl-2-thioxothiazolidin-4-one)

CAS No. : 2088628-64-0

Grade : &gt;98%

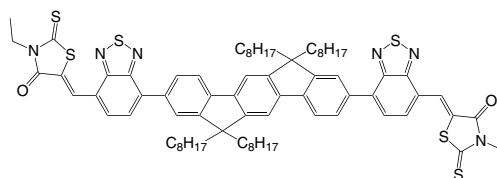
Formula : C<sub>76</sub>H<sub>92</sub>N<sub>6</sub>O<sub>2</sub>S<sub>6</sub>

M.W. : 1313.97 g/mole

HOMO : -5.75 eV

LUMO : -3.70 eV

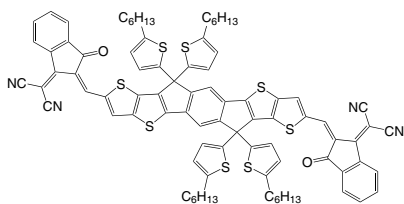
PCE : 11.0% (with PTB7-Th)



## LT-S9471 | ITIC-Th

3,9-Bis(2-methylene-(3-(1,1-dicyanomethylene)-indanone))-5,5,11,11-tetrakis(5-hexylthiophenyl)-dithieno[2,3-d:2',3'-d']-s-indaceno[1,2-b:5,6-b']-dithiophene

CAS No. : 1889344-13-1  
 Grade : >98%  
 Formula :  $C_{86}H_{74}N_4O_2S_8$   
 M.W. : 1452.05 g/mole  
 HOMO : -5.66 eV  
 LUMO : -3.93 eV  
 PCE : 9.6% (with PDBT-T1)

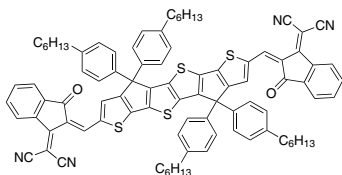


## LT-S9472 | IHIC

NEW

2,2'-[[4,4,9,9-Tetrakis(4-hexylphenyl)-4,9-dihydrothieno[3',2':4,5]cyclopenta[1,2-b]thieno[2'',3'':3',4']cyclopenta[1',2':4,5]thieno[2,3-d]thiophene-2,7-diyl]bis[methylydene(3-oxo-1H-indene-2,1(3H)-diylidene)]bis-propanedinitrile

CAS No. : 2127354-15-6  
 Grade : >98% (NMR)  
 Formula :  $C_{90}H_{80}N_4O_2S_4$   
 UV : 796 nm  
 M.W. : 1377.88 g/mole  
 HOMO : -5.28 eV  
 LUMO : -3.87 eV

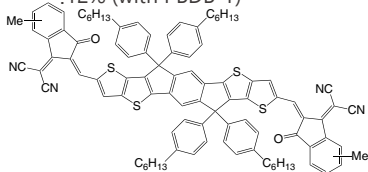


## LT-S9473 | IT-M

NEW

3,9-bis(2-methylene-((3-(1,1-dicyanomethylene)-6/7-methyl-indanone))-5,5,11,11-tetrakis(4-hexylphenyl)-dithieno[2,3-d:2',3'-d']-s-indaceno[1,2-b:5,6-b']dithiophene

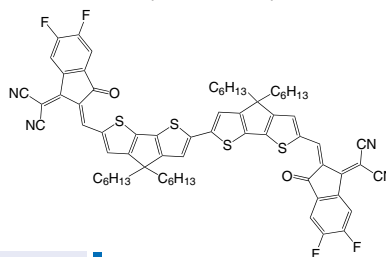
CAS No. : 2047352-80-5 / 2047352-83-8 / 2047352-86-1  
 Grade : >99%, with isomers (HPLC)  
 Formula :  $C_{96}H_{86}N_4O_2S_4$   
 M.W. : 1456 g/mole  
 HOMO : -5.58 eV  
 LUMO : -3.98 eV  
 PCE : 12% (with PBDB-T)



## LT-S9475 | CPDT-4F

2,2'-((2Z,2'Z)-((4,4,4',4'-Tetrahexyl-4H,4'H-[2,2'-bi(cyclopenta[1,2-b:5,4-b']dithiophene))-6,6'-diyl)bis(methanylydene))bis(5,6-difluoro-3-oxo-2,3-dihydro-1H-indene-2,1-diylidene))dimalononitrile

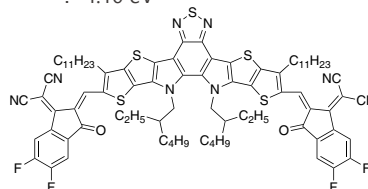
Grade : >98% (HPLC)  
 Formula :  $C_{68}H_{62}F_4N_4O_2S_4$   
 M.W. : 1171.50 g/mole  
 HOMO : -5.26 eV  
 LUMO : -3.87 eV  
 PCE : 9.47% (with PBDB-T)



## LT-S9476 | Y6(BTPPTT-4F)

2,2'-((2Z,2'Z)-((12,13-Bis(2-ethylhexyl)-3,9-diundecyl-12,13-dihydro-[1,2,5]thiadiazolo[3,4-e]thieno-[2'',3'':4',5']thieno[2',3':4,5]pyrrolo[3,2-g]thieno-[2',3':4,5]thieno[3,2-b]indole-2,10-diyl)bis(methanylydene))-bis(5,6-difluoro-3-oxo-2,3-dihydro-1H-indene-2,1-diylidene))dimalononitrile

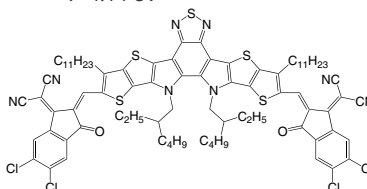
CAS No. : 2304444-49-1  
 Grade : >99% (NMR)  
 Formula :  $C_{82}H_{86}F_4N_8O_2S_5$   
 M.W. : 1451.93 g/mole  
 UV : 731 nm (in  $CHCl_3$ )  
 HOMO : -5.65 eV  
 LUMO : -4.10 eV



## LT-S9491 | Y7, BTP-4CI

2,2'-((2Z,2'Z)-((12,13-Bis(2-ethylhexyl)-3,9-diundecyl-12,13-dihydro-[1,2,5]thiadiazolo[3,4-e]thieno-[2'',3'':4',5']thieno[2',3':4,5]pyrrolo[3,2-g]thieno-[2',3':4,5]thieno[3,2-b]indole-2,10-diyl)bis(methanylydene))-bis(5,6-dichloro-3-oxo-2,3-dihydro-1H-indene-2,1-diylidene))dimalononitrile

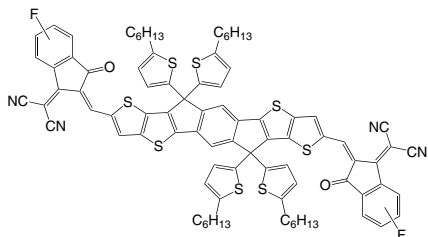
CAS NO : 2447642-40-0  
 Grade : >99% (NMR)  
 Formula :  $C_{82}H_{86}Cl_4N_8O_2S_5$   
 M.W. : 1517.75 g/mole  
 UV : 746, 839 nm (in  $CHCl_3$ )  
 HOMO : -5.68 eV  
 LUMO : -4.14 eV



## LT-S9492 | ITIC-Th1

3,9-Bis(2-methylene-(3-(1,1-dicyanomethylene)-6/7-fluoro-indanone))-5,5,11,11-tetrakis(5-hexylthiényl)-dithieno[2,3-d:2',3'-d']-s-indaceno[1,2-b:5,6-b']dithiophene

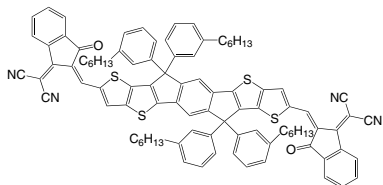
Grade	: >99% (NMR)
Formula	: C <sub>86</sub> H <sub>72</sub> F <sub>2</sub> N <sub>4</sub> O <sub>2</sub> S <sub>8</sub>
M.W.	: 1488.03 g/mole
UV	: 677 nm (in CH <sub>2</sub> Cl <sub>2</sub> )
HOMO	: -5.74 eV
LUMO	: -4.01 eV
PCE	: 12.1% (with FTAZ)



## LT-S9493 | m-ITIC

3,9-Bis(2-methylene-(3-(1,1-dicyanomethylene)-indanone))-5,5,11,11-tetrakis(3-hexylphenyl)-dithieno[2,3-d:2',3'-d']-s-indaceno[1,2-b:5,6-b']dithiophene

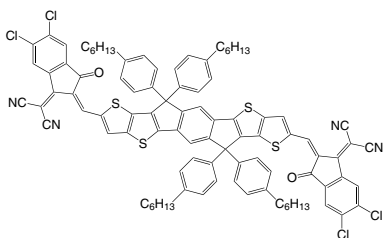
Grade	: >99% (NMR)
Formula	: C <sub>94</sub> H <sub>82</sub> N <sub>4</sub> O <sub>2</sub> S <sub>4</sub>
M.W.	: 1427.94 g/mole
HOMO	: -5.58 eV
LUMO	: -3.98 eV
PCE	: 11.77% (with J61)



## LT-S9494 | IT-4Cl,ITIC-2Cl

3,9-Bis(2-methylene-(3-(1,1-dicyanomethylene)-6,7-dichloro-indanone))-5,5,11,11-tetrakis(4-hexylphenyl)-dithieno[2,3-d:2',3'-d']-s-indaceno[1,2-b:5,6-b']dithiophene

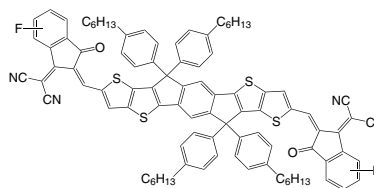
CAS No.	: 2253663-81-7
Grade	: >99% (NMR)
Formula	: C <sub>94</sub> H <sub>78</sub> Cl <sub>4</sub> N <sub>4</sub> O <sub>2</sub> S <sub>4</sub>
M.W.	: 1565.72 g/mole
HOMO	: -5.75 eV
LUMO	: -4.09 eV
PCE	: 13.45% (with PM6)



## LT-S9495 | IT-2F

3,9-Bis(2-methylene-(3-(1,1-dicyanomethylene)-6/7-fluoro-indanone))-5,5,11,11-tetrakis(4-hexylphenyl)-dithieno[2,3-d:2',3'-d']-s-indaceno[1,2-b:5,6-b']dithiophene

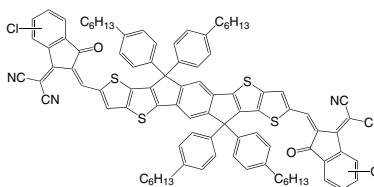
Grade	: >99% (NMR)
Formula	: C <sub>96</sub> H <sub>88</sub> F <sub>2</sub> N <sub>4</sub> O <sub>2</sub> S <sub>4</sub>
M.W.	: 1496.01 g/mole
UV	: 685, 721 nm (in CHCl <sub>3</sub> )
HOMO	: -5.41 eV
LUMO	: -3.87 eV
PCE	: 12.08% (with PBDB-T)



## LT-S9496 | IT-2Cl

3,9-Bis(2-methylene-(3-(1,1-dicyanomethylene)-6/7-chloro-indanone))-5,5,11,11-tetrakis(4-hexylphenyl)-dithieno[2,3-d:2',3'-d']-s-indaceno[1,2-b:5,6-b']dithiophene

Grade	: >99% (NMR)
Formula	: C <sub>94</sub> H <sub>80</sub> Cl <sub>2</sub> N <sub>4</sub> O <sub>2</sub> S <sub>4</sub>
M.W.	: 1496.83 g/mole
UV	: 690, 735 nm (in CHCl <sub>3</sub> )
HOMO	: -5.42 eV
LUMO	: -3.90 eV
PCE	: 10.77% (with PBDB-T)

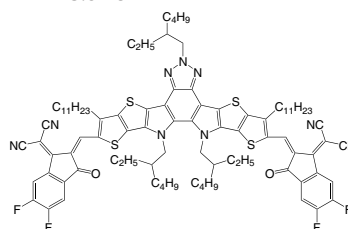


## LT-S9505 | Y16-4F, Y11

**NEW**

2,2'-((2Z,2'Z)-((6,12,13-Tris(2-ethylhexyl)-3,9-diundecyl-12,13-dihydro-6H-thieno[2'',3'':4,5]thieno[2',3':4,5]pyrrolo[3,2-g]thieno[2',3':4,5]thieno[3,2-b][1,2,3]triazolo[4,5-e]indole-2,10-diy)bis(methanylylidene))bis(5,6-difluoro-3-oxo-2,3-dihydro-1H-indene-2,1-diy)lidene)dimalononitrile

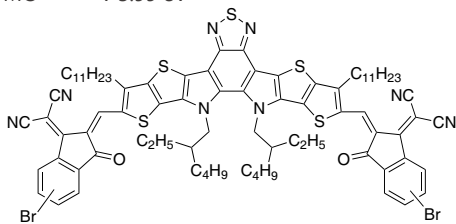
CAS No	: 2271032-12-1
Grade	: >99%
Formula	: C <sub>90</sub> H <sub>103</sub> F <sub>4</sub> N <sub>9</sub> O <sub>2</sub> S <sub>4</sub>
M.W.	: 1547.09 g/mole
UV	: 850 nm (film)
HOMO	: -5.69 eV
LUMO	: -3.87 eV



## LT-S9508 | TPT10

2,2'-((2Z,2'Z)-((12,13-Bis(2-ethylhexyl)-3,9-diundecyl-12,13-dihydro-[1,2,5]-thiadiazolo[3,4-e]thieno[2'',3''':4',5']-thieno[2',3':4,5]pyrrolo[3,2-g]thieno-[2',3':4,5]thieno[3,2-b]-indole-2,10-diyl)bis(methanylylidene))bis(5/6-bromo-3-oxo-2,3-dihydro-1H-indene-2,1-diylidene))-dimalononitrile

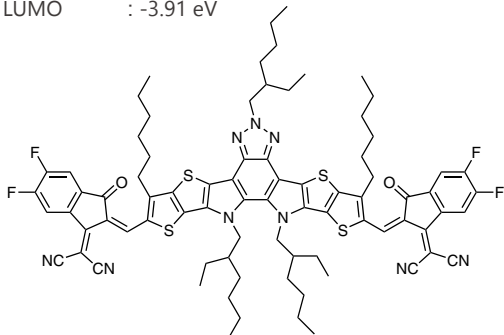
CAS No. : 2414381-17-0  
 Grade : >99% (NMR)  
 Formula : C<sub>82</sub>H<sub>88</sub>Br<sub>2</sub>N<sub>8</sub>O<sub>2</sub>S<sub>5</sub>  
 M.W. : 1537.76 g/mole  
 UV : 817 nm (film)  
 HOMO : -5.52 eV  
 LUMO : -3.99 eV



## LT-S9544 | Y18

2,2'-((2Z,2'Z)-((12,13-Bis(2-ethylhexyl)-3,9-diundecyl-12,13-dihydro-2-(2-ethylhexyl)-[1,2,3]triazole[3,4-e]-thieno[2'',3''':4',5']thieno-[2',3':4,5]pyrrolo[3,2-g]-thieno[2',3':4,5]thieno-[3,2-b]indole-2,10-diyl)-bis(methanylylidene))bis(5,6-difloro-3-oxo-2,3-dihydro-1H-indene-2,1-diylidene))dimalononitrile

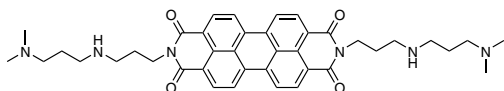
Grade : >99% (NMR)  
 Formula : C<sub>80</sub>H<sub>83</sub>F<sub>4</sub>N<sub>9</sub>O<sub>2</sub>S<sub>4</sub>  
 M.W. : 1406.83 g/mole  
 HOMO : -5.58 eV  
 LUMO : -3.91 eV



## LT-S9545 | PDINN

2,9-Bis[3-[[3-(dimethylamino)propyl]amino]propyl]-anthra[2,1,9-def,6,5,10-d'e'f']diisoquinoline-1,3,8,10(2H,9H)-tetrone

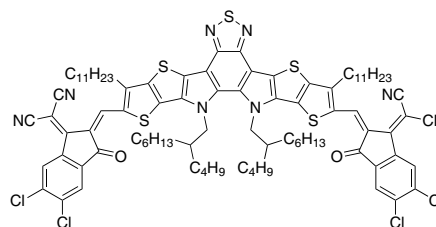
CAS No. : 1020180-01-1  
 Grade : >96%  
 Formula : C<sub>40</sub>H<sub>46</sub>N<sub>6</sub>O<sub>4</sub>  
 M.W. : 674.83 g/mole  
 Hole Mobility : 7.1 cm<sup>2</sup> / (Vs)



## LT-S9558 | Y6-BO-4Cl

2,2'-((2Z,2'Z)-((12,13-bis(2-butylloctyl)-3,9-diundecyl-12,13-dihydro-[1,2,5]thiadiazolo[3,4-e]thieno[2'',3''':4',5']thieno[2',3':4,5]pyrrolo[3,2-g]thieno [2',3':4,5]thieno[3,2-b]indole-2,10-diyl)bis(methanylylidene))bis(5,6-dichloro-3-oxo-2,3-dihydro-1H-indene-2,1-diylidene))dimalononitrile

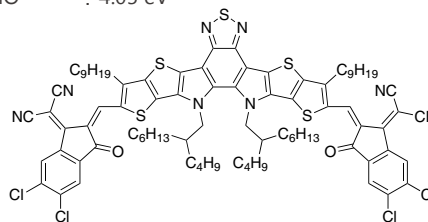
CAS No. : 2447642-41-1  
 Grade : >99% (NMR)  
 Formula : C<sub>90</sub>H<sub>102</sub>Cl<sub>4</sub>N<sub>8</sub>O<sub>2</sub>S<sub>5</sub>  
 M.W. : 1629.96 g/mole  
 HOMO : -5.63 eV  
 LUMO : -4.04 eV



## LT-S9559 | BTP-eC9

2,2'-((2Z,2'Z)-((12,13-bis(2-butylloctyl)-3,9-dinonyl-12,13-dihydro-[1,2,5]thiadiazolo[3,4-e]thieno[2'',3''':4',5']thieno[2',3':4,5]pyrrolo[3,2-g]thieno[2',3':4,5]thieno[3,2-b]indole-2,10-diyl)bis(methanylylidene))bis(5,6-dichloro-3-oxo-2,3-dihydro-1H-indene-2,1-diylidene))dimalononitrile

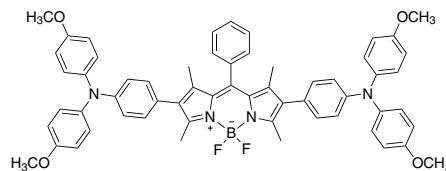
CAS No. : 2598965-39-8  
 Grade : >99% (NMR)  
 Formula : C<sub>95</sub>H<sub>94</sub>Cl<sub>4</sub>N<sub>8</sub>O<sub>2</sub>S<sub>5</sub>  
 M.W. : 1573.89 g/mole  
 UV : 543 nm  
 HOMO : -5.64 eV  
 LUMO : -4.05 eV



## LT-S9560 | BTPA III

2,8-Bis(4-(bis(4-methoxyphenyl)amino)phenyl)-5,5-difluoro-1,3,7,9-tetramethyl-10-phenyl-5H-dipyrrolo[1,2-c:2',1'-f][1,3,2]diazaborin-4-ium-5-uide

Grade : >99% (NMR)  
 Formula : C<sub>59</sub>H<sub>53</sub>BF<sub>2</sub>N<sub>2</sub>O<sub>4</sub>  
 M.W. : 930.88 g/mole  
 UV : 543 nm  
 HOMO : -5.14 eV  
 LUMO : -3.34 eV





## LT-S9563

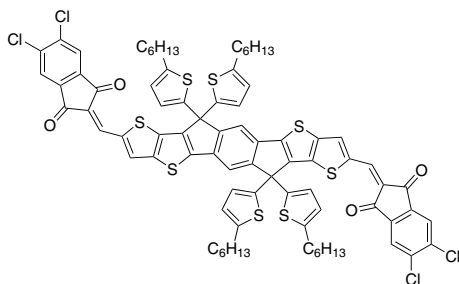
NEW

3,9-bis(2-methylene-(5,6-dichloro-1H-indene-1,3(2H)-dione))-5,5,11,11-tetrakis(5-hexylthienyl)-dithieno[2,3-d:2',3'-d']-s-indaceno[1,2-b:5,6-b']dithiophene

Grade : >99% (HPLC)

Formula :  $C_{80}H_{70}Cl_4O_4S_8$

M.W. : 1493.74 g/mole



## LT-S9581

L8-BO-F

2,2'-((2,2'Z)-((12,13-bis(2-ethylhexyl)-3,9-butyloctyl-12,13-dihydro-[1,2,5]thiadiazolo[3,4-e]thieno[2',3':4,5']thieno[2',3':4,5]pyrrolo[3,2-g]thieno[2',3':4,5]thieno[3,2-b]indole-2,10-diyli)bis(methanylylidene))bis(5/6-fluoro-3-oxo-2,3-dihydro-1H-indene-2,1-diyliidene))dimalononitrile

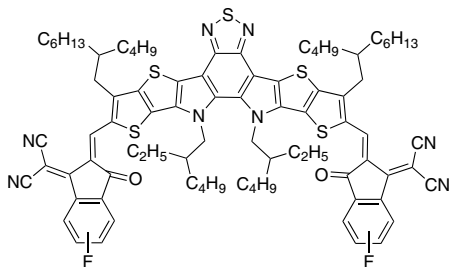
Grade : >99% (NMR)

Formula :  $C_{84}H_{92}F_2N_8O_2S_5$

M.W. : 1444.00 g/mole

HOMO : -5.59 eV

LUMO : -3.85 eV



## LT-S9582

DR8

(5Z,5'Z)-5,5'-((4-(2-butyloctyl)-4H-dithieno[3,2-b:2',3'-d]pyrrole-2,6-diyli)bis(methanylylidene))bis(3-octyl-2-thioxothiazolidin-4-one)

Grade : >99%

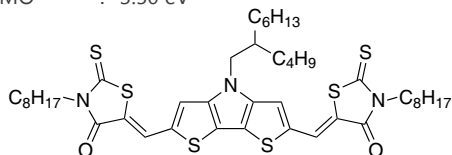
Formula :  $C_{44}H_{63}N_3O_2S_6$

M.W. : 858.38 g/mole

UV : 584 nm(in  $CHCl_3$ )

HOMO : -5.67 eV

LUMO : -3.50 eV



## LT-S9584

ITC6-4Cl

2,2'-[[3,9-Dihexyl-6,6,12,12-tetrakis(4-hexylphenyl)-6,12-dihydrodithieno[2,3-d:2',3'-d']-s-indaceno[1,2-b:5,6-b']dithiophene-2,8-diyli]bis(methylylidene(5,6-chloro-3-oxo-1H-indene-2,1(3H)-diylidene))]bispropanedinitrile

Grade : >99% (NMR)

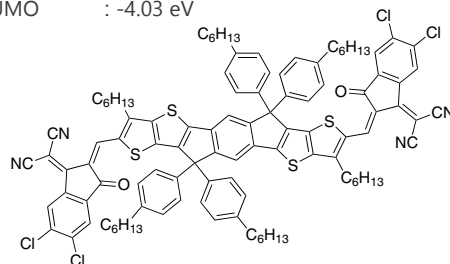
Formula :  $C_{106}H_{102}Cl_4N_4O_2S_4$

M.W. : 1734.04 g/mole

UV : 718 nm (in  $CHCl_3$ )

HOMO : -5.79 eV

LUMO : -4.03 eV



## LT-S9606

BTR

NEW

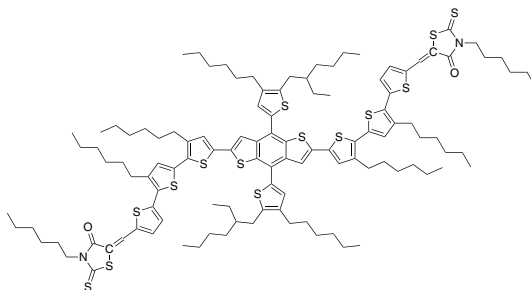
5,5'-[[4,8-bis(5-(2-ethylhexyl)-4-hexyl-2-thienyl)benzo[1,2-b:4,5-b']dithiophene-2,6-diyli]bis[(3',3''-dihexyl[2,2':5',2''-terthiophene]-5'',5'-diyl)methylydne ]]bis[3-hexyl-2-thioxo-4-thiazolidinone]

CAS No. : 2041283-06-9

Grade : >98%

Formula :  $C_{114}H_{152}N_2O_2S_{14}$

M.W. : 2031.41 g/mole



## LT-S9607 | DTY6

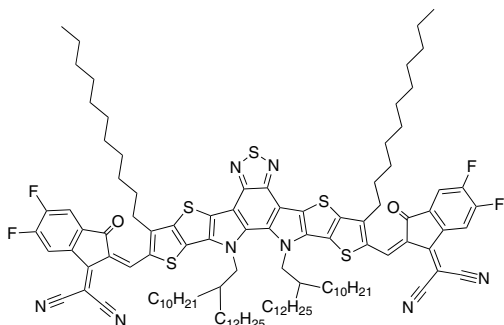
NEW

2,2'-((2Z,2'Z)-((12,13-bis(2-decylteradecyl)-3,9-diundecyl-12,13-dihydro-[1,2,5]thiadiazolo[3,4-e]thieno[2'',3'':4',5']thieno[2',3':4,5]pyrrolo[3,2-g]thieno[2',3':4,5]thieno[3,2-b]indole-2,10-diy))bis(methanylylidene))bis(5,6-difluoro-3-oxo-2,3-dihydro-1H-indene-2,1-diy))dimalononitrile

Grade : &gt; 99%

Formula :  $C_{114}H_{150}F_4N_8O_2S_5$ 

M.W. : 1900.83 g/mole



## LT-S9608 | TPT10-C8C12

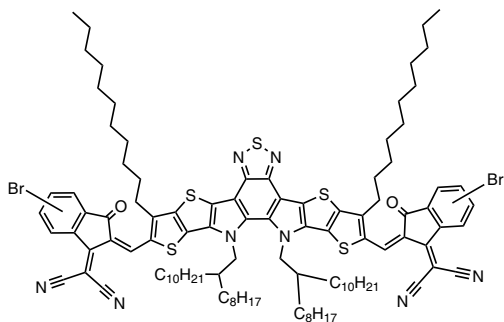
NEW

2,2'-[[12,13-Bis(2-octyldodecyl)-12,13-dihydro-3,9-dinonylbisthieno[2'',3'':4',5']thieno[2',3':4,5]pyrrolo[3,2-e:2',3'-g][2,1,3]benzothiadiazole-2,10-diy]]bis[methylidyne(5 or 6-bromo-3-oxo-1H-indene-2,1(3H)-diy)]bis[propanedinitrile]

Grade : &gt; 98%

Formula :  $C_{106}H_{136}Br_2N_8O_2S_5$ 

M.W. : 1874.45 g/mole



## LT-S9609 | BTP-4F-12

NEW

2,2'-((2Z,2'Z)-((12,13-bis(2-butylloctyl)-3,9-diundecyl-12,13-dihydro-[1,2,5]thiadiazolo[3,4-e]thieno[2'',3'':4',5']thieno[2',3':4,5]pyrrolo[3,2-g]thieno[2',3':4,5]thieno[3,2-b]indole-2,10-diy))bis(methanylylidene))bis(5,6-difluoro-3-oxo-2,3-dihydro-1H-indene-2,1-diy))dimalononitrile

CAS No. : 2389125-23-7

Grade : &gt; 98% (NMR)

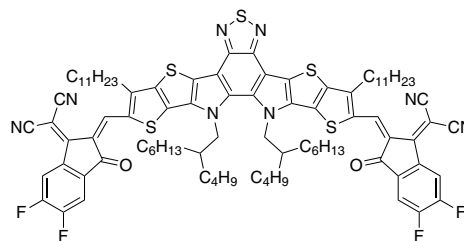
Formula :  $C_{90}H_{102}F_4N_8O_2S_5$ 

M.W. : 1564.14 g/mole

UV : 715 nm

HOMO : -5.68 eV

LUMO : -4.06 eV



## LT-S9707 | L8-BO

NEW

2,2'-((2Z,2'Z)-((12,13-bis(2-ethylhexyl)-3,9-(2-butylloctyl)-12,13-dihydro-[1,2,5]thiadiazolo[3,4-e]thieno[2'',3'':4',5']thieno[2',3':4,5]pyrrolo[3,2-g]thieno[2',3':4,5]thieno[3,2-b]indole-2,10-diy))bis(methanylylidene))bis(5,6-difluoro-3-oxo-2,3-dihydro-1H-indene-2,1-diy))dimalononitrile

CAS No. : 2668341-40-8

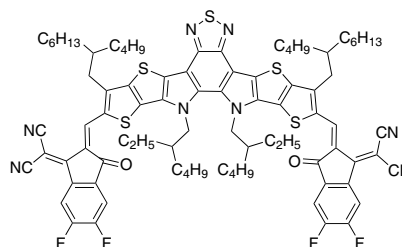
Grade : &gt; 99% (NMR)

Formula :  $C_{84}H_{90}F_4N_8O_2S_5$ 

M.W. : 1479.98 g/mole

HOMO : -5.68 eV

LUMO : -3.9 eV

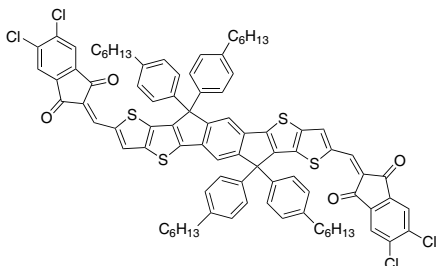


### LT-S9712 | IO-4Cl

**NEW**

3,9-Bis[5,6-dichloro-1H-indene-1,3(2H)dione]-5,5,11,11-tetrakis(4-hexylphenyl)-dithieno[2,3-d:2',3'-d']-s-indaceno[1,2-b:5,6-b']dithiophene

Grade : >98% (NMR)  
 Formula :  $C_{88}H_{78}Cl_4O_4S_4$   
 M.W. : 1469.63 g/mole  
 HOMO : -5.72 eV  
 LUMO : -3.83 eV

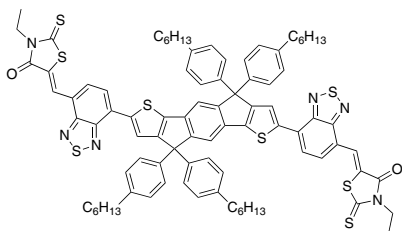


### LT-S9713 | IDT-2Br

**NEW**

5,5'-[[4,4,9,9-Tetrakis(4-hexylphenyl)-4,9-dihydro-s-indaceno[1,2-b:5,6-b']dithiophene-2,7-diyl]bis(2,1,3-benzothiadiazole-7,4-diylmethylidene)]bis[3-ethyl-2-thioxo-4-thiazolidinone]

CAS No. : 2042521-91-3  
 Grade : >98% (NMR)  
 Formula :  $C_{88}H_{88}N_6O_2S_8$   
 UV : 636 nm  
 M.W. : 1518.2 g/mole  
 HOMO : -5.52 eV  
 LUMO : -3.69 eV

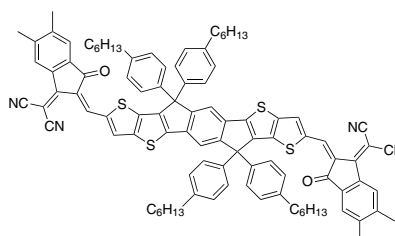


### LT-S9714 | ITIC-DM

**NEW**

3,9-Bis(2-methylene-((3-(1,1-dicyanomethylene)-6,7-dimethyl-indanone))-5,5,11,11-tetrakis(4-hexylphenyl)-dithieno[2,3-d:2',3'-d']-s-indaceno[1,2-b:5,6-b']dithiophene

CAS No. : 2047352-92-9  
 Grade : >98% (NMR)  
 Formula :  $C_{98}H_{90}N_4O_2S_4$   
 M.W. : 1484.05 g/mole  
 HOMO : -5.56 eV  
 LUMO : -3.93 eV

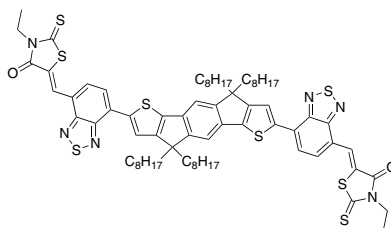


### LT-S9715 | o-IDTBR

**NEW**

(5Z,5'Z)-5,5'-((7,7'-(4,4,9,9-tetraoctyl-4,9-dihydro-s-indaceno[1,2-b:5,6-b']dithiophene-2,7-diyl)bis(benzo[c][1,2,5]thiadiazole-7,4-diyl))bis(methanylylidene))bis(3-ethyl-2-thioxothiazolidin-4-one)

CAS No. : 2077945-91-4  
 Grade : >98% (NMR)  
 Formula :  $C_{72}H_{88}N_6O_2S_8$   
 M.W. : 1326.03 g/mole  
 HOMO : -5.56 eV  
 LUMO : -3.93 eV

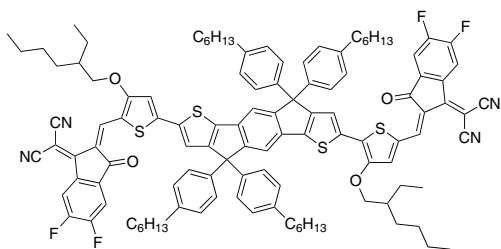


## LT-S9716 | IEICO-4F

NEW

2,2'-((2Z,2'Z)-(((4,4,9-tris(4-hexylphenyl)-9-(4-pentylphenyl)-4,9-dihydro-s-indaceno[1,2-b:5,6-b]dithiophene-2,7-diyl)bis(4-((2-ethylhexyl)oxy)thiophene5,2-diyl))bis(methanylylidene))bis(5,6-difluoro-3-oxo-2,3-dihydro-1H-indene-2,1-diylidene)) dimalononitrile

CAS No. :2089044-02-8  
 Grade :>98% (NMR)  
 Formula :C<sub>114</sub>H<sub>114</sub>F<sub>4</sub>N<sub>4</sub>O<sub>4</sub>S<sub>4</sub>  
 UV :865 nm  
 M.W. :1808.4 g/mole  
 HOMO :-5.44 eV  
 LUMO :-4.16 eV

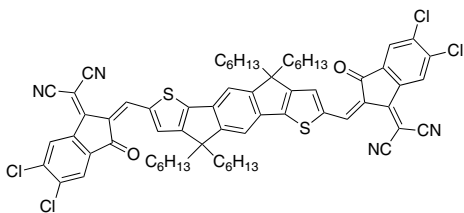


## LT-S9717 | IDIC-4Cl

NEW

2,2'-((2Z,2'Z)-((4,4,9-tetrahexyl-4,9-dihydro-s-indaceno[1,2-b:5,6-b]dithiophene-2,7-diyl)bis(methanylylidene))bis(5,6-dichloro-3-oxo-2,3-dihydro-1H-indene-2,1-diylidene)) dimalononitrile

CAS No. :2361961-01-3  
 Grade :>98% (NMR)  
 Formula :C<sub>66</sub>H<sub>62</sub>Cl<sub>4</sub>N<sub>4</sub>O<sub>2</sub>S<sub>2</sub>  
 M.W. :1149.17 g/mole  
 HOMO :-5.72 eV  
 LUMO :-4.1 eV

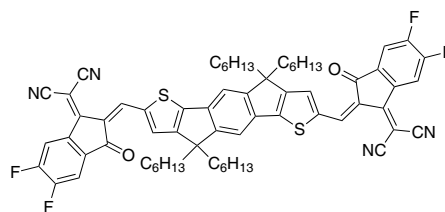


## LT-S9718 | IDIC-4F

NEW

2,2'-((2Z,2'Z)-((4,4,9,9-tetrahexyl-4,9-dihydro-s-indaceno[1,2-b:5,6-b]dithiophene-2,7-diyl)bis(methanylylidene))bis(5,6-difluoro-3-oxo-2,3-dihydro-1H-indene-2,1-diylidene)) dimalononitrile

CAS No. :2229934-71-6  
 Grade :>98% (NMR)  
 Formula :C<sub>66</sub>H<sub>62</sub>F<sub>4</sub>N<sub>4</sub>O<sub>2</sub>S<sub>2</sub>  
 UV :707 nm  
 M.W. :1083.35  
 HOMO :-6.3 eV  
 LUMO :-3.82 eV

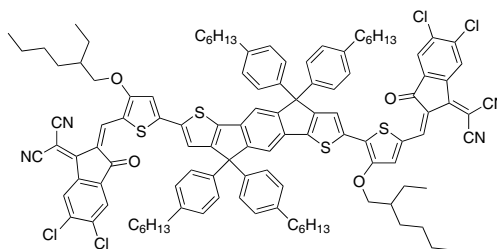


## LT-S9719 | IEICO-4Cl

NEW

2,2'-((2Z,2'Z)-(((4,4,9-tris(4-hexylphenyl)-9-(4-pentylphenyl)-4,9-dihydro-s-indaceno[1,2-b:5,6-b]dithiophene-2,7-diyl)bis(4-((2-ethylhexyl)oxy)thiophene5,2-diyl))bis(methanylylidene))bis(5,6-dichloro-3-oxo-2,3-dihydro-1H-indene-2,1-diylidene)) dimalononitrile

CAS No. :2240998-88-1  
 Grade :>98% (NMR)  
 Formula :C<sub>114</sub>H<sub>114</sub>Cl<sub>4</sub>N<sub>4</sub>O<sub>4</sub>S<sub>4</sub>  
 UV :802 nm  
 M.W. :1874.22  
 HOMO :-5.56 eV  
 LUMO :-4.23 eV

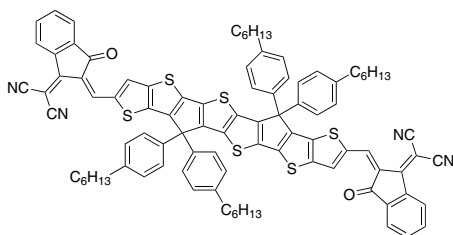


## LT-S9720 | 6TIC

NEW

2,2'-[[[6,6,12,12-tetrakis(4-hexylphenyl)-6,12-dihydro-Thieno[2'',3''':4',5']thieno[3',2':4,5]cyclopenta[1,2-b]thieno[2''',3''':4'',5''']thieno[2'',3''':3',4']cyclopenta[1',2':4,5]thieno[2,3-d]thiophene-2,7-diy]]bis[methyldiylidene(3-oxo-1H-indene-2,1(3H)-diylidene)]]bis-propanedinitrile

CAS No. : 2244414-53-5  
 Grade : >98% (NMR)  
 Formula :  $C_{94}H_{80}N_4O_2S_6$   
 UV : 795 nm  
 M.W. : 1490.06 g/mole  
 HOMO : -5.45 eV  
 LUMO : -3.94 eV

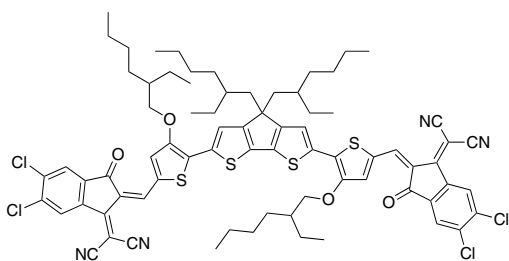


## LT-S9721 | COTIC-4Cl

NEW

2,2'-((2Z,2'Z)-(((4,4-bis(2-ethylhexyl)-4H-cyclopenta[2,1-b:3,4-b']dithiophene-2,6-diy))bis(4-(2-ethylhexyloxy)thiophene-5,2-diy))bis(methanylylidene))bis(5,6-dichloro-3-oxo-2,3-dihydro-1H-indene-2,1-diylidene))dimalononitrile

CAS No. : 2328092-51-7  
 Grade : >98% (NMR)  
 Formula :  $C_{75}H_{78}Cl_4N_4O_4S_4$   
 UV : 1005 nm  
 M.W. : 1369.52 g/mole  
 HOMO : -5.24 eV  
 LUMO : -4.02 eV

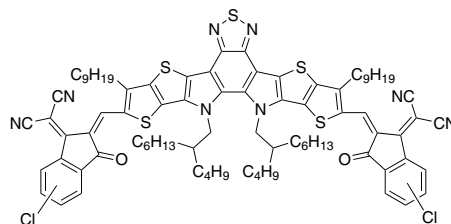


## LT-S9722 | eC9-2Cl

NEW

2,2'-[[[12,13-Bis(2-butylloctyl)-12,13-dihydro-3,9-dinonylbisthieno[2'',3''':4',5']thieno[2',3':4,5]pyrrolo[3,2-e:2',3'-g][2,1,3]benzothiadiazole-2,10-diy]]bis[methyldiylidene(2 or 3-chloro-3-oxo-1H-indene-2,1(3H)-diylidene)]]bis[propanedinitrile]

Grade : >98% (NMR)  
 Formula :  $C_{86}H_{96}Cl_2N_8O_2S_5$   
 M.W. : 1504.97 g/mole  
 HOMO : -5.57 eV  
 LUMO : -3.74 eV

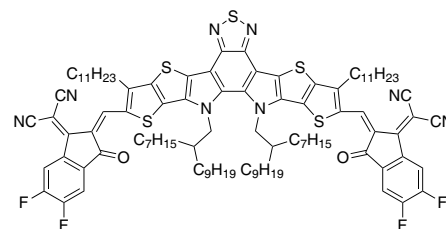


## LT-S9723 | HU-Y6

NEW

2,2'-((2Z,2'Z)-((12,13-bis(2-heptylundecyl)-3,9-diundecyl-12,13-dihydro-[1,2,5]thiadiazolo[3,4-e]thieno[2'',3''':4',5']thieno[2',3':4,5]pyrrolo[3,2-g]thieno[2',3':4,5]thieno[3,2-b]indole-2,10-diy))bis(methanylylidene))bis(5,6-difluoro-3-oxo-2,3-dihydro-1H-indene-2,1-diylidene))dimalononitrile

Grade : >98% (NMR)  
 Formula :  $C_{102}H_{126}F_4N_8O_2S_5$   
 M.W. : 1732.46 g/mole

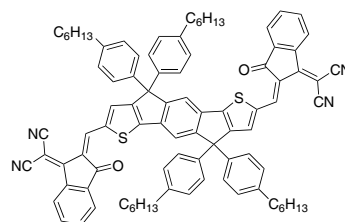


## LT-S9724 | IDPC

NEW

2,2'-((2Z,2'Z)-((4,4,9,9-tetrakis(4-hexylphenyl)-4,9-dihydro-s-indaceno[1,2-b:5,6-b']dithiophene-2,7-diy))bis(methanylylidene))bis(3-oxo-2,3-dihydro-1H-indene-2,1-diylidene))dimalononitrile

CAS No. : 2095504-33-7  
 Grade : >98% (NMR)  
 Formula :  $C_{90}H_{82}N_4O_2S_2$   
 M.W. : 1315.77 g/mole

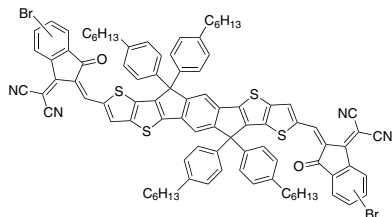


## LT-S9725 | IT-2Br

NEW

3,9-Bis(2-methylene-((3-(1,1-dicyanomethylene)-6/7-bromo)-indanone))-5,5,11,11-tetrakis(4-hexylphenyl)-dithieno[2,3-d:2',3'-d']-s-indaceno[1,2-b:5,6-b']dithiophene

CAS No. :2408481-69-4  
 Grade :>98% (NMR)  
 Formula :C<sub>94</sub>H<sub>80</sub>Br<sub>2</sub>N<sub>4</sub>O<sub>2</sub>S<sub>4</sub>  
 UV :741 nm  
 M.W. :1585.73 g/mole  
 HOMO :-5.53 eV  
 LUMO :-3.9 eV

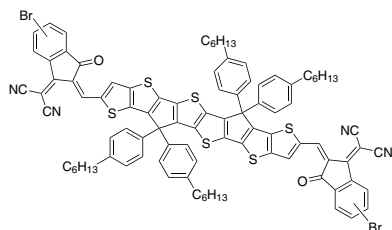


## LT-S9726 | 6TIC-2Br

NEW

2,2'-[[[6,6,12,12-Tetrakis(4-hexylphenyl)-6,12-dihydro-Thieno[2'',3''':4',5']thieno[3',2':4,5]cyclopenta[1,2-b]thieno[2''',3''':4',5']thieno[2'',3'':3',4']cyclopenta[1',2':4,5]thieno[2,3-d]thiophene-2,7-diy]]bis[methyldiylene(5 or 6-bromo-3-oxo-1H-indene-2,1(3H)-diylidene)]bis[propanedinitrile]

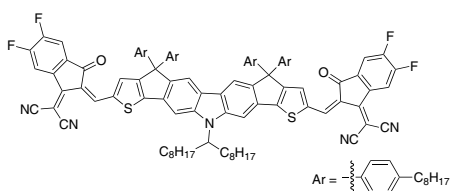
Grade :>98%(NMR)  
 Formula :C<sub>94</sub>H<sub>78</sub>Br<sub>2</sub>N<sub>4</sub>O<sub>2</sub>S<sub>6</sub>  
 M.W. :1647.85 g/mole



## LT-S9742 | DTCCIC-4F

NEW

CAS No. :2375196-39-5  
 Formula :C<sub>121</sub>H<sub>131</sub>F<sub>4</sub>N<sub>5</sub>O<sub>2</sub>S<sub>2</sub>  
 M.W. :1827.5 g/mole  
 UV :703 nm (in DCM)  
 HOMO :-5.8 eV  
 LUMO :-3.94 eV  
 Synonym :DTC(4Ph)-4FIC

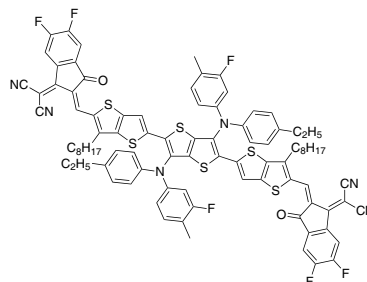


## LT-S9836 | 3TT-C2-F

NEW

2,2'-((2Z,2'Z)-((3',6'-bis((4-ethylphenyl)(3-fluoro-4-methylphenyl)amino)-6,6''-dioctyl-[2,2':5',2''-terthieno[3,2-b]thiophene)-5,5''-diyl)bis(methanylylidene))bis(5,6-difluoro-3-oxo-2,3-dihydro-1H-indene-2,1-diylidene))dimalononitrile

Grade :NMR >99%  
 Formula :C<sub>90</sub>H<sub>72</sub>F<sub>6</sub>N<sub>6</sub>O<sub>2</sub>S<sub>6</sub>  
 M.W. :1575.95 g/mole  
 UV :712 nm (in CHCl<sub>3</sub>)  
 HOMO :-5.56 eV  
 LUMO :-3.95 eV

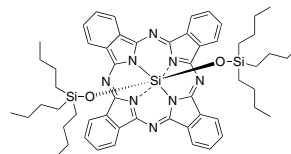


## LT-S9847 | 3BS-SiPc

NEW

Bis(tri-n-butylsilyl oxide) silicon phthalocyanine

Grade :>95%  
 Formula :C<sub>56</sub>H<sub>70</sub>N<sub>8</sub>O<sub>2</sub>Si<sub>3</sub>  
 M.W. :971.46 g/mole  
 HOMO :-5.3 eV  
 LUMO :-3.5 eV

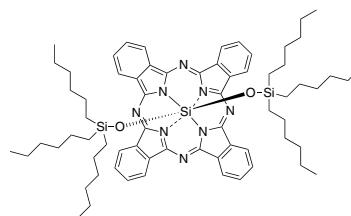


## LT-S9849 | 3HS-SiPc

NEW

Bis(tri-n-hexylsilyl oxide) silicon phthalocyanine

CAS No. :92396-89-9  
 Grade :>95%  
 Formula :C<sub>68</sub>H<sub>94</sub>N<sub>8</sub>O<sub>2</sub>Si<sub>3</sub>  
 M.W. :1139.78 g/mole  
 HOMO :-5.3 eV  
 LUMO :-3.5 eV

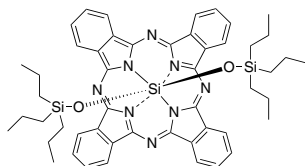


### LT-S9850 | 3PS-SiPc

**NEW**

Bis(tri-n-propylsilyl oxide) silicon phthalocyanine

CAS No :  
Grade :>95%  
Formula : $C_{50}H_{58}N_8O_2Si_3$   
M.W. :887.3 g/mole  
HOMO : -5.3 eV  
LUMO : -3.5 eV

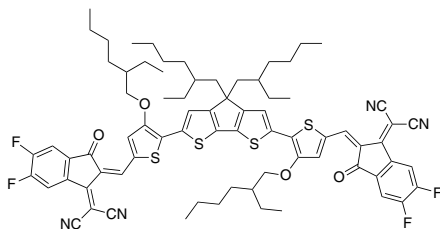


### LT-S9868 | COTIC-4F

**NEW**

2,2'-((2Z,2'Z)-(((4,4-bis(2-ethylhexyl)-4H-cyclopenta[2,1-b:3,4-b']dithiophene-2,6-diyl)bis(4-(2-ethylhexyloxy)thiophene-5,2-diyl))bis(methanylylidene))bis(5,6-difluoro-3-oxo-2,3-dihydro-1H-indene-2,1-diylidene)dimalononitrile

Grade :>99%(NMR)  
Formula : $C_{75}H_{78}F_4N_4O_4S_4$   
M.W. :1303.7 g/mole  
UV :875 nm (in  $CHCl_3$ )  
HOMO : -5.26 eV  
LUMO : -4.17 eV

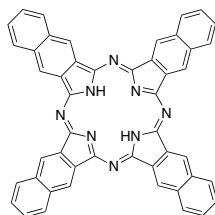


### LT-S9891 | Nc

**NEW**

2,3-Naphthalocyanine

CAS No :23627-89-6  
Grade :Sublimed >99%  
Formula : $C_{48}H_{26}N_8$   
M.W. :714.77 g/mole

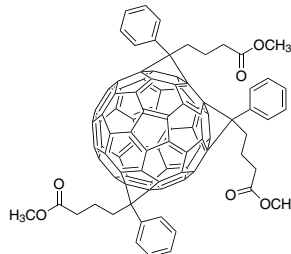


### LT-S9912

Tris-PCBM, TrisPC63BM, tris[60]PCBM, PC60BM trisadduct

**NEW**

Tris(1-[3-(methoxycarbonyl)propyl]-1-phenyl)-[6,6]C<sub>63</sub>  
Grade :>99%  
Formula : $C_{96}H_{42}O_6$   
M.W. :1291.36 g/mole

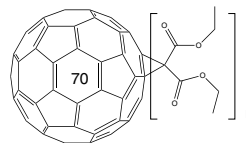


### LT-S9915 | C70 malonic ester

**NEW**

C<sub>70</sub>-n-(malonic ester)

Grade :>99% (multiple isomers), n=3-5  
Formula : $C_{70}(C_7H_{10}O_4)_n$

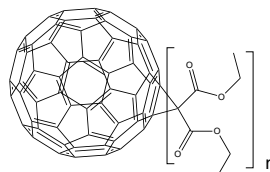


### LT-S9916 | C60 malonic ester

**NEW**

C<sub>60</sub>-n-(malonic ester)

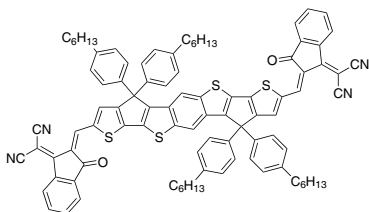
Grade :>99.5% (multiple isomers), n≥3  
Formula : $C_{60}(C_7H_{10}O_4)_n$



LT-S9920 | BDCPDT-IC, NFBBDT, BDT-IC **NEW**

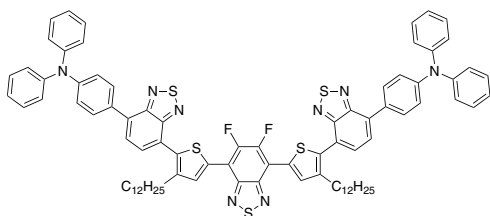
2,2'-[[[4,4,10,10-Tetrakis(4-hexylphenyl)-4,10-dihydrothieno[3',2':4,5]cyclopenta[1,2b]thieno[2'',3''':3',4']cyclopenta[1',2':4,5]thieno[2,3-f][1]benzothiophene-2,8-diyl]]bis[methyldiylne(3-oxo-1H-indene-2,1(3H)-diylidene))]bis[propanedinitrile]

CAS No :2097134-83-1  
Grade :>98%  
Formula :C<sub>94</sub>H<sub>82</sub>N<sub>4</sub>O<sub>2</sub>S<sub>4</sub>  
M.W. :1427.94 g/mole

LT-S9921 | **NEW**

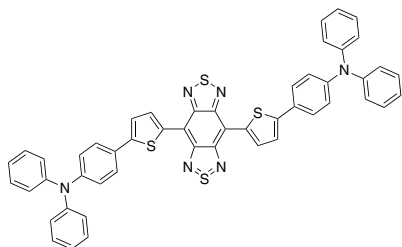
4,4'-(((5,6-Difluorobenzo[c][1,2,5]thiadiazole-4,7-diyl))bis(3-dodecylthiophene-5,2-diyl))bis(benzo[c][1,2,5]thiadiazole-7,4-diyl))bis(N,N-diphenylaniline)

Grade :>97%  
Formula :C<sub>86</sub>H<sub>84</sub>F<sub>2</sub>N<sub>8</sub>S<sub>5</sub>  
M.W. :1427.96 g/mole

LT-S9922 | **NEW**

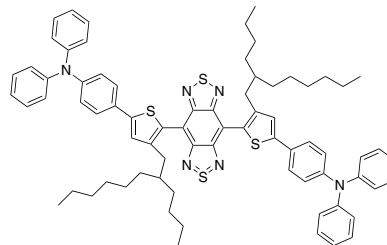
4,4'-Benzo[1,2-c:4,5-c']bis[1,2,5]thiadiazole-4,8-diyl-di-5,2-thiophenediyl))bis[N,N-bis(phenyl)benzenamine

CAS No :1070910-99-4  
Grade :>98%  
Formula :C<sub>50</sub>H<sub>32</sub>N<sub>6</sub>S<sub>4</sub>  
M.W. :845.09 g/mole

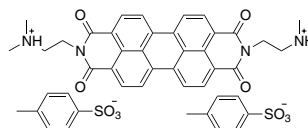
LT-S9923 | **NEW**

4,4'-Benzo[1,2-c:4,5-c']bis[1,2,5]thiadiazole-4,8-diyl-di-5,2-[3-(2-butyloctyl)thiophene]-diyl))bis[N,N-bis(4-phenyl)benzenamine

CAS No :2925278-58-4  
Grade :>97%  
Formula :C<sub>74</sub>H<sub>80</sub>N<sub>6</sub>S<sub>4</sub>  
M.W. :1181.73 g/mole

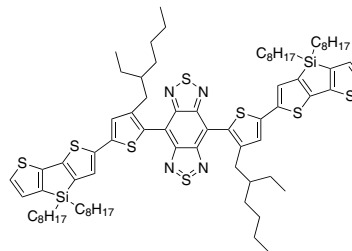
LT-S9924 | PBDI **NEW**

CAS No :1535171-00-6  
Grade :>97%  
Formula :C<sub>46</sub>H<sub>44</sub>N<sub>4</sub>O<sub>10</sub>S<sub>2</sub>  
M.W. :876.99 g/mole

LT-S9925 | **NEW**

4,8-Bis(5-(4,4-dioctyl-4H-silolo[3,2-b:4,5-b']dithiophene-yl)-3-(2-ethylhexyl)-2-thienyl)-2λ4δ2-benzo[1,2-c:4,5-c']bis[1,2,5]thiadiazole

Grade :>98%  
Formula :C<sub>78</sub>H<sub>110</sub>N<sub>4</sub>S<sub>8</sub>Si<sub>2</sub>  
M.W. :1416.43 g/mole





## LT-S9926 | ZR1

NEW

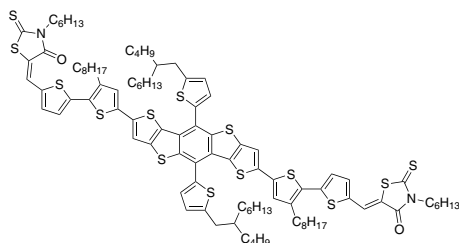
2,7-(2-(3-Hexyl-2-thioxothiazolidin-4-one-yl)-(5-thiophen-yl))-5,10-bis(2-butyl-octylthienyl)benzo[1,2-b:4,5-b']dithieno[3,2-b]thiophene

CAS No : 2582829-54-5

Grade : &gt;98%

Formula :  $C_{98}H_{124}N_2O_2S_{14}$ 

M.W. : 1810.96 g/mole



## LT-S9929 | IDIC-C16-Br

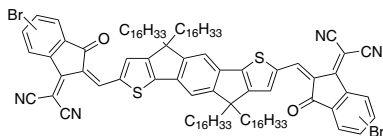
NEW

2,2'-((2Z,2'Z)-((4,4,9,9-tetrahexadecyl-4,9-dihydro-s-indaceno[1,2-b:5,6-b']dithiophene-2,7-diy))bis(methanylylidene))bis(5- or 6-bromo-3-oxo-1H-indene-2,1(3H)-diylidene)dimalononitrile

Grade : &gt;99%

Formula :  $C_{106}H_{144}Br_2N_4O_2S_2$ 

M.W. : 1730.24 g/mole



## LT-S9931

NEW

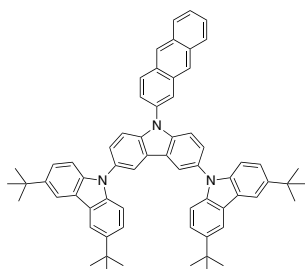
9'-(Anthracen-2-yl)-3,3'',6,6''-tetra-tert-butyl-9'H-9,3':6',9''-tercarbazole

CAS No : 1332640-08-0

Grade : &gt;99%

Formula :  $C_{66}H_{63}N_3$ 

M.W. : 898.23 g/mole

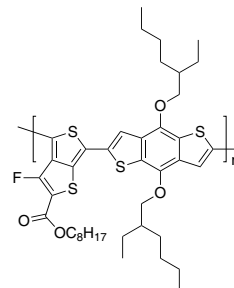


## LT-S9932 | PTB4

NEW

Poly-([4,8-bis((2-ethylhexyl)oxy)-benzo[1,2-b:4,5-b']dithiophene-2,6-diyl)-alt-[3-fluore-2-(octyloxy)-carbonylthieno[3,4-b]thiophene-4,6-diyl])

Grade : Mw &gt; 10000

Formula :  $(C_{41}H_{53}FO_4S_4)_n$ 

## LT-S9942 | GS-ISO

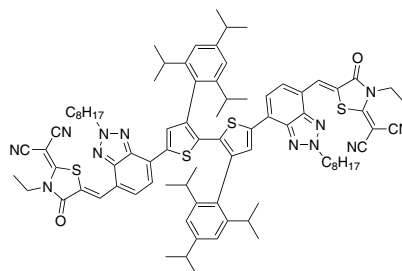
NEW

2,2'-((5Z,5'Z)-5,5'-((7,7'-(3,3'-bis(2,4,6-trisopropylphenyl)-[2,2'-bithiophene]-5,5'-diyl))bis(2-octyl-2H-benzo[d][1,2,3]triazole-7,4-diyl))bis(methanylylidene))bis(3-ethyl-4-oxothiazolidine-5,2-diylidene)dimalononitrile

Grade : &gt;99%

Formula :  $C_{84}H_{98}N_{12}O_2S_4$ 

M.W. : 1436.01 g/mole



## LT-S9943 | GS-OC6

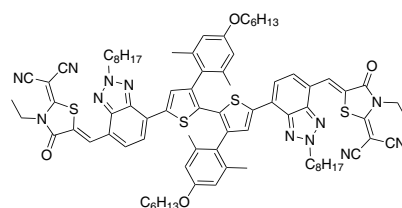
NEW

2,2'-((5Z,5'Z)-5,5'-((7,7'-(3,3'-bis(4-(hexyloxy)-2,6-dimethylphenyl)-[2,2'-bithiophene]-5,5'-diyl))bis(2-octyl-2H-benzo[d][1,2,3]triazole-7,4-diyl))bis(methanylylidene))bis(3-ethyl-4-oxothiazolidine-5,2-diylidene)dimalononitrile

Grade : &gt;99%

Formula :  $C_{82}H_{94}N_{12}O_4S_4$ 

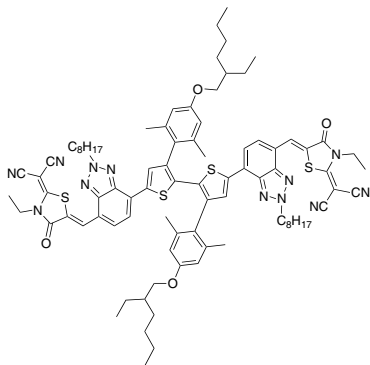
M.W. : 1439.96 g/mole



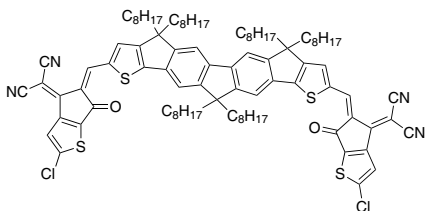
LT-S9944 | GS-OEH **NEW**

2,2'-((5Z,5'Z)-5,5'-((7,7'-(3,3'-bis(4-((2-ethylhexyl)oxy)-2,6-dimethylphenyl)-[2,2'-bithiophene]-5,5'-diyl)bis(2-octyl-2H-benzo[d][1,2,3]triazole-7,4-diyl))bis(methanylelidene))bis(3-ethyl-4-oxothiazolidine-5,2-diylidene))dimalononitrile

Grade : > 99%  
 Formula :  $C_{86}H_{102}N_{12}O_4S_4$   
 M.W. : 1496.06 g/mole

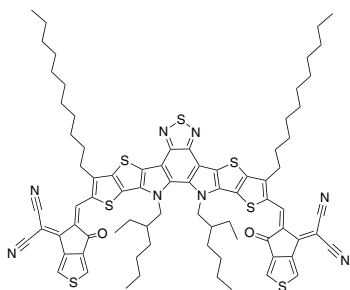
LT-S9945 | FCC-Cl **NEW**

FCC-Cl  
 CAS No : 2681341-29-5  
 Grade : > 99%  
 Formula :  $C_{93}H_{112}Cl_2N_4O_2S_4$   
 M.W. : 1517.07 g/mole

LT-S9946 | Y8, Y6-T, Y10 **NEW**

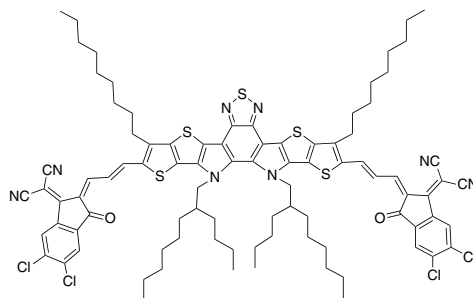
2,2'-((5Z,5'Z)-5,5'-((12,13-bis(2-ethylhexyl)-3,9-diundecyl-12,13-dihydro-[1,2,5]thiadiazolo[3,4-e]thieno[2'',3':4',5']thieno[2',3':4,5]pyrrolo[3,2-g]thieno[2',3':4,5]thieno[3,2-b]indole-2,10-diyl)bis(methanylelidene))bis(6-oxo-5,6-dihydro-4H-cyclopenta[c]thiophene-5,4-diylidene))dimalononitrile

CAS No : 2410422-75-0  
 Grade : > 99%  
 Formula :  $C_{78}H_{86}N_8O_2S_7$   
 M.W. : 1392.02 g/mole

LT-S9947 | BTPV-4Cl-eC9 **NEW**

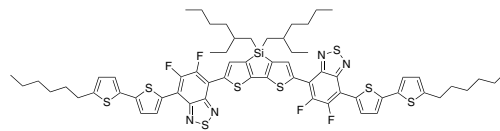
2,2'-((2Z,2'Z)-((2E,2'E)-(12,13-bis(2-butylloctyl)-3,9-dinonyl-12,13-dihydro-[1,2,5]thiadiazolo[3,4-e]thieno[2'',3':4',5']thieno[2',3':4,5]pyrrolo[3,2-g]thieno[2',3':4,5]thieno[3,2-b]indole-2,10-diyl)bis(prop-2-en-3-yl-1-ylidene))bis(5,6-dichloro-3-oxo-2,3-dihydro-1H-indene-2,1-diylidene))dimalononitrile

Grade : > 99%  
 Formula :  $C_{90}H_{98}Cl_4N_8O_2S_5$   
 M.W. : 1625.93 g/mole

LT-S9948 | DTS(F2BTTh2)2 **NEW**

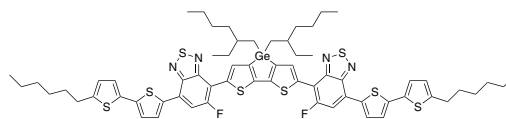
7,7'-(4,4-bis(2-ethylhexyl)-4H-silolo[3,2-b:4,5-b']dithiophene-2,6-diyl)bis(5,6-difluoro-4-(5'-hexyl-[2,2'-bithiophen]-5-yl)benzo[c][1,2,5]thiadiazole)

Grade : > 99%  
 Formula :  $C_{64}H_{70}F_4N_4S_8Si$   
 M.W. : 1255.86 g/mole

LT-S9949 | DTG(FBTTh2)2 **NEW**

7,7'-(4,4-bis(2-ethylhexyl)-4H-germolo[3,2-b:4,5-b']dithiophene-2,6-diyl)bis(6-fluoro-4-(5'-hexyl-[2,2'-bithiophen]-5-yl)benzo[c][1,2,5]thiadiazole)

Grade : > 99%  
 Formula :  $C_{64}H_{70}F_2GeN_4S_8$   
 M.W. : 1264.44 g/mole



## LT-S9950 | CP

NEW

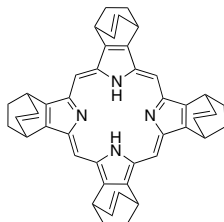
1,4:8,11:15,18:22,25-Tetraethano-29H,31H-tetrabenzob[b,g,l,q]porphine

CAS No :200354-12-7

Grade :>99%

Formula :C<sub>44</sub>H<sub>38</sub>N<sub>4</sub>

M.W. :622.8 g/mole



## LT-S9951 | Y5, BTP-4H

NEW

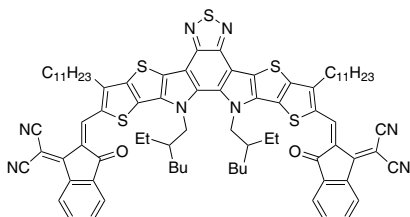
2,2'-((2Z,2'Z)-((12,13-Bis(2-ethylhexyl)-3,9-diundecyl-12,13-dihydro-[1,2,5]thiadiazolo[3,4-e]thieno[2'',3':4',5']thieno[2',3':4,5]pyrrolo[3,2-g]thieno[2',3':4,5]thieno[3,2b]indole-2,10-diyli)bis(methanylylidene))bis(3-oxo-2,3-dihydro-1H-indene-2,1-diyliidene))-dimalononitrile

CAS No :2304444-48-0

Grade :>99%

Formula :C<sub>82</sub>H<sub>90</sub>N<sub>8</sub>O<sub>2</sub>S<sub>5</sub>

M.W. :1379.97 g/mole



## LT-S9952 | Y2

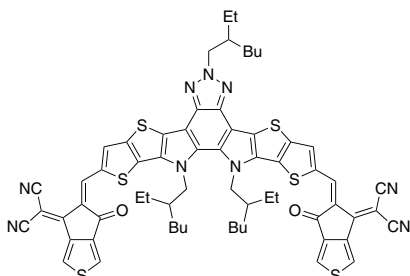
NEW

2,2'-((5Z,5'Z)-((6,12,13-Tris(2-ethylhexyl)-12,13-dihydro-6H-thieno-[2'',3':4',5']thieno[2',3':4,5]pyrrolo[3,2-g]thieno[2',3':4,5]thieno[3,2-b][1,2,3]triazolo[4,5-e]indole-2,10-diyli)bis(methanylylidene))bis(6-oxo-5,6-dihydro-4H-cyclopenta[c]thiophene-5,4-diyliidene))dimalononitrile

Grade :>99%

Formula :C<sub>68</sub>H<sub>59</sub>N<sub>5</sub>O<sub>2</sub>S<sub>6</sub>

M.W. :1178.6 g/mole



## LT-S9953 | IEICO

NEW

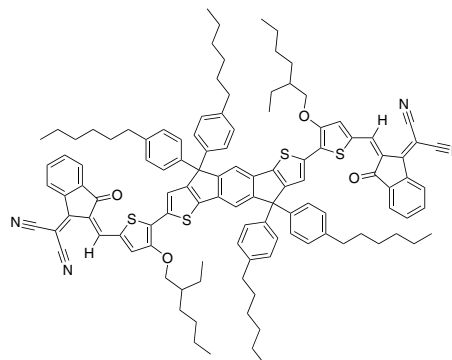
2,2'-((2Z,2'Z)-((5,5'-Bis(4,4,9,9-tetrakis(4-hexylphenyl)-4,9-dihydro-sindaceno[1,2-b:5,6-diyliidene))dimalononitrile, 2,2'-[[4,4,9,9-tetrakis(4-hexylphenyl)-4,9-dihydro-s-indaceno[1,2-b:5,6-b']dithiophene-2,7-diyli]bis[[4-[(2-ethylhexyl)oxy]-5,2-thiophenediyl]-Z)-methylidyne(3-oxo-1H-indene-2,1(3H)-diylidene))]bis-propanedinitrile

CAS No :2055812-53-6

Grade :>99%

Formula :C<sub>114</sub>H<sub>118</sub>N<sub>4</sub>O<sub>4</sub>S<sub>4</sub>

M.W. :1736.44 g/mole



## LT-S9954 | ITDBR, EH-IDTBR, eh-IDTBR

NEW

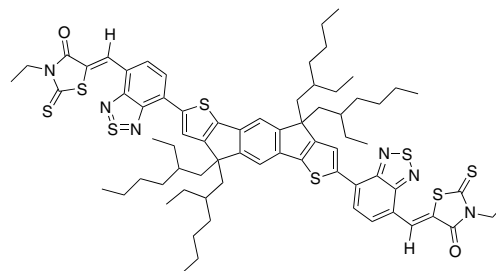
3-Ethyl-5-[[7-(15-[[7-[[3-ethyl-4-oxo-2-sulfanylidene-1,3-thiazolidin-5-ylidene)methyl]-2,1,3-benzothiadiazol-4-yl]-9,9,18,18-tetrakis(2-ethylhexyl)-5,14-dithiapentacyclo[10.6.0.0<sup>3,10</sup>.0<sup>4,8</sup>.0<sup>13,17</sup>]octadeca(12),2,4(8),6,10,13(17),15-heptaen-6-yl)-2,1,3-benzothiadiazol-4-yl]]methylidene)-2-sulfanylidene-1,3-thiazolidin-4-one

CAS No :2102510-60-9

Grade :>99%

Formula :C<sub>72</sub>H<sub>88</sub>N<sub>6</sub>O<sub>2</sub>S<sub>8</sub>

M.W. :1326.02 g/mole



### LT-S9955 | FTCC-Br

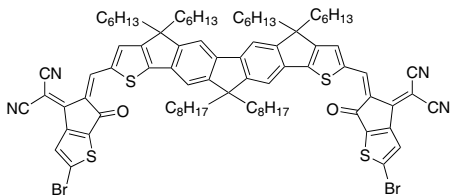
**NEW**

FTCC-Br

Grade : >99%

Formula :  $C_{85}H_{96}Br_2N_4O_2S_4$

M.W. : 1493.76 g/mole



### LT-S9957 | CO1-4F, CO1-F

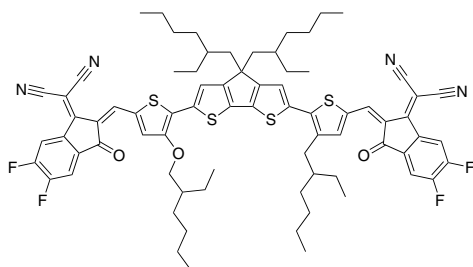
**NEW**

2-((Z)-2-((5-(6-((Z)-1-(Dicyanomethylene)-5,6-difluoro-3-oxo-1Hinden-2(3H)-ylidene)methyl)-3-((2-ethylhexyl)oxy)thiophen-2-yl)-4,4-bis(2-ethylhexyl)-4H-S-8-cyclopenta[1,2-b:5,4-'d]thiophen-2-yl)-4-(2-ethylhexyl)thiophen-2-yl)methylene)-5,6-difluoro-3-oxo-2,3-dihydro-1Hinden-1-ylidene)malononitrile

Grade : >99%

Formula :  $C_{75}H_{78}F_4N_4O_3S_4$

M.W. : 1287.7 g/mole



### LT-S9958 | A-2ThCl

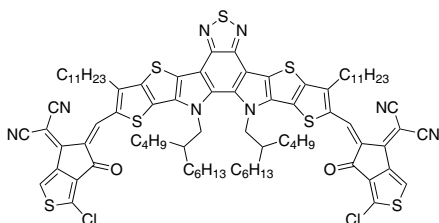
**NEW**

2,2'-((5Z,5'Z)-5,5'-((12,13-Bis(2-butyloctyl)-3,9-diundecyl-12,13-dihydro-[1,2,5]thiadiazolo[3,4-e]thieno[2'',3'':4',5']thieno[2':3':4,5]pyrrolo[3,2-g]thieno[2':3':4,5]thieno[3,2-b]indole-2,10-diyl)bis(methanylylidene))bis(1-chloro-6-oxo-5,6-dihydro-4H-cyclopenta[c]thiophene-5,4-diylidene))dimalononitrile

Grade : >99%

Formula :  $C_{86}H_{100}Cl_2N_6O_2S_7$

M.W. : 1573.13 g/mole



### LT-S9959 | BTPV-4F-eC9

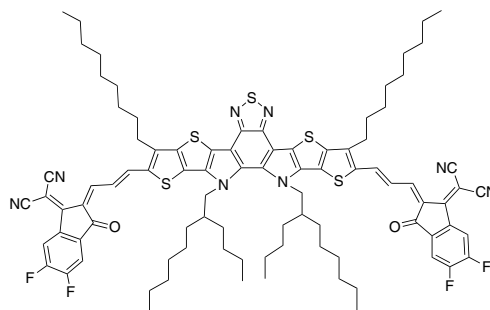
**NEW**

2,2'-((2Z,2'Z)-((2E,2'E)-(12,13-Bis(2-butyloctyl)-3,9-dinonyl-12,13-dihydro-[1,2,5]thiadiazolo[3,4-e]thieno[2'',3'':4',5']thieno[2':3':4,5]pyrrolo[3,2-g]thieno[2':3':4,5]thieno[3,2-b]indole-2,10-diyl)bis(prop-2-en-3-yl-1-ylidene))bis(5,6-difluoro-3-oxo-2,3-dihydro-1H-indene-2,1-diylidene))dimalononitrile

Grade : >99%

Formula :  $C_{90}H_{98}F_4N_8O_2S_5$

M.W. : 1560.11 g/mole

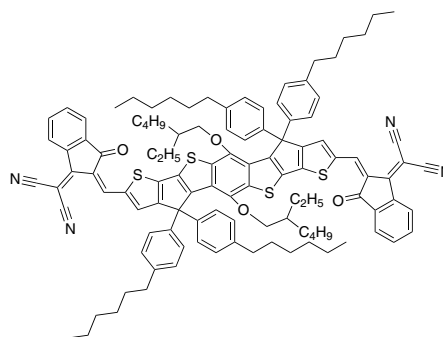


### LT-S9960 | BTIC,BT-IC

**NEW**

Formula :  $C_{110}H_{114}N_4O_4S_4$

M.W. : 1684.36 g/mole

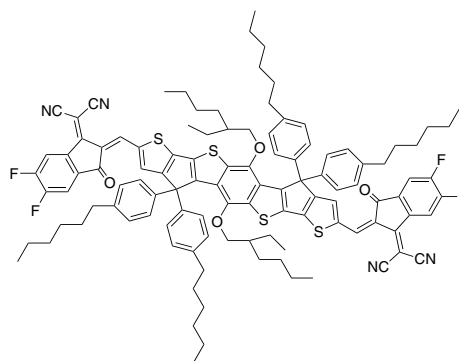


### LT-S9961 | BTIC-4F

**NEW**

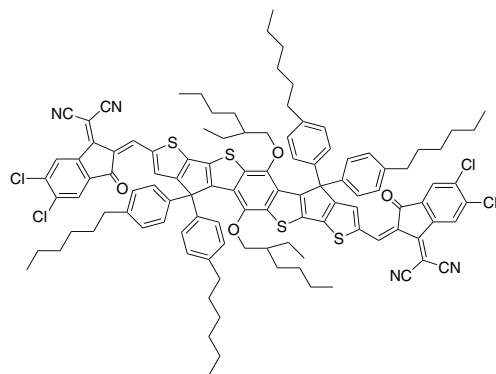
Formula :  $C_{110}H_{110}F_4N_4O_4S_4$

M.W. : 1756.32 g/mole



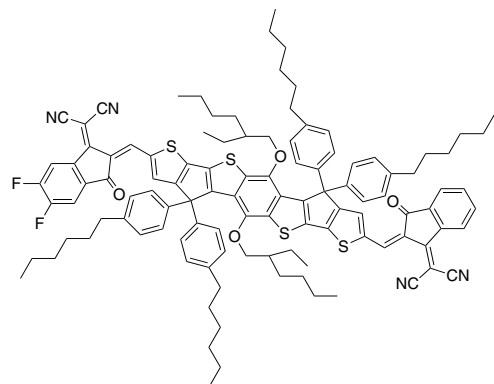
### LT-S9962 | BTIC-4Cl, BTCIC NEW

Formula :  $C_{110}H_{110}Cl_4N_4O_4S_4$   
M.W. : 1822.15 g/mole



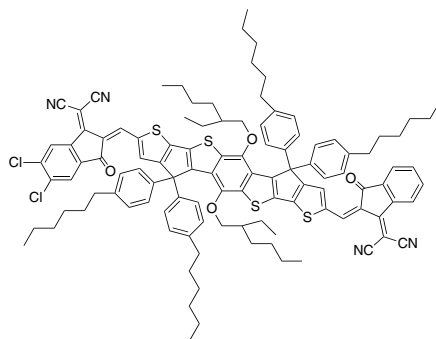
### LT-S9963 | BTIC-2F NEW

Formula :  $C_{110}H_{112}F_2N_4O_4S_4$   
M.W. : 1720.35 g/mole



### LT-S9964 | BTIC-2Cl NEW

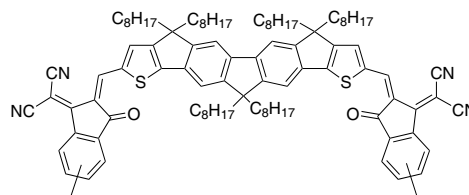
Formula :  $C_{110}H_{112}Cl_2N_4O_4S_4$   
M.W. : 1753.26 g/mole



### LT-S9965 | F-M, FM, FTIC-C8C8M NEW

4,4',7,7',12,12'-Octyl-7,12-dihydro- bis[methylidyne(3-oxo-  
methyl)-1H

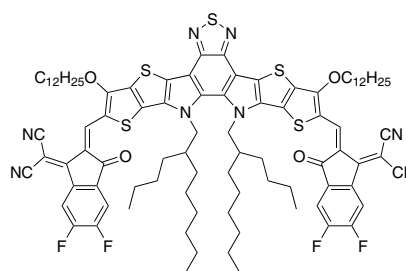
CAS No : 2239303-91-2  
Grade : >98%  
Formula :  $C_{99}H_{122}N_4O_2S_2$   
M.W. : 1464.18 g/mole



### LT-S9967 | Y6-O NEW

2,2'-((2Z,2'Z)-((12,13-bis(2-butylloctyl)-3,9-bis(dodecyloxy)-  
12,13-dihydro-[1,2,5]thiadiazolo[3,4-e]thieno[2'',3''':4',5']  
thieno[2',3':4,5]pyrrolo[3,2-g]thieno[2',3':4,5]thieno[3,2-b]  
indole-2,10-diyl)bis(methanylylidene))bis(5,6-difluoro-3-oxo-  
2,3-dihydro-1H-indene-2,1-diylidene))dimalononitrile

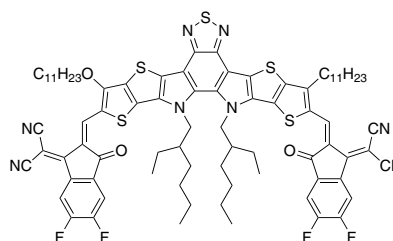
Grade : >99%  
Formula :  $C_{92}H_{106}F_4N_8O_4S_5$   
M.W. : 1624.2 g/mole



### LT-S9968 | Y6-1O NEW

2,2'-((2Z,2'Z)-((12,13-bis(2-ethylhexyl)-3-undecyl-9-  
(undecyloxy)-12,13-dihydro-[1,2,5]thiadiazolo[3,4-e]  
thieno[2'',3''':4',5']thieno[2',3':4,5]pyrrolo[3,2-g]thieno[2',3':4,5]  
thieno[3,2-b]indole-2,10-diyl)bis(methanylylidene))bis(5,6-  
difluoro-3-oxo-2,3-dihydro-1H-indene-2,1-diylidene))  
dimalononitrile

Grade : >99%  
Formula :  $C_{82}H_{86}F_4N_8O_3S_5$   
M.W. : 1467.93 g/mole



## LT-S9969 | BTP-Th

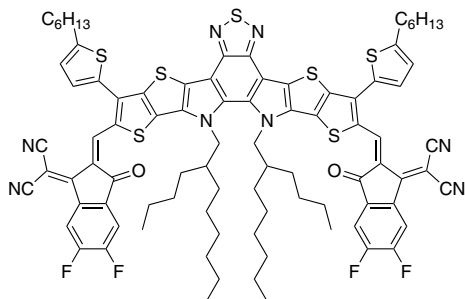
NEW

2,2'-((2Z,2'Z)-((12,13-Bis(2-butylloctyl)-3,9-bis(5-hexylthiophen-2-yl)-12,13-dihydro-[1,2,5]thiadiazolo[3,4-e]thieno[2',3':4',5']thieno[2',3':4,5]pyrrolo[3,2-g]thieno[2',3':4,5]thieno[3,2-b]indole-2,10-diy))bis(methanylylidene))bis(5,6-difluoro-3-oxo-2,3-dihydro-1H-indene-2,1-diylidene))dimalononitrile

Grade : &gt;99%

Formula :  $C_{88}H_{86}F_4N_8O_2S_7$ 

M.W. : 1588.13 g/mole



## LT-S9970 | BTP-FTh

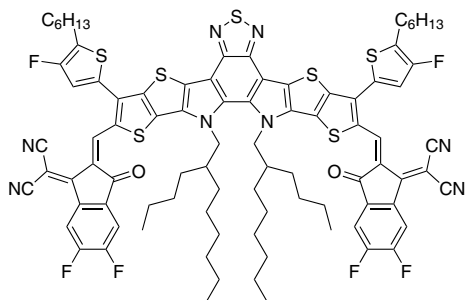
NEW

2,2'-((2Z,2'Z)-((12,13-Bis(2-butylloctyl)-3,9-bis(4-fluoro-5-hexylthiophen-2-yl)-12,13-dihydro-[1,2,5]thiadiazolo[3,4-e]thieno[2',3':4',5']thieno[2',3':4,5]pyrrolo[3,2-g]thieno[2',3':4,5]thieno[3,2-b]indole-2,10-diy))bis(methanylylidene))bis(5,6-difluoro-3-oxo-2,3-dihydro-1H-indene-2,1-diylidene))dimalononitrile

Grade : &gt;99%

Formula :  $C_{88}H_{84}F_6N_8O_2S_7$ 

M.W. : 1624.1 g/mole



## LT-S9971 | A4T-16

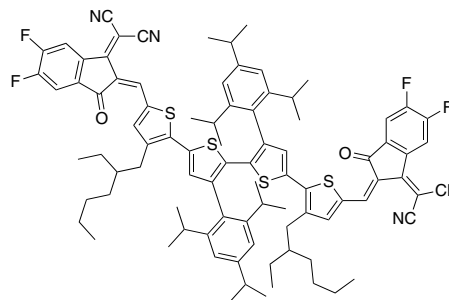
NEW

2,2'-((2Z,2'Z)-((3,3'''-Bis(2-ethylhexyl)-3'',4'-bis(2,4,6-triisopropylphenyl)-[2,2':5',2'':5'',2'''-quaterthiophene)-5,5'''-diyl)bis(methanylylidene))bis(5,6-difluoro-3-oxo-2,3-dihydro-1H-indene-2,1-diylidene))dimalononitrile

Grade : &gt;99%

Formula :  $C_{88}H_{90}F_4N_4O_2S_4$ 

M.W. : 1439.94 g/mole



## LT-S9972 | L8-EH

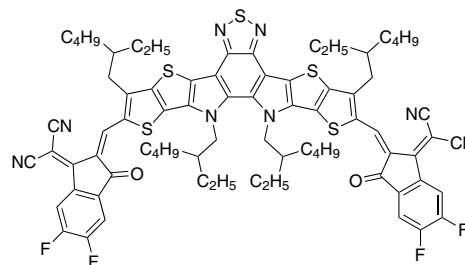
NEW

2,2'-((2Z,2'Z)-((3,9,12,13-tetrakis(2-ethylhexyl)-12,13-dihydro-[1,2,5]thiadiazolo[3,4-e]thieno[2',3':4',5']thieno[2',3':4,5]pyrrolo[3,2-g]thieno[2',3':4,5]thieno[3,2-b]indole-2,10-diy))bis(methanylylidene))bis(5,6-difluoro-3-oxo-2,3-dihydro-1H-indene-2,1-diylidene))dimalononitrile

Grade : &gt;99%

Formula :  $C_{76}H_{74}F_4N_8O_2S_5$ 

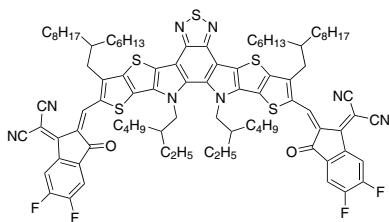
M.W. : 1367.77 g/mole



LT-S9973 | L8-HD **NEW**

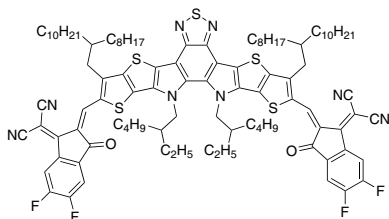
2,2'-((2Z,2'Z)-((12,13-bis(2-ethylhexyl)-3,9-bis(2-hexyldecyl)-12,13-dihydro-[1,2,5]thiadiazolo[3,4-e]thieno[2'',3'':4',5']thieno[2',3':4,5]pyrrolo[3,2-g]thieno[2',3':4,5]thieno[3,2-b]indole-2,10-diy)bis(methanylylidene))bis(5,6-difluoro-3-oxo-2,3-dihydro-1H-indene-2,1-diy)lidene)dimalononitrile

Grade : > 99%  
Formula :  $C_{92}H_{106}F_4N_8O_2S_5$   
M.W. : 1592.2 g/mole

LT-S9974 | L8-OD **NEW**

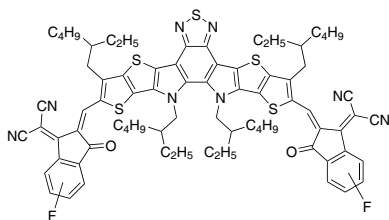
2,2'-((2Z,2'Z)-((12,13-bis(2-ethylhexyl)-3,9-bis(2-octyldecyl)-12,13-dihydro-[1,2,5]thiadiazolo[3,4-e]thieno[2'',3'':4',5']thieno[2',3':4,5]pyrrolo[3,2-g]thieno[2',3':4,5]thieno[3,2-b]indole-2,10-diy)bis(methanylylidene))bis(5,6-difluoro-3-oxo-2,3-dihydro-1H-indene-2,1-diy)lidene)dimalononitrile

Grade : > 99%  
Formula :  $C_{100}H_{122}F_4N_8O_2S_5$   
M.W. : 1704.41 g/mole

LT-S9975 | L8-EH-F **NEW**

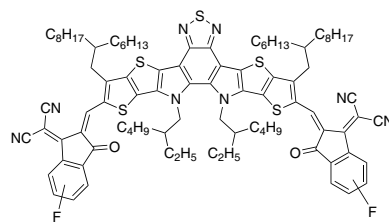
2,2'-((2Z,2'Z)-((3,3'''-Bis(2-ethylhexyl)-3'',4''-bis(2,4,6-triisopropylphenyl)-[2,2':5'',2'':5'']-quaterthiophene)-5,5'''-diyl)bis(methanylylidene))bis(5,6-difluoro-3-oxo-2,3-dihydro-1H-indene-2,1-diy)lidene)dimalononitrile

Formula :  $C_{76}H_{76}F_2N_8O_2S_5$   
M.W. : 1331.79 g/mole

LT-S9976 | L8-HD-F **NEW**

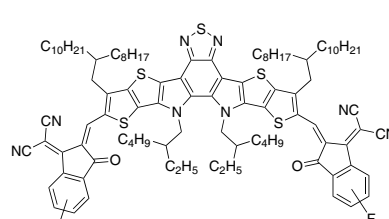
2,2'-((2Z,2'Z)-((3,9,12,13-Tetrakis(2-ethylhexyl)-12,13-dihydro-[1,2,5]thiadiazolo[3,4-e]thieno[2'',3'':4',5']thieno[2',3':4,5]pyrrolo[3,2-g]thieno[2',3':4,5]thieno[3,2-b]indole-2,10-diy)bis(methanylylidene))bis(5,6-difluoro-3-oxo-2,3-dihydro-1H-indene-2,1-diy)lidene)dimalononitrile

Grade : > 99%  
Formula :  $C_{92}H_{108}F_2N_8O_2S_5$   
M.W. : 1556.22 g/mole

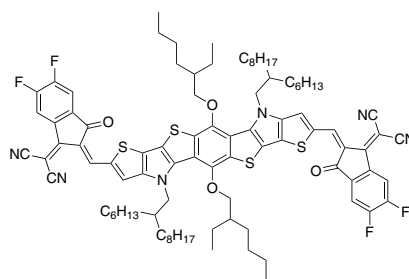
LT-S9977 | L8-OD-F **NEW**

2,2'-((2Z,2'Z)-((12,13-Bis(2-ethylhexyl)-3,9-bis(2-hexyldecyl)-12,13-dihydro-[1,2,5]thiadiazolo[3,4-e]thieno[2'',3'':4',5']thieno[2',3':4,5]pyrrolo[3,2-g]thieno[2',3':4,5]thieno[3,2-b]indole-2,10-diy)bis(methanylylidene))bis(5,6-difluoro-3-oxo-2,3-dihydro-1H-indene-2,1-diy)lidene)dimalononitrile

Grade : > 99%  
Formula :  $C_{100}H_{124}F_2N_8O_2S_5$   
M.W. : 1668.43 g/mole

LT-S9978 | M3 **NEW**

Formula :  $C_{92}H_{108}F_4N_6O_4S_4$   
M.W. : 1566.13 g/mole



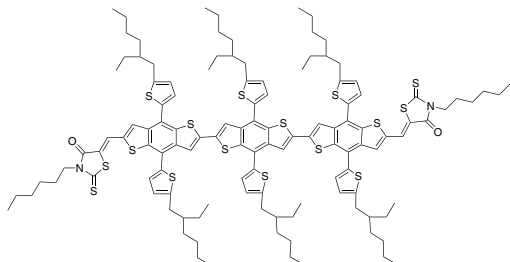
### LT-S9979 | DRTB-T-Cx, DRTB, DRTB-T, DRTB-T-C6 **NEW**

5Z,5'E)-5,5'-((4,4',4'',8,8',8''-Hexakis(5-(2-ethylhexyl)thiophen-2-yl) S<sub>4</sub> -[2,2':6',2''-terbenzo[1,2-b:4,5-b']dithiophene)-6,6''-diyl)bis(methanylylidene))bis (3-hexyl-2-thioxothiazolidin-4-one)

Grade : >99%

Formula : C<sub>122</sub>H<sub>148</sub>N<sub>2</sub>O<sub>2</sub>S<sub>16</sub>

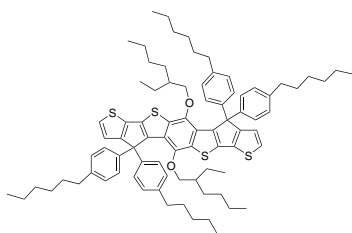
M.W. : 2187.53 g/mole



### K1840 | BT **NEW**

Formula : C<sub>84</sub>H<sub>106</sub>O<sub>2</sub>S<sub>4</sub>

M.W. : 1275.99 g/mole

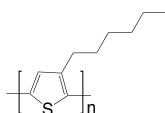




## LT-S909 | P3HT

Poly(3-hexylthiophene-2,5-diyl)

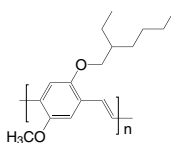
CAS No. : 110134-47-9 / 104934-50-1  
 Grade : Mw >45,000 (GPC)  
 Electronic Grade : Regio Regular >93%  
 Formula :  $(C_{10}H_{14}S)_n$   
 UV : 445 nm (in THF)  
 PL : 564 nm (in THF)  
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene, Dichlorobenzene



## LT-S931 | MEH-PPV

Poly[2-methoxy-5-(2-ethylhexyloxy)-1,4-phenylenevinylene]

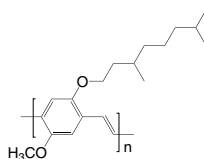
CAS No. : 138184-36-8  
 Grade : Mw >100,000 (GPC)  
 Formula :  $(C_{17}H_{24}O_2)_n$   
 UV : 501 nm (in  $CH_2Cl_2$ )  
 PL : 502 nm (in  $CH_2Cl_2$ )  
 Solubility : Soluble in THF,  $CHCl_3$ , Chlorobenzene, Dichlorobenzene



## LT-S932 | MDMO-PPV

Poly[2-methoxy-5-(3,7-dimethyloxy)-1,4-phenylenevinylene]

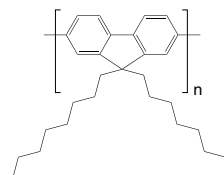
CAS No. : 177716-59-5  
 Grade : Mw >100,000 (GPC)  
 Formula :  $(C_{19}H_{28}O_2)_n$   
 UV : 485 nm (in  $CH_2Cl_2$ )  
 PL : 555 nm (in  $CH_2Cl_2$ )  
 Solubility : Soluble in THF,  $CHCl_3$ , Chlorobenzene, Dichlorobenzene



## LT-S933 | PFO

Poly(9,9-dioctylfluorenyl-2,7-diyl)

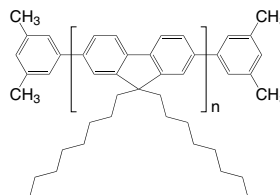
CAS No. : 123864-00-6  
 Grade : Mw =50,000 ~ 150,000 (GPC)  
 Formula :  $(C_{29}H_{40})_n$   
 UV : 376 nm (in THF)  
 PL : 426 nm (in THF)  
 Solubility : Soluble in THF,  $CHCl_3$ , Chlorobenzene, Dichlorobenzene



## LT-S934 | PFO-DMP

Poly(9,9-dioctylfluorenyl-2,7-diyl) end capped with dimethylphenyl

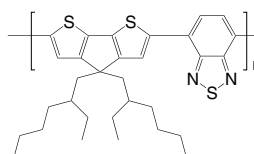
CAS No. : 874816-14-5  
 Grade : Mw =50,000 ~ 150,000 (GPC)  
 Formula :  $C_{16}H_{18}(C_{29}H_{40})_n$   
 UV : 368 nm (in THF)  
 PL : 421 nm (in THF)  
 Solubility : Soluble in THF,  $CHCl_3$ , Chlorobenzene, Dichlorobenzene



## LT-S949 | PCPDTBT

Poly[2,6-(4,4-bis-(2-ethylhexyl)-4H-cyclopenta[2,1-b:3,4-b']-dithiophene)-alt-4,7-(2,1,3-benzothiadiazole)]

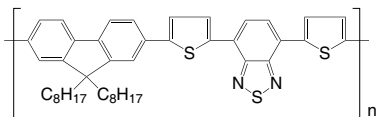
CAS No. : 920515-34-0  
 Grade : Mw =7,000 ~ 20,000 (GPC)  
 Formula :  $(C_{31}H_{38}N_2S_3)_n$   
 UV : 695 nm (in THF)  
 PL : 564 nm (in THF)  
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene, Dichlorobenzene



**LT-S950** | PFOBT / PFODBT

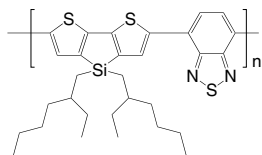
Poly[2,7-(9,9-di-octyl-fluorene)-*alt*-4,7-bis(thiophen-2-yl)benzo-2,1,3-thiadiazole]

CAS No. : 782469-77-6  
 Grade : Mw = 10,000 ~ 50,000 (GPC)  
 Formula : (C<sub>43</sub>H<sub>46</sub>N<sub>2</sub>S<sub>3</sub>)<sub>n</sub>  
 UV : 523 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 PL : 630 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene

**LT-S951** | PSBTBT

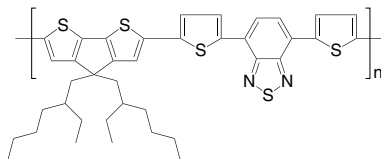
Poly[2,6-(4,4'-bis(2-ethylhexyl)dithieno[3,2-*b*:2',3'-*d*]silole)-*alt*-4,7-(2,1,3-benzothiadiazole)]

CAS No. : 1089687-02-4  
 Grade : Mw = 10,000 ~ 30,000 (GPC)  
 Formula : (C<sub>30</sub>H<sub>38</sub>N<sub>2</sub>S<sub>3</sub>Si)<sub>n</sub>  
 UV : 652 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene

**LT-S953** | PCPDTTBT

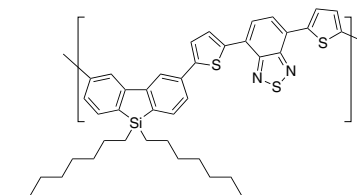
Poly[2,6-(4,4'-bis(2-ethylhexyl)-4*H*-cyclopenta-[2,1-*b*:3,4-*b'*]dithiophene)-*alt*-4,7-bis(thiophen-2-yl)benzo-2,1,3-thiadiazole]

CAS No. : 1035681-83-4  
 Grade : Mw = 8,000 ~ 20,000 (GPC)  
 Formula : (C<sub>39</sub>H<sub>42</sub>N<sub>2</sub>S<sub>5</sub>)<sub>n</sub>  
 UV : 615 nm (in CHCl<sub>3</sub>)  
 PL : 749 nm (in CHCl<sub>3</sub>)  
 Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene

**LT-S954** | PSiFDBT**NEW**

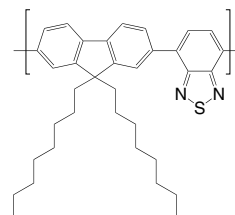
Poly[2,7-(9,9-dioctyl-dibenzosilole)-*alt*-4,7-bis(thiophen-2-yl)benzo-2,1,3-thiadiazole]

CAS No. : 1004272-92-7  
 Grade : Mw ~ 38,000  
 Formula : (C<sub>42</sub>H<sub>46</sub>N<sub>2</sub>S<sub>3</sub>Si)<sub>n</sub>

**LT-S957** | F8BT

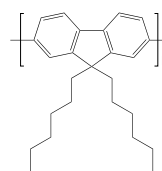
Poly[(9,9-dioctylfluorenyl-2,7-diyl)-*alt*-(benzo[2,1,3]thiadiazol-4,7-diyl)]

CAS No. : 210347-52-7  
 Grade : Mw > 20,000 (GPC)  
 Formula : (C<sub>35</sub>H<sub>42</sub>N<sub>2</sub>S)<sub>n</sub>  
 UV : 453 nm (in THF)  
 PL : 534 nm (in THF)  
 Solubility : Soluble in THF, CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene

**LT-S958** | PHF

Poly(9,9-dihexylfluorenyl-2,7-diyl)

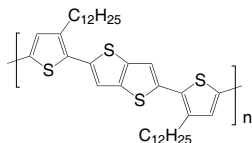
CAS No. : 201807-75-2  
 Grade : Mw = 30,000 ~ 100,000 (GPC)  
 Formula : (C<sub>25</sub>H<sub>32</sub>)<sub>n</sub>  
 UV : 389 nm (in THF)  
 PL : 418 nm (in THF)  
 Solubility : Soluble in THF, CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene



**LT-S981** | PBTTC-C<sub>12</sub>

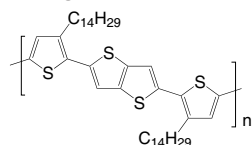
Poly[2,5-bis(3-dodecylthiophen-2-yl)thieno[3,2-b]thiophene]

CAS No. : 888491-18-7  
 Grade : Mw = 10,000~100,000 (GPC)  
 Formula : (C<sub>38</sub>H<sub>54</sub>S<sub>4</sub>)<sub>n</sub>  
 UV : 460 nm (in THF)  
 PL : 557 nm (in THF)  
 Solubility : > 5 mg/mL in CHCl<sub>3</sub>

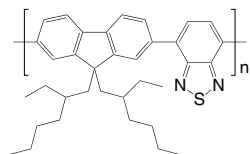
**LT-S982** | PBTTC-C<sub>14</sub>

Poly[2,5-bis(3-tetradecylthiophen-2-yl)thieno[3,2-b]thiophene]

CAS No. : 888491-19-8  
 Grade : Mw = 10,000~100,000 (GPC)  
 Formula : (C<sub>42</sub>H<sub>62</sub>S<sub>4</sub>)<sub>n</sub>  
 UV : 466 nm (in THF)  
 PL : 557 nm (in THF)  
 Solubility : > 5 mg/mL in CHCl<sub>3</sub>

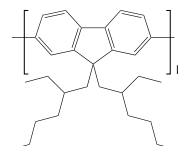
**LT-S9003** | F2EHBTPoly[(9,9-bis(2-ethylhexyl)fluorenyl-2,7-diyl)-*alt*-(benzo[2,1,3]thiadiazol-4,7-diyl)]

CAS No. : 1379051-13-4  
 Grade : Mw = 10,000 ~ 50,000 (GPC)  
 Formula : (C<sub>35</sub>H<sub>42</sub>N<sub>2</sub>S)<sub>n</sub>  
 UV : 453 nm (in THF)  
 PL : 645 nm (in THF)  
 Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene

**LT-S9004** | PF2EH

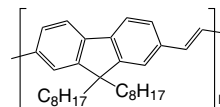
Poly[9,9-bis(2-ethylhexyl)fluorenyl-2,7-diyl]

CAS No. : 188201-16-3  
 Grade : Mw > 20,000 (GPC)  
 Formula : (C<sub>29</sub>H<sub>40</sub>)<sub>n</sub>  
 UV : 389 nm (in THF)  
 PL : 418 nm (in THF)  
 Solubility : Soluble in THF, CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene

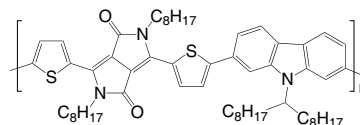
**LT-S9006**

Poly[(9,9-dioctyl-9H-fluorene-2,7-diyl)-(1E)-1,2-ethene-diyl]

CAS No. : 360068-36-6  
 Grade : Mw > 20,000 (GPC)  
 Formula : (C<sub>31</sub>H<sub>42</sub>)<sub>n</sub>  
 UV : 455 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene

**LT-S9032** | PCBTDDPPPoly[*N*'-9'-heptadecanyl-2,7-carbazole-*alt*-3,6-bis(thiophen-5-yl)-2,5-dioctyl-2,5-dihydropyrrolo[3,4]pyrrole-1,4-dione]

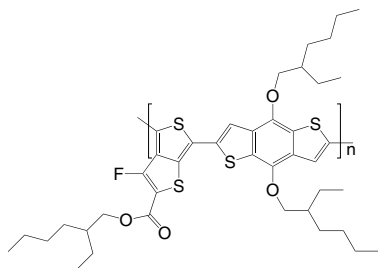
CAS No. : 1147374-60-4  
 Grade : Mw > 10,000 (GPC)  
 Formula : (C<sub>59</sub>H<sub>81</sub>N<sub>3</sub>O<sub>2</sub>S<sub>2</sub>)<sub>n</sub>  
 UV : 647 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene



## LT-S9050 | PTB7

Poly[4,8-bis[(2-ethylhexyl)oxy]benzo[1,2-*b*:4,5-*b'*]dithiophene-2,6-diyl-*alt*-3-fluoro-2-[(2-ethylhexyl)carbonyl]thieno[3,4-*b'*]thiophene-4,6-diyl]

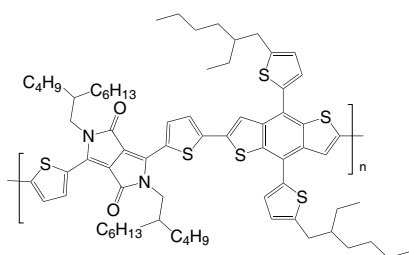
CAS No. : 1266549-31-8  
 Grade : Mw >20,000 (GPC)  
 Formula : (C<sub>41</sub>H<sub>53</sub>FO<sub>4</sub>S<sub>4</sub>)<sub>n</sub>  
 UV : 670 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene



## LT-S9081 | PBDTT-DPP

Poly[2,6'-4,8-di(5-ethylhexylthienyl)benzo[1,2-*b*:3,4-*b'*]dithiophene-*alt*-5-dibutyl-3,6-bis(5-bromothiophen-2-yl)-pyrrolo[3,4-*c*]pyrrole-1,4-dione]

CAS No. : 1380582-98-8  
 Grade : Mw >50,000 (GPC)  
 Formula : (C<sub>72</sub>H<sub>94</sub>N<sub>2</sub>O<sub>2</sub>S<sub>6</sub>)<sub>n</sub>  
 Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene

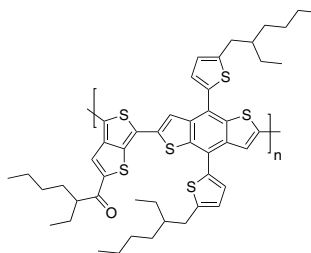


## LT-S9108 | PBDTTT-C-T

NEW

Poly[1-(6-{4,8-bis[(2-ethylhexyl)oxy]-6-methylbenzo[1,2-*b*:4,5-*b'*]dithiophen-2-yl)-3-fluoro-4-methylthieno[3,4-*b'*]thiophen-2-yl)-1-octanone]

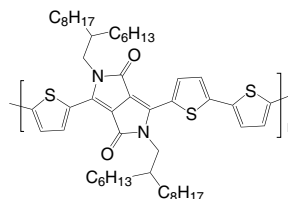
CAS No. : 1393932-53-0  
 Grade : >99% (monomers) Mw~100000  
 Formula : (C<sub>48</sub>H<sub>56</sub>OS<sub>6</sub>)<sub>n</sub>



## LT-S9109 | PDPPP3T

Poly[2,2'-[(2,5-bis(2-hexyldecyl)-3,6-dioxo-2,3,5,6-tetrahydropyrrolo[3,4-*c*]pyrrole-1,4-diyl)dithiophene]-5,5'-diyl-*alt*-thiophen-2,5-diyl]

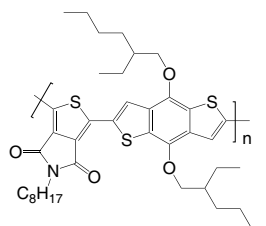
CAS No. : 1198291-01-8  
 Grade : Mw >30,000 (GPC)  
 Formula : (C<sub>50</sub>H<sub>72</sub>N<sub>2</sub>O<sub>2</sub>S<sub>3</sub>)<sub>n</sub>  
 UV : 830 nm (in CHCl<sub>3</sub>)  
 Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene



## LT-S9111 | PBDTTPD

Poly[4,8-bis[(2-ethylhexyl)oxy]benzo[1,2-*b*:4,5-*b'*]dithiophene-2,6-diyl-*alt*-(1,3-(5-octyl-4*H*-thieno[3,4-*c*]pyrrole-4,6(5*H*)-dione))]

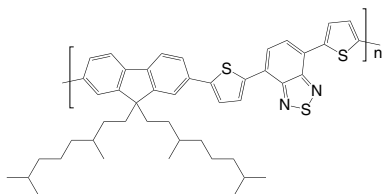
CAS No. : 1223479-75-1  
 Grade : Mw >30,000 (GPC)  
 Formula : (C<sub>40</sub>H<sub>53</sub>NO<sub>4</sub>S<sub>3</sub>)<sub>n</sub>  
 UV : 629 nm (in CHCl<sub>3</sub>)  
 Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene



**LT-S9113** | BisDMO-PFDTBT

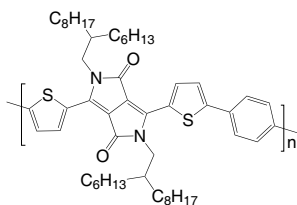
Poly{[2,7-(9,9-bis(3,7-dimethyloctylfluorene))-*alt*-[5,5-(4,7-di-2'-thienyl-2,1,3-benzothiadiazole)]}

CAS No. : 1204005-82-2  
 Grade : Mw > 10,000 (GPC)  
 Formula : (C<sub>47</sub>H<sub>54</sub>N<sub>2</sub>S<sub>3</sub>)<sub>n</sub>  
 UV : 560 nm (in CHCl<sub>3</sub>)  
 Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene

**LT-S9114** | PDPPTPT

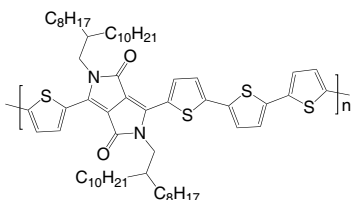
Poly{2,2'-[(2,5-bis(2-hexyldecyl)-3,6-dioxo-2,3,5,6-tetrahydropyrrolo[3,4-c]pyrrole-1,4-diyl)]dithiophene-5,5'-diyl-*alt*-benzen-1,4-diyl}

CAS No. : 1255939-39-9  
 Grade : Mw > 20,000 (GPC)  
 Formula : (C<sub>52</sub>H<sub>74</sub>N<sub>2</sub>O<sub>2</sub>S<sub>2</sub>)<sub>n</sub>  
 UV : 628 nm (in CHCl<sub>3</sub>)  
 Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene

**LT-S9117** | PDQT

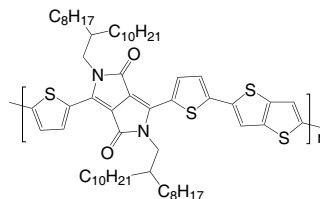
Poly{2,2'-[(2,5-bis(2-octyldodecyl)-3,6-dioxo-2,3,5,6-tetrahydropyrrolo[3,4-c]pyrrole-1,4-diyl)]dithiophene-5,5'-diyl-*alt*-2,2'-bithiophene-5,5'-diyl}

CAS No. : 1267540-03-3  
 Grade : Mw > 30,000 (GPC)  
 Formula : (C<sub>62</sub>H<sub>90</sub>N<sub>2</sub>O<sub>2</sub>S<sub>4</sub>)<sub>n</sub>  
 UV : 810 nm (in CHCl<sub>3</sub>)  
 Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene

**LT-S9118** | PDBT-co-TT

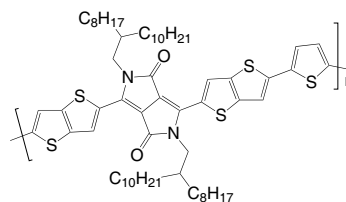
Poly{2,2'-[(2,5-bis(2-octyldodecyl)-3,6-dioxo-2,3,5,6-tetrahydropyrrolo[3,4-c]pyrrole-1,4-diyl)]dithiophene-5,5'-diyl-*alt*-thieno[3,2-*b*]thiophen-2,5-diyl}

CAS No. : 1444870-74-9  
 Grade : Mw > 30,000 (GPC)  
 Formula : (C<sub>60</sub>H<sub>88</sub>N<sub>2</sub>O<sub>2</sub>S<sub>4</sub>)<sub>n</sub>  
 UV : 810 nm (in CHCl<sub>3</sub>)  
 Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene

**LT-S9119** | PDPPBTT

Poly{2,2'-[(2,5-bis(2-octyldodecyl)-3,6-dioxo-2,3,5,6-tetrahydropyrrolo[3,4-c]pyrrole-1,4-diyl)]dithiophene-5,5'-diyl-*alt*-thiophen-2,5-diyl}

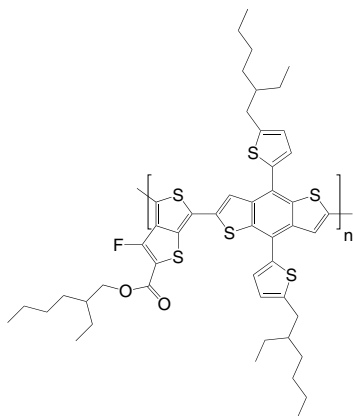
CAS No. : 1270977-98-4  
 Grade : Mw > 30,000 (GPC)  
 Formula : (C<sub>62</sub>H<sub>88</sub>N<sub>2</sub>O<sub>2</sub>S<sub>5</sub>)<sub>n</sub>  
 UV : 812 nm (in CHCl<sub>3</sub>)  
 Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene



## LT-S9139 | PTB7-Th

Poly[4,8-bis[5-(2-ethylhexyl)thiophen-2-yl]benzo[1,2-b:4,5-b']-dithiophene-2,6-diyl-*alt*-3-fluoro-2-[(2-ethylhexyl)carbonyl]-thieno[3,4-*b*]thiophene-4,6-diyl]

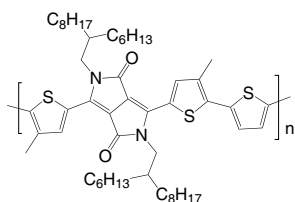
CAS No. : 1469791-66-9  
 Grade : Mw = 10,000~100,000 (GPC)  
 Formula : (C<sub>49</sub>H<sub>57</sub>FO<sub>2</sub>S<sub>6</sub>)<sub>n</sub>  
 UV : 695 nm (in CHCl<sub>3</sub>)  
 Solubility : >5 mg/mL in CHCl<sub>3</sub>



## LT-S9178 | PMDPP3T

Poly[[2,5-bis(2-hexyldecyl)-2,3,5,6-tetrahydro-3,6-dioxopyrrolo[3,4-*c*]pyrrole-1,4-diyl]-*alt*-[3',3''-dimethyl-2,2':5',2''-terthiophene]-5,5''-diyl]

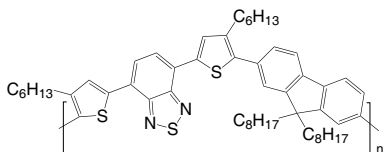
CAS No. : 1429119-71-0  
 Grade : Mw > 30,000 (GPC)  
 Formula : (C<sub>52</sub>H<sub>76</sub>N<sub>2</sub>O<sub>2</sub>S<sub>3</sub>)<sub>n</sub>  
 UV : 830 nm (in CHCl<sub>3</sub>)  
 Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene



## LT-S9210 | F8BTB

4-(5-(9,9-Dioctyl-9H-fluoren-2-yl)-4-hexylthiophen-2-yl)-7-(4-hexylthiophen-2-yl)benzo[c][1,2,5]thiadiazole

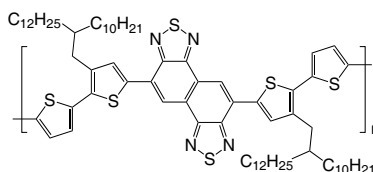
CAS No. : 891911-18-5  
 Grade : Mw > 5,000 (GPC)  
 Formula : (C<sub>55</sub>H<sub>70</sub>N<sub>2</sub>S<sub>3</sub>)<sub>n</sub>



## LT-S9271 | PNTz4T

Poly[naphtho[1,2-*c*:5,6-*c'*]bis[1,2,5]thiadiazole-5,10-diyl][3,3''-bis(2-decyltetradecyl)[2,2':5',2''':5'',2''''-quaterthiophene]-5,5''-diyl]

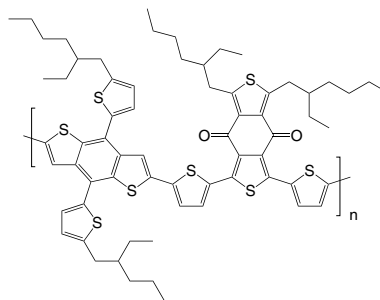
CAS No. : 1357999-94-0  
 Grade : Mw > 30,000 (GPC)  
 Formula : (C<sub>74</sub>H<sub>106</sub>N<sub>4</sub>S<sub>6</sub>)<sub>n</sub>  
 UV : 725 nm (film)



## LT-S9273 | PBDB-T

Poly[[4,8-bis[5-(2-ethylhexyl)-2-thienyl]benzo[1,2-*b*:4,5-*b'*]dithiophene-2,6-diyl]-2,5-thiophenediyl][5,7-bis(2-ethylhexyl)-4,8-dioxo-4H,8H-benzo[1,2-*c*:4,5-*c'*]dithiophene-1,3-diyl]

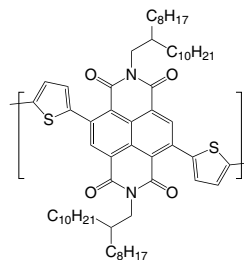
CAS No. : 1415929-80-4  
 Grade : Mw > 10,000 (GPC)  
 Formula : (C<sub>68</sub>H<sub>78</sub>O<sub>2</sub>S<sub>8</sub>)<sub>n</sub>



## LT-S9282 | P(NDI2OD-T2)

Poly[[1,2,3,6,7,8-hexahydro-2,7-bis(2-octyldodecyl)-1,3,6,8-dioxobenzo[*lmn*][3,8]phenanthroline-4,9-diyl][2,2'-bithiophene]-5,5'-diyl]

CAS No. : 1100243-40-0  
 Grade : Mw > 10,000 (GPC)  
 Formula : (C<sub>62</sub>H<sub>88</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>)<sub>n</sub>



**LT-S9288** | PDCBT

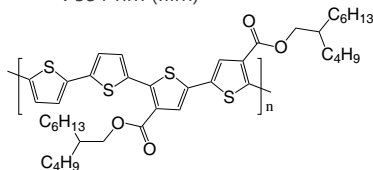
Poly[2,2''''-bis[[[2-butyl(octyl)oxy]carbonyl]-[2,2':5',2''':5'',2''''-quaterthiophene]-5,5''''-diyl]

CAS No. : 1609536-17-5

Grade : Mw > 10,000 (GPC)

Formula : (C<sub>42</sub>H<sub>56</sub>O<sub>4</sub>S<sub>4</sub>)<sub>n</sub>

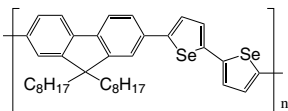
UV : 551 nm (film)

**LT-S9420** | F8Se2

Poly[[2,2'-biselenophene]-5,5'-diyl(9,9-dioctyl-9H-fluorene-2,7-diyl)]

CAS No. : 898233-56-2

Formula : (C<sub>37</sub>H<sub>44</sub>Se<sub>2</sub>)<sub>n</sub>

**LT-S9435** | PTQ10

Poly[(thiophene)-alt-(6,7-difluoro-2-(2-hexyldecyloxy)quinoxaline)]

CAS No. : 2270233-86-6

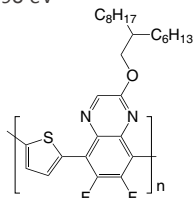
Grade : Mw > 10,000 (GPC)

Formula : (C<sub>28</sub>H<sub>36</sub>F<sub>2</sub>N<sub>2</sub>OS)<sub>n</sub>

UV : A strong Absorption from 450 to 620 nm (in CHCl<sub>3</sub> and film)

HOMO : -5.54 eV

LUMO : -2.98 eV

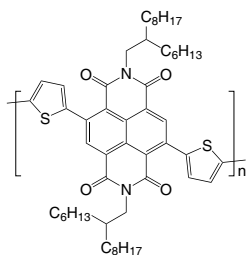
**LT-S9448** | PNDI(2HD)2T

Poly[[N,N'-bis(2-hexyldecyl)naphthalene-1,4,5,8-bis(dicarboximide)-2,6-diyl]-alt-5,5'-(2,2'-bithiophene)]

CAS No. : 1459168-70-7

Grade : Mw > 10,000 (GPC)

Formula : (C<sub>54</sub>H<sub>72</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>)<sub>n</sub>

**LT-S9449** | P(NDI2OD-2FT)

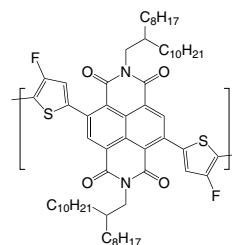
Poly[[1,2,3,6,7,8-hexahydro-2,7-bis(2-octyldodecyl)-1,3,6,8-tetraoxobenzo[Imn][3,8]phenanthroline-4,9-diyl]-[3,3'-difluoro[2,2'-bithiophene]-5,5'-diyl]]

CAS No. : 1773524-46-1

Grade : Mw > 10,000 (GPC)

Formula : (C<sub>62</sub>H<sub>86</sub>F<sub>2</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>)<sub>n</sub>

Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene

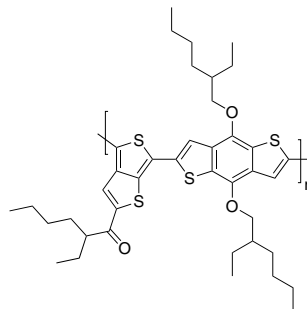
**LT-S9451** | PBDTTT-C**NEW**

Poly[(4,8-bis-(2-ethylhexyloxy)-benzo[1,2-b;4,5-b']dithiophene)-2,6-diyl-alt-(4-(2-ethylhexanoyl)-thieno[3,4-b]thiophene)]-2,6-diyl]

CAS No. : 1202249-71-5

Grade : >99.9% Mw ~89000

Formula : (C<sub>40</sub>H<sub>52</sub>O<sub>3</sub>S<sub>4</sub>)<sub>n</sub>

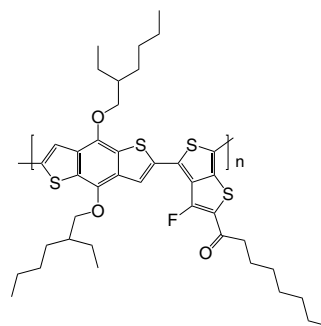
**LT-S9452** | PBDTTT-CF

Poly[[4,8-bis[[2-ethylhexyl]oxy]benzo[1,2-b;4,5-b']-dithiophene-2,6-diyl][3-fluoro-2-(1-oxooctyl)thieno[3,4-b]thiophenediyl]]

CAS No. : 1379592-65-0

Grade : Mw > 50,000 (GPC)

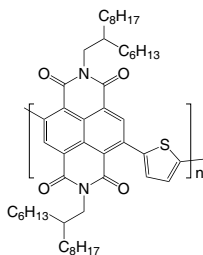
Formula : (C<sub>40</sub>H<sub>51</sub>FO<sub>3</sub>S<sub>4</sub>)<sub>n</sub>



## LT-S9454 | PNDI(2HD)T

Poly[[N,N'-bis(2-hexyldecyl)naphthalene-1,4,5,8-bis(dicarboximide)-2,6-diyl]-alt-2,5-thiophene]

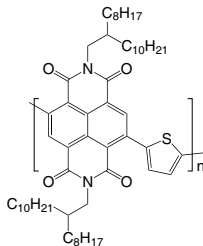
CAS No. : 1675973-74-6  
 Grade : Mw > 10,000 (GPC)  
 Formula :  $(C_{50}H_{70}N_2O_4S)_n$   
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene, Dichlorobenzene



## LT-S9455 | PNDI(2OD)T

Poly[[1,2,3,6,7,8-hexahydro-2,7-bis(2-octyldecyl)-1,3,6,8-tetraoxobenzo[imn][3,8]phenanthroline-4,9-diyl]-2,5-thiophenediyl]

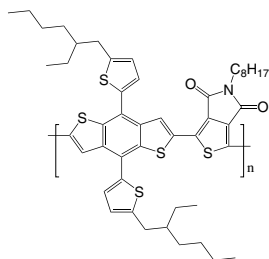
CAS No. : 1236111-76-4  
 Grade : Mw > 10,000 (GPC)  
 Formula :  $(C_{58}H_{86}N_2O_4S)_n$   
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene, Dichlorobenzene



## LT-S9456 | PBDDT-T8-TPD

Poly[[5,6-dihydro-5-octyl-4,6-dioxo-4H-thieno[3,4-c]-pyrrole-1,3-diyl][4,8-bis[5-(2-ethylhexyl)-2-thienyl]-benzo[1,2-b:4,5-b']dithiophene-2,6-diyl]]

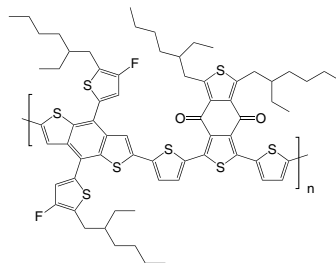
CAS No. : 1426534-44-2  
 Grade : Mw = 50,000-150,000 (GPC)  
 Formula :  $(C_{48}H_{57}NO_2S_5)_n$   
 UV : 557, 614 nm (film)



## LT-S9457 | PM6 (PBDB-T-2F)

Poly[[4,8-bis[5-(2-ethylhexyl)-4-fluoro-2-thienyl]benzo[1,2-b:4,5-b']dithiophene-2,6-diyl]-2,5-thiophenediyl-[5,7-bis(2-ethylhexyl)-4,8-dioxo-4H,8H-benzo[1,2-c:4,5-c']dithiophene-1,3-diyl]-2,5-thiophenediyl]

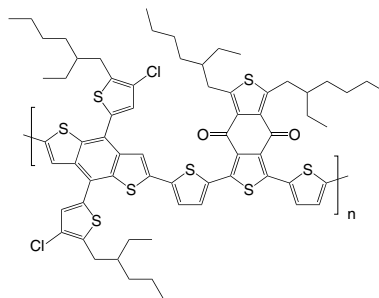
CAS No. : 1802013-83-7  
 Grade : > 40,000 (GPC)  
 Formula :  $(C_{68}H_{76}F_2O_2S_6)_n$   
 UV : 614 nm (in  $CHCl_3$ )  
 HOMO : -5.45 eV  
 LUMO : -3.65 eV



## LT-S9458 | PBDB-T-2Cl

Poly[[4,8-bis[4-chloro-5-(2-ethylhexyl)-2-thienyl]benzo[1,2-b:4,5-b']dithiophene-2,6-diyl]-2,5-thiophenediyl-[5,7-bis(2-ethylhexyl)-4,8-dioxo-4H,8H-benzo[1,2-c:4,5-c']dithiophene-1,3-diyl]-2,5-thiophenediyl]

CAS No. : 2239295-71-5  
 Grade : Mw > 10,000 (GPC)  
 Formula :  $(C_{68}H_{76}Cl_2O_2S_6)_n$   
 PCE : 14%

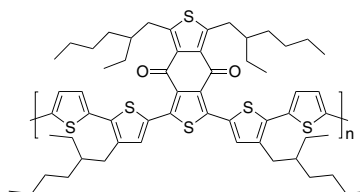


## LT-S9459 | PBDD4T

NEW

Poly[[5,7-bis(2-ethylhexyl)-4,8-dioxo-4H,8H-benzo[1,2-c:4,5-c']dithiophene-1,3-diyl][3,3''-bis(2-ethylhexyl)[2,2':5',2'':5'',2'''-quaterthiophene]-5,5'''-diyl]]

CAS No. : 1439937-09-3  
 Grade : Mw > 10,000  
 Formula :  $(C_{58}H_{74}O_2S_6)_n$

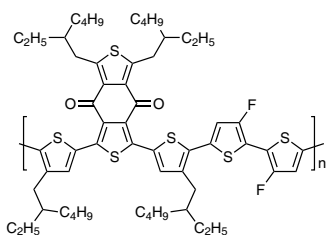




## LT-S9462 | PBDD4T-2F

Poly[[5,7-bis(2-ethylhexyl)-4,8-dioxo-4H,8H-benzo[1,2-c:4,5-c']dithiophene-1,3-diyl][3,3''-bis(2-ethylhexyl)-3'',4'-difluoro[2,2':5',2'':5'',2''''-quaterthiophene]-5,5''''-diyl]]

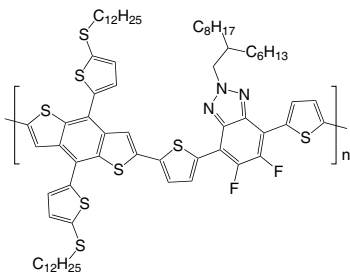
CAS No. : 1890205-85-2  
 Grade : Mw > 10,000 (GPC)  
 Formula : (C<sub>58</sub>H<sub>72</sub>F<sub>2</sub>O<sub>2</sub>S<sub>6</sub>)<sub>n</sub>  
 Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene



## LT-S9463 | J61

Poly[[5,6-difluoro-2-(2-hexyldecyl)-2H-benzotriazole-4,7-diyl]-2,5-thiophenediyl][4,8-bis[5-(dodecylthio)-2-thienyl]benzo[1,2-b:4,5-b']dithiophene-2,6-diyl]-2,5-thiophenediyl]]

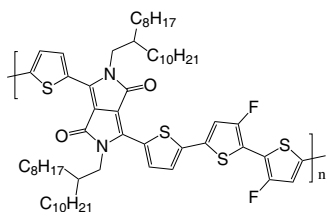
CAS No. : 1887136-03-9  
 Grade : Mw = 50,000-150,000 (GPC)  
 Formula : (C<sub>72</sub>H<sub>93</sub>F<sub>2</sub>N<sub>3</sub>S<sub>8</sub>)<sub>n</sub>  
 PCE : 11.77%



## LT-S9464 | PDPP4T-2F

Poly[[2,5-bis(2-decyltetradecyl)-2,3,5,6-tetrahydro-3,6-dioxopyrrolo[3,4-c]pyrrole-1,4-diyl]-3',4'-difluoro[2,2':5',2'':5'',2''''-quaterthiophene]-5,5''''-diyl]]

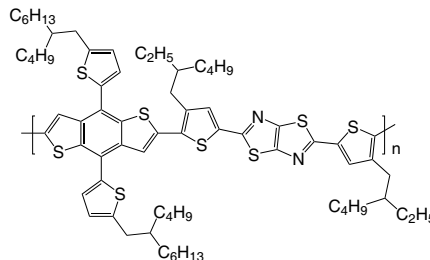
CAS No. : 1926166-46-2  
 Grade : Mw = 20,000~200,000 (GPC)  
 Formula : (C<sub>70</sub>H<sub>104</sub>F<sub>2</sub>N<sub>2</sub>O<sub>2</sub>S<sub>4</sub>)<sub>n</sub>



## LT-S9465 | PTZ1

Poly[thiazolo[5,4-d]thiazole-2,5-diyl][4-(2-ethylhexyl)-2,5-thiophenediyl][4,8-bis[5-(2-butyldecyl)-2-thienyl]-benzo[1,2-b:4,5-b']dithiophene-2,6-diyl][3-(2-ethylhexyl)-2,5-thiophenediyl]]

CAS No. : 2029196-34-5  
 Grade : Mw = 10,000-50,000 (GPC)  
 Formula : (C<sub>70</sub>H<sub>92</sub>N<sub>2</sub>S<sub>8</sub>)<sub>n</sub>

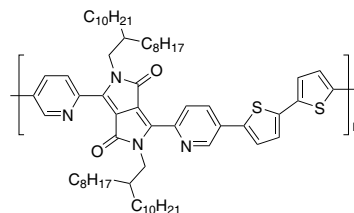


## LT-S9467 | PDBPyBT

NEW

Poly(2,5-bis(2-octyldecyl)-3,6-di(pyridin-2-yl)-pyrrolo[3,4-c]pyrrole-1,4(2H,5H)-dione-alt-2,2'-bithiophene)

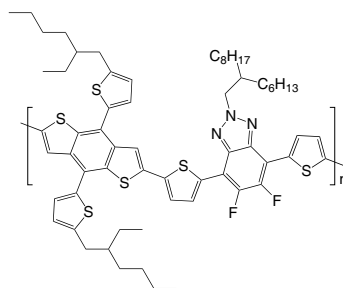
CAS No. : 1455028-36-0  
 Formula : (C<sub>64</sub>H<sub>92</sub>N<sub>4</sub>O<sub>2</sub>S<sub>2</sub>)<sub>n</sub>  
 M.W. : Mw > 10,000



## LT-S9469 | J52

Poly[[5,6-difluoro-2-(2-hexyldecyl)-2H-benzotriazole-4,7-diyl]-2,5-thiophenediyl][4,8-bis[5-(2-ethylhexyl)-2-thienyl]benzo[1,2-b:4,5-b']dithiophene-2,6-diyl]-2,5-thiophenediyl]]

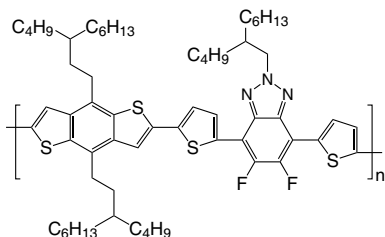
CAS No. : 1887136-01-7  
 Grade : Mw > 10,000 (GPC)  
 Formula : (C<sub>64</sub>H<sub>77</sub>F<sub>2</sub>N<sub>3</sub>S<sub>6</sub>)<sub>n</sub>  
 Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene



## LT-S9497 | FTAZ

Poly[4,8-bis(3-butylonyl)benzo[1,2-b:4,5-b']dithiophene-2,6-diyl-alt-5,6-difluoro-2-(2-butylloctyl)-4,7-di(thiophen-2-yl)-2H-benzo[d][1,2,3]triazole-5,5-diyl]

Grade : Mw > 10,000 (GPC)  
 Formula :  $(C_{62}H_{85}F_2N_3S_4)_n$   
 PCE : 12.1% (with ITIC-Th<sub>1</sub>)  
 HOMO : -5.38 eV  
 LUMO : -3.17 eV

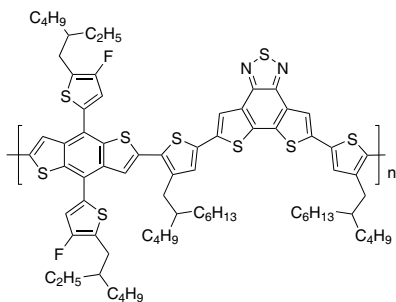


## LT-S9502 | D18

NEW

Poly[(4,8-bis(5-(2-ethylhexyl)-4-fluorothiophen-2-yl)-benzo[1,2-b:4,5-b']dithiophene-2,6-diyl)-alt-(5,8-[tributyl(4-(2-butylloctyl)thiophen)]dithieno-[3',2':3,4;2'',3''':5,6]benzo[1,2-c][1,2,5]thiadiazole)]

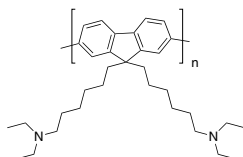
CAS No. : 2433725-54-1  
 Grade : Mw > 30,000 (GPC)  
 Formula :  $(C_{76}H_{92}F_2N_2S_9)_n$



## LT-S9506 | PFN100

Poly[(9,9-bis(6'-(N,N-diethylamino)hexyl)-2,7-fluorene]

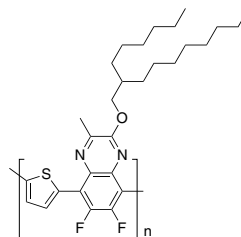
CAS No. : 1305335-08-3  
 Grade : Mw = 30,000~100,000  
 Formula :  $(C_{33}H_{50}N_2)_n$   
 HOMO : -5.54 eV  
 LUMO : -3.58 eV  
 Mobility :  $8.14 \times 10^{-4} \text{ cm}^2/\text{Vs}$



## LT-S9507 | PTQ11

NEW

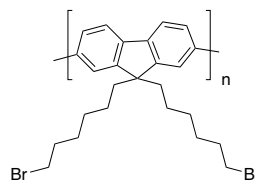
Grade : Mw = 80000  
 Formula :  $(C_{29}H_{38}F_2N_2OS)_n$



## LT-S9509

Poly[(9,9-bis(6-bromohexyl)-2,7-fluorene]

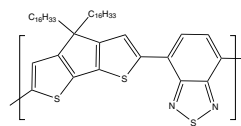
Grade : Mw = 30,000~100,000  
 Formula :  $(C_{25}H_{30}Br_2)_n$



## LT-S9537 | CDT-BTZ

Poly[2,1,3-benzothiadiazole-4,7-diyl(4,4-dihexadecyl-4H-cyclopenta[2,1-b:3,4-b']dithiophene-2,6-diyl)]

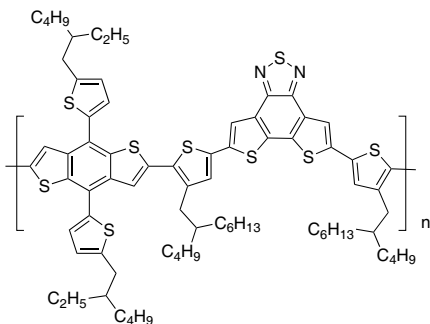
CAS No. : 1079041-67-0  
 Grade : Mw > 10000  
 Formula :  $(C_{47}H_{70}N_2S_3)_n$



## LT-S9585 | JD40

Poly((4,8-bis(5-(2-ethylhexyl)thiophen-2-yl)-benzo[1,2-*b*:4,5-*b'*]dithiophene-2,6-diyl)-alt-[5,8-(tributyl(4-(2-butyloctyl)thiophen)]dithieno-[3',2':3,4;2'',3'':5,6]benzo[1,2-*c*][1,2,5]thiadiazole))

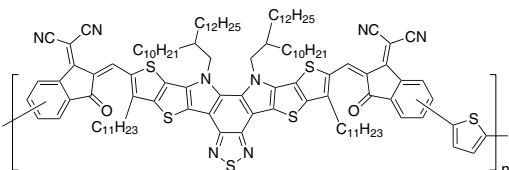
Grade : Mw > 30000  
 Formula : (C<sub>76</sub>H<sub>94</sub>N<sub>2</sub>S<sub>9</sub>)<sub>n</sub>  
 UV : 580 nm (in CHCl<sub>3</sub>)  
 HOMO : -5.28 eV  
 LUMO : -3.32 eV



## LT-S9590 | PJ1

Poly[[12,13-bis(2-decyltetradecyl)-12,13-dihydro-3,9-diundecylbisthieno[2'',3'':4',5']thieno[2',3':4,5]pyrrolo[3,2-*e*:2',3'-*g*][2,1,3]benzothiadiazole-2,10-diyl]methylidyne[1-(dicyanomethylene)-1,3-dihydro-3-oxo-2H-inden-yl-2-ylidene]-2,5-thiophenediyl[1-(dicyanomethylene)-1,3-dihydro-3-oxo-2H-inden-yl-2-ylidene]methylidyne]

CAS No. : 2411023-04-4  
 Grade : Mw > 10000  
 Formula : (C<sub>118</sub>H<sub>154</sub>N<sub>8</sub>O<sub>2</sub>S<sub>6</sub>)<sub>n</sub>  
 UV : 765 nm (in CHCl<sub>3</sub>)  
 HOMO : -5.61 eV  
 LUMO : -3.80 eV

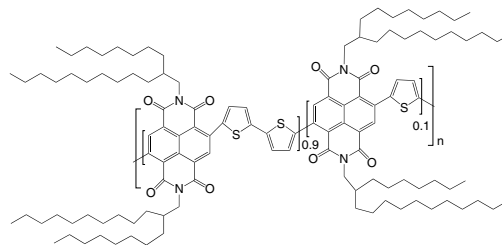


NEW

## LT-S9610 | PNDI-T10 (PCE9, high mobility n-type polymer)

Poly(((N,N'-bis(2-octyldodecyl)aphthalene-1,4,5,8-bis(dicarboximide)-2,6-diyl)-alt-5,5'-(2,2'-bithiophene))-ran-[[N,N'-bis(2-octyldodecyl)aphthalene-1,4,5,8-bis(dicarboximide)-2,6-diyl]-alt-2,5-thiophene])

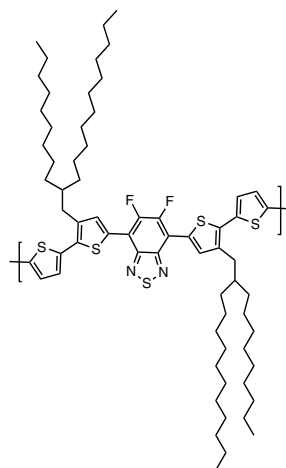
CAS No. : 1977539-03-9  
 Grade : Mw > 100,000  
 Formula : (C<sub>62</sub>H<sub>88</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>)<sub>0.9</sub> · (C<sub>58</sub>H<sub>86</sub>N<sub>2</sub>O<sub>4</sub>S)<sub>0.1</sub>



## LT-S9611 | PffBT4T-C9C13 (PCE12) NEW

Poly((5,6-difluoro-2,1,3-benzothiadiazol-4,7-diyl)-alt-(3,3''-di(2-nonyltridecyl)-2,2';5',2'';5'',2'''-quaterthiophen-5,5'''-diyl))

Grade : Mw > 100,000  
 Formula : (C<sub>66</sub>H<sub>97</sub>F<sub>2</sub>N<sub>2</sub>S<sub>5</sub>)<sub>n</sub>

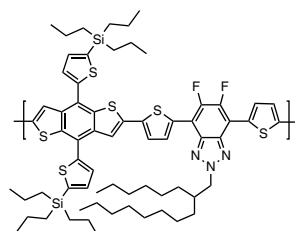


## LT-S9612 | PJ71

NEW

Poly[[5,6-difluoro-2-(2-hexyldecyl)-2H-benzotriazole-4,7-diyl]-2,5-thiophenediyl[4,8-bis[5-(tripropylsilyl)-2-thienyl]benzo[1,2-*b*:4,5-*b'*]dithiophene-2,6-diyl]-2,5-thiophenediyl]

CAS No. : 2035466-89-6  
 Grade : Mw > 100,000  
 Formula : (C<sub>66</sub>H<sub>85</sub>F<sub>2</sub>N<sub>3</sub>S<sub>6</sub>Si<sub>2</sub>)<sub>n</sub>

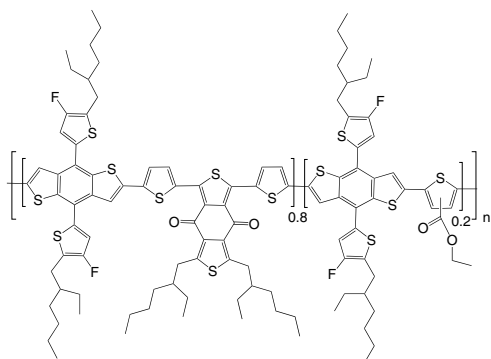


LT-S9613 | PBDB-TF-T1 **NEW**

Poly[(2,6-(4,8-bis(5-(2-ethylhexyl-3-fluoro)thiophen-2-yl)-benzo[1,2-b:4,5-b']dithiophene))-alt-(5,5-(1',3'-di-2-thienyl-5',7'-bis(2-ethylhexyl)benzo[1',2'-c:4',5'-c']dithiophene-4,8-dione))-ran-poly[(2,6-(4,8-bis(5-(2-ethylhexyl)thiophen-2-yl)-benzo[1,2-b:4,5-b']dithiophene))-alt-(2,2-ethyl-3(or4)-carboxylate-thiophene)]

Grade :Mw >50,000

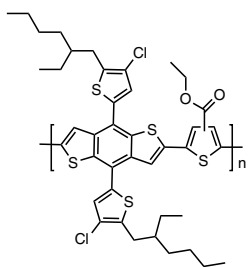
Formula :[(C<sub>68</sub>H<sub>76</sub>F<sub>2</sub>O<sub>2</sub>S<sub>8</sub>)0.8(C<sub>41</sub>H<sub>44</sub>F<sub>2</sub>O<sub>2</sub>S<sub>5</sub>)0.2]n

LT-S9614 | PCITO2 **NEW**

Poly[(2,6-(4,8-bis(5-(2-ethylhexyl-3-chloro)thiophen-2-yl)-benzo[1,2-b:4,5-b']dithiophene))-alt-(2,2-ethyl-3(or4)-carboxylate-thiophene)]

Grade :Mw >50,000

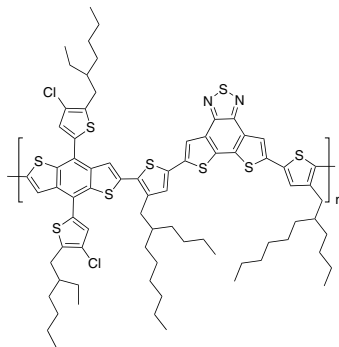
Formula :[(C<sub>41</sub>H<sub>44</sub>Cl<sub>2</sub>O<sub>2</sub>S<sub>5</sub>)n

LT-S9615 | D18-Cl **NEW**

Poly[(2,6-(4,8-bis(5-(2-ethylhexyl-3-chloro)thiophen-2-yl)-benzo[1,2-b:4,5-b']dithiophene))-alt-5,5'-(5,8-bis(4-(2-butyloctyl)thiophen-2-yl)dithieno[3',2':3,4;2'',3''':5,6]benzo[1,2-c][1,2,5]thiadiazole)]

Grade :Mw >30,000

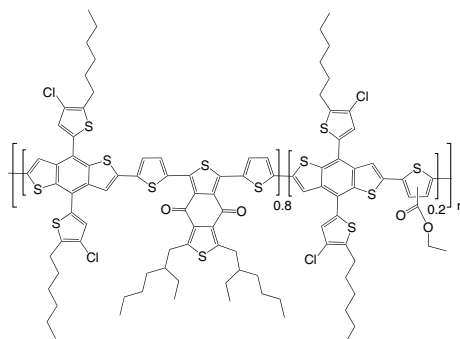
Formula :[(C<sub>76</sub>H<sub>92</sub>Cl<sub>2</sub>N<sub>2</sub>S<sub>7</sub>)n

LT-S9616 | PBDB-TCI-T1 **NEW**

Poly[(2,6-(4,8-bis(5-(2-ethylhexyl-3-chloro)thiophen-2-yl)-benzo[1,2-b:4,5-b']dithiophene))-alt-(5,5-(1',3'-di-2-thienyl-5',7'-bis(2-ethylhexyl)benzo[1',2'-c:4',5'-c']dithiophene-4,8-dione))-ran-poly[(2,6-(4,8-bis(5-(2-ethylhexyl)thiophen-2-yl)-benzo[1,2-b:4,5-b']dithiophene))-alt-(2,2-ethyl-3(or4)-carboxylate-thiophene)]

Grade :Mw >100,000

Formula :[(C<sub>68</sub>H<sub>76</sub>Cl<sub>2</sub>O<sub>2</sub>S<sub>8</sub>)0.8(C<sub>41</sub>H<sub>44</sub>F<sub>2</sub>O<sub>2</sub>S<sub>5</sub>)0.2]n

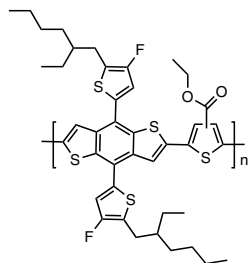


LT-S9617 | PTO2 **NEW**

Poly[(2,6-(4,8-bis(5-(2-ethylhexyl)thiophen-2-yl)-benzo[1,2-b:4,5-b']dithiophene)-alt-(2,2-ethyl-3(or4)-carboxylate-thiophene)]

Grade :Mw >50,000

Formula : $(C_{41}H_{44}F_2O_2S_5)_n$

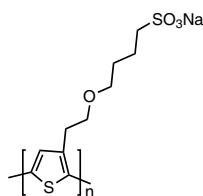
LT-S9618 | PTEBS Water Soluble Polythiophenes **NEW**

Sodium poly[2-(3-thienyl)-ethoxy-4-butylsulfonate]

CAS No. : 744198-90-1

Grade :>99%

Formula : $(C_{10}H_{13}S_2O_4Na)_n$

LT-S9709 | J52-Cl **NEW**

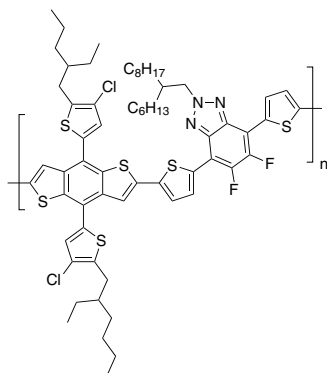
Poly[[5,6-difluoro-2-(2-hexyldecyl)-2H-benzotriazole-4,7-diyl]-2,5-thiophenediyl][4,8-bis[5-(2-ethylhexyl-3-chloro)-2-thienyl]benzo[1,2-b:4,5-b']dithiophene-2,6-diyl]-2,5-thiophenediyl]

Grade :Mw >20,000

Formula : $(C_{63}H_{73}Cl_2F_2N_3S_6)_n$

HOMO :-5.38 eV

LUMO :-3.44 eV

LT-S9710 | P4T2F-HD **NEW**

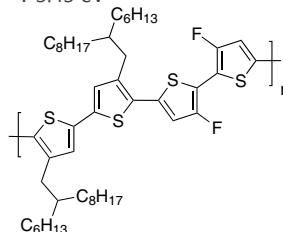
Poly(3,3'-dihexyldecyl-4''',4''''-difluoro[2,2':5',2''':5'',2''''-quaterthiophene]-5,5''''-diyl)

Grade :Mw >20,000

Formula : $(C_{48}H_{70}F_2S_4)_n$

HOMO :-5.35 eV

LUMO :-3.43 eV

LT-S9711 | PBQx-TF **NEW**

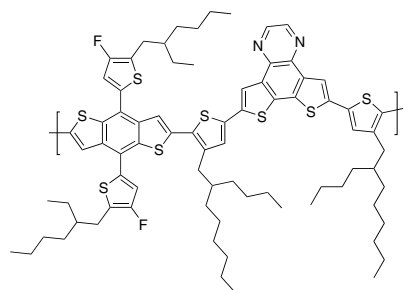
Poly[(2,6-(4,8-bis(5-(2-ethylhexyl-3-fluoro)thiophen-2-yl)-benzo[1,2-b:4,5-b']dithiophene)-alt-5,5'-(6,9-bis(4-(2-butyl)octyl)thiophen-2-yl)dithieno[3,2-f:2',3'-h]quinoxaline)]

Grade :Mw >20,000

Formula : $(C_{78}H_{94}F_2N_2S_8)_n$

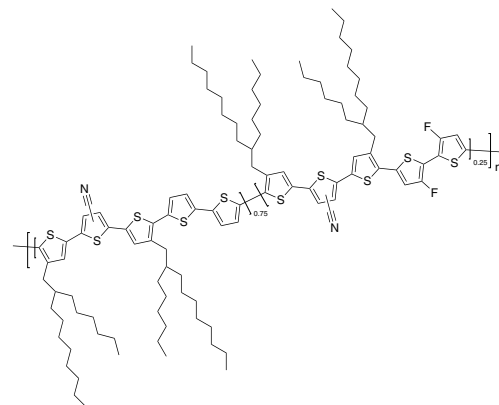
HOMO :-5.41 eV

LUMO :-2.82 eV

LT-S9728 | P5TCN-F25 **NEW**

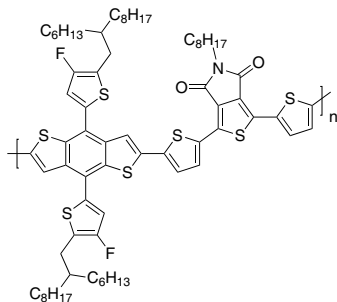
Poly[[3,3''-bis(2-hexyldecyl)-3'(4')-cyano[2,2':5',2''':5'',2''''-quinquethiophene]-5,5''''-diyl]-alt-[3,3''-bis(2-hexyldecyl)-3'(4')-cyano-3''',4''''-difluoro[2,2':5',2''':5'',2''''-quinquethiophene]-5,5''''-diyl]]

Grade :Mw >40,000 (GPC)

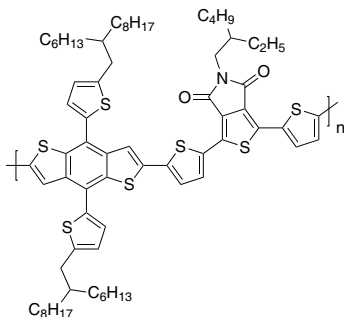


**LT-S9743** | TPD-3F **NEW**

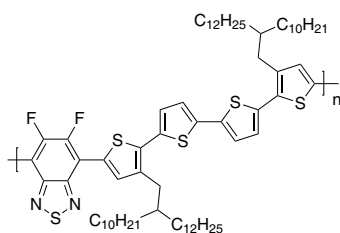
CAS No. :2499690-26-3  
 Formula : $(C_{72}H_{91}F_2NO_2S_7)_n$   
 M.W. :Mw >30,000  
 UV :555 nm (in o-xylene, film)  
 HOMO :-5.64 eV  
 LUMO :-3.76 eV

**LT-S9744** | PT-7 **NEW**

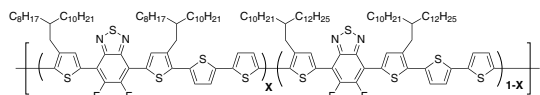
Grade :Mw >40,000  
 Formula : $(C_{72}H_{93}NO_2S_7)_n$   
 UV :558 nm (in o-xylene, film)  
 HOMO :-5.44 eV  
 LUMO :-3.56 eV

**LT-S9745** | PV3006 **NEW**

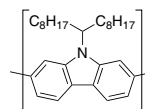
CAS No. :1430201-61-8  
 Grade :Mw >40,000  
 Formula : $(C_{70}H_{104}F_2N_2S_5)_n$   
 UV :702 nm (in CB)  
 HOMO :-5.36 eV  
 LUMO :-3.74 eV  
 Synonym :FBT-Th<sub>4</sub>(1,4)

**LT-S9746** | PV5001 **NEW**

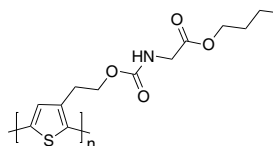
CAS No. :2221940-37-8  
 Formula : $(C_{66}H_{96}F_2N_2S_3)_n$   
 UV :702 nm (in CB)  
 Synonym :PffBT<sub>4</sub>T-500D

**LT-S9928** | PCz **NEW**

Poly[n-(1-octylonyl)-9h-carbazole-2,7-diy]l  
 CAS No :1093292-01-3  
 Grade :Mw > 10000  
 Formula : $(C_{29}H_{41}N)_n$

**LT-S9930** | PURET **NEW**

Poly[2(3-thienyl)ethanol n-butoxycarbonylmethylurethane]  
 Grade :Mw~50000  
 Formula : $(C_{13}H_{17}NO_4S)_n$



## LT-S9940 | J51

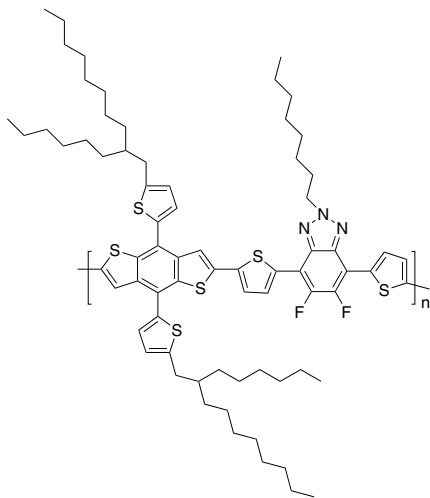
NEW

Poly[(5,6-difluoro-2-octyl-2H-benzotriazole-4,7-diyl)-2,5-thiophenediyl[4,8-bis[5-(2-hexyldecyl)-2-thienyl]benzo[1,2-b:4,5-b']dithiophene-2,6-diyl]-2,5-thiophenediyl]

CAS No : 1393529-03-7

Grade : >98% (based on NMR) Mw = 20000~40000

Formula :  $(C_{72}H_{93}F_2N_3S_6)_n$



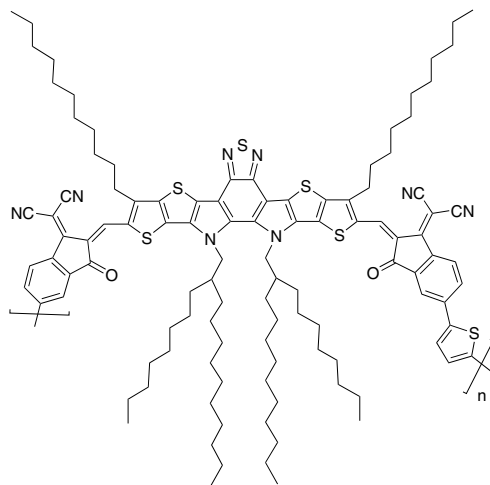
## LT-S9956 | PY-IT

NEW

Poly[[12,13-bis(2-octyldecyl)-12,13-dihydro-3,9-dioctylbisthieno[2'',3':4',5']thieno[2',3':4,5]pyrrolo[3,2-e:2',3'-g][2,1,3]benzothiadiazole-2,10-diyl]methylidene[1-(dicyanomethylene)-1,3-dihydro-3-oxo-2H-inden-yl-2-ylidene]-2,5-thiophenediyl[1-(dicyanomethylene)-1,3-dihydro-3-oxo-2H-inden-yl-2-ylidene]methylidene]

Grade : Mw > 5,000 (GPC)

Formula :  $(C_{110}H_{138}N_8O_2S_6)_n$



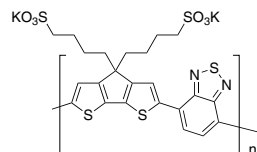
## LT-S9985 | PCPDTBTSO3K · CPE-K

NEW

Poly[2,6-(4,4-bis-potassium butanysulfonate-4H-cyclopenta-[2,1-b;3,4-b']-dithiophene)-alt-4,7-(2,1,3-benzothiadiazole)]

Grade : >99% Mw ~ 25000

Formula :  $(C_{23}H_{20}K_2N_2O_6S_5)_n$



## LT-S9986 | PBDTT-SeDOO, PBDTT-SeDPP

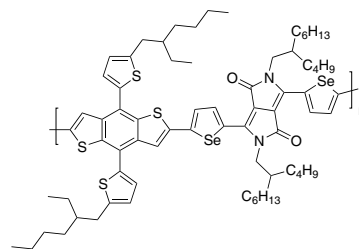
NEW

Poly[[2,5-bis(2-butyldecyl)-2,3,5,6-tetrahydro-3,6-dioxopyrrolo[3,4-c]pyrrole-1,4-diyl]-2,5-selenophenediyl[4,8-bis[5-(2-ethylhexyl)-2-thienyl]benzo[1,2-b:4,5-b']dithiophene-2,6-diyl]-2,5-selenophenediyl]

CAS No : 1427210-15-8

Grade : >99% Mw ~ 40000

Formula :  $(C_{72}H_{94}N_2O_2S_4Se_2)_n$

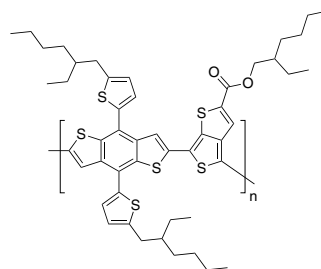


## LT-S9987 | PBDTTT-E-T

NEW

Grade : Mw = 30000~60000

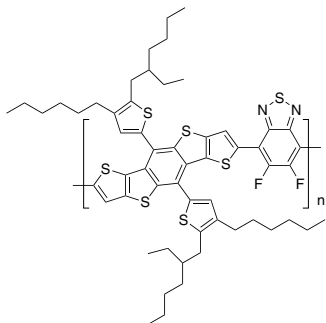
Formula :  $(C_{49}H_{56}O_2S_6)_n$



### LT-S9988 | PDBDT-FBT

**NEW**

CAS No :1919055-55-2  
 Grade :>99% Mw >80000  
 Formula : $(C_{56}H_{64}F_2N_2S_7)_n$

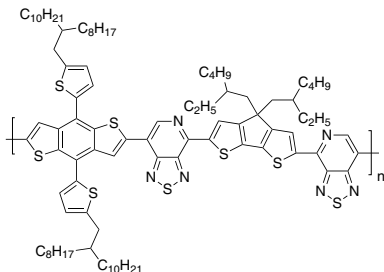


### LT-S9990 | PM2

**NEW**

Poly[[1,2,5]thiadiazolo[3,4-c]pyridine-7,4-diyl[[4,4-bis(2-ethylhexyl)-4Hcyclopenta[2,1-b:3,4-b']dithiophene-2,6-diyl][1,2,5]thiadiazolo[3,4-c]pyridine-4,7-diyl[[4,8-bis[5-(2-octyldodecyl)-2-thienyl]benzo[1,2-b:4,5-b']dithiophene-2,6-diyl]]

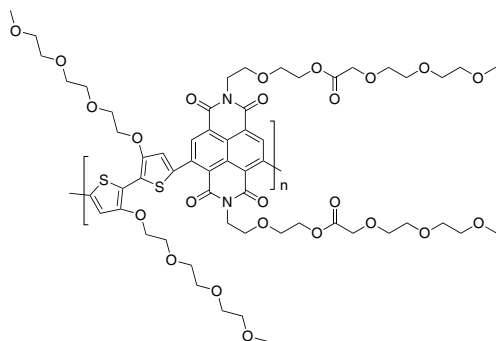
CAS No :2173236-98-9  
 Grade :Mw~150000  
 Formula : $(C_{93}H_{126}N_6S_8)_n$



### LT-S9991 | P(gNDI-gT2)

**NEW**

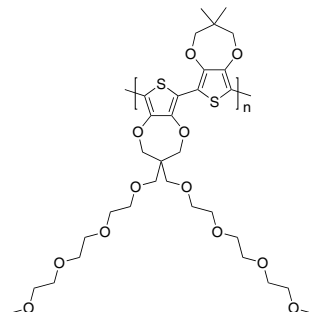
CAS No :2186673-54-9  
 Grade :Mw >20,000  
 Formula : $(C_{58}H_{76}N_2O_{24}S_2)_n$



### LT-S9992

**NEW** ProDOT, PECD, ProDOT(OE)-DMP

Grade :Mw >20,000 (GPC)  
 Formula : $(C_{32}H_{48}O_{12}S_2)_n$

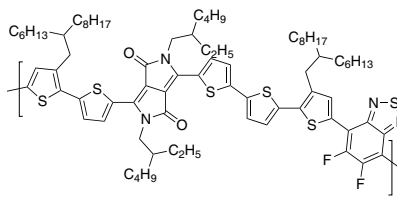


### LT-S9993 | PffBT-DPP

**NEW**

Polymer of (4,7-bis(5-bromo-4-(2-hexyldecyl)thiophen-2-yl)-5,6-difluorobenzo[c][1,2,5]thiadiazole and (2,5-bis(2-ethylhexyl)-3,6-bis(5-(trimethylstannyl)thiophen-2-yl)-2,5-dihydropyrrolo[3,4-c]pyrrole-1,4-dione)

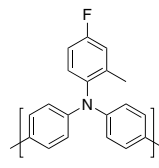
Grade :>99% (monomers) Mw~50000  
 Formula : $(C_{80}H_{108}F_2N_4O_2S_6)_n$



### LT-N1021 | 1F-PTAA

Poly(bis(4-phenyl)(4-fluoro-2-methylphenyl)amine

Grade :Mw >10,000  
 Formula : $(C_{19}H_{14}FN)_n$   
 HOMO :-5.52 eV  
 LUMO :-2.55 eV

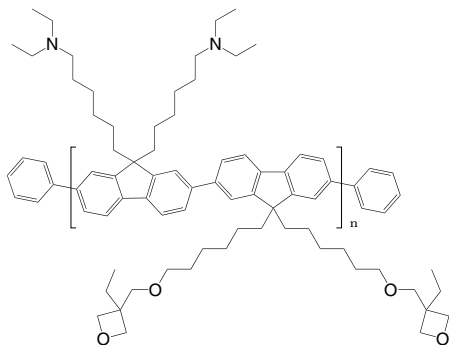




### LT-N177 | PFN-OX

Poly[2,7-[9,9-bis(6'-(*N,N*-diethylamino)hexyl)fluorene]-*alt*-2,7-[9,9-bis(6-((3-ethyloxytan-3-yl)methoxy)hexyl)fluorene]]

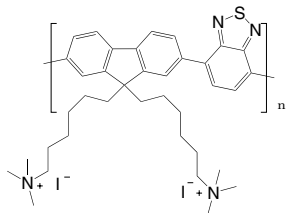
CAS No. : 1345045-27-3  
 Formula :  $(C_{70}H_{102}N_2O_4)_n C_{12}H_{10}$   
 UV :  $378 \pm 10$  nm (in THF)  
 Solubility : Soluble in THF,  $CHCl_3$



### LT-N181 | PFNIBT

Poly(9,9-bis(6-trimethyl-ammoniumiodide)-hexylfluorene-2,7-diyl-*alt*-(benzo[2,1,3]thiadiazol-4,7-diyl))

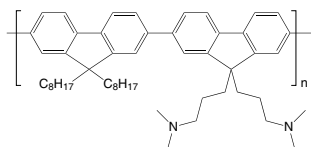
Grade : Mw > 10,000 (GPC)  
 Formula :  $(C_{35}H_{42}N_4S)_n$   
 UV : 317, 448 nm (in DMSO)  
 Solubility : Soluble in MeOH



### LT-N4027 | PFN-DOF

Poly[(9,9-bis(3'-(*N,N*-dimethylamino)propyl)-2,7-fluorene)-*alt*-2,7-(9,9-dioctylfluorene)]

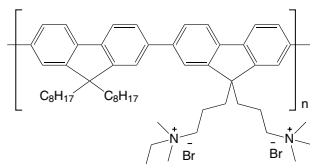
CAS No. : 673474-75-4  
 Grade : Mw > 10,000 (GPC)  
 Formula :  $(C_{52}H_{70}N_2)_n$   
 UV : 391 nm (in  $CH_2Cl_2$ )  
 PL : 414 nm (in  $CH_2Cl_2$ )  
 Solubility : Soluble in  $CH_2Cl_2$ ,  $CHCl_3$ , Toluene



### LT-N878 | PFN-Br

Poly[(9,9-bis(3'-(*N,N*-dimethyl)-*N*-ethylammonium)-propyl)-2,7-fluorene)-*alt*-2,7-(9,9-dioctylfluorene)]dibromide

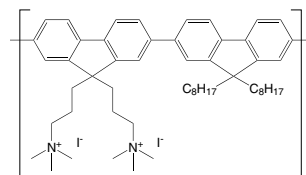
CAS No. : 889672-99-5  
 Grade : Mw > 10,000 (GPC)  
 Formula :  $(C_{56}H_{80}N_2Br_2)_n$   
 UV : 375 nm (in MeOH)  
 PL : 440 nm (in MeOH)  
 Solubility : Soluble in MeOH



### LT-N8006 | PFN-diiodine salt

Poly[[9,9-bis[3-(trimethylammonium)propyl]-2,7-fluorene]-*alt*-2,7-(9,9-dioctylfluorene)]diiodide

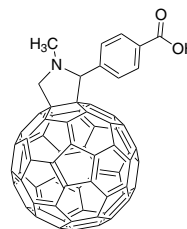
CAS No. : 1687752-60-8  
 Grade : Mw = 10,000 ~ 100,000 (GPC)  
 Formula :  $(C_{56}H_{80}N_2I_2)_n$



### LT-S9161 | C<sub>60</sub>-COOH-SAM

4-(1',5'-Dihydro-1'-methyl-2'H-[5,6]fullereno-C<sub>60</sub>-1h-[1,9-c]-pyrrol-2'-yl)benzoic acid

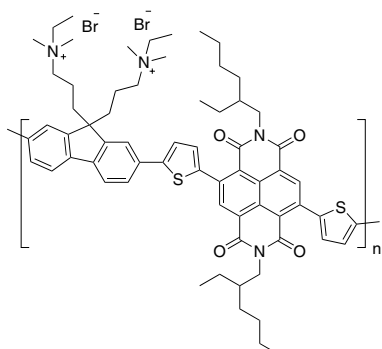
CAS No. : 631918-72-4  
 Grade : > 99%  
 Formula :  $C_{70}H_{11}NO_2$   
 M.W. : 897.84 g/mole  
 UV : 345 nm (in  $CH_2Cl_2$ )



### LT-S9289 | PNDIT-F3N-Br

Poly[[2,7-bis(2-ethylhexyl)-1,2,3,6,7,8-hexahydro-1,3,6,8-tetraoxobenzol[imn][3,8]phenanthroline-4,9-diy]-2,5-thiophenediy][9,9-bis[3'((N,N-dimethyl)-N-ethylammonium)-propyl]-9H-fluorene-2,7-diy]-2,5-thiophenediy]

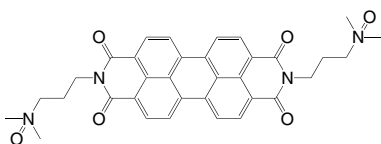
CAS No. : 2169941-79-9  
 Grade : Mw > 10,000 (GPC)  
 Formula :  $(C_{65}H_{80}Br_2N_4O_4S_2)_n$   
 UV : 380, 580 nm (in Methanol)



### LT-S9479 | PDINO

2,9-Bis[3-(dimethyloxidoamino)propyl]anthra[2,1,9-def,6,5,10-d'e'f]diisoquinoline-1,3,8,10(2H,9H)-tetrone

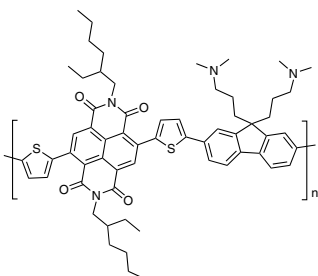
CAS No. : 1558023-86-1  
 Grade : >97%  
 Formula :  $C_{34}H_{32}N_4O_6$   
 M.W. : 592.64 g/mole  
 HOMO : -6.21 eV  
 LUMO : -3.63 eV



### LT-S9490 | PNDIT-F3N **NEW**

Poly[[2,7-bis(2-ethylhexyl)-1,2,3,6,7,8-hexahydro-1,3,6,8-tetraoxobenzol[imn][3,8]phenanthroline-4,9-diy]-2,5-thiophenediy][9,9-bis[3'((N,N-dimethyl)-N-ethylamino)propyl]-9H-fluorene-2,7-diy]-2,5-thiophenediy]

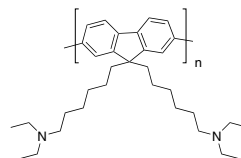
CAS No. : 1800206-46-5  
 Grade : M.W > 10,000  
 Formula :  $(C_{61}H_{70}N_4O_4S_2)_n$



### LT-S9506 | PFN100

Poly[(9,9-bis(6'-(N,N-diethylamino)hexyl)-2,7-fluorene]

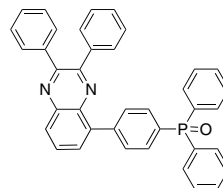
CAS No. : 1305335-08-3  
 Grade : Mw = 30,000~100,000  
 Formula :  $(C_{33}H_{50}N_2)_n$   
 HOMO : -5.54 eV  
 LUMO : -3.58 eV  
 Mobility :  $8.14 \times 10^{-4} \text{ cm}^2 / \text{Vs}$



### LT-S9562 | QxTPPO1

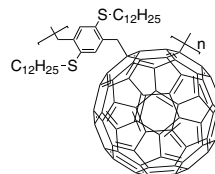
(4-(2,3-Diphenylquinoxalin-5-yl) phenyl)diphenylphosphine oxide

Grade : Sublimed >99%  
 Formula :  $C_{38}H_{27}N_2OP$   
 M.W. : 558.61 g/mole  
 UV : 265 nm (IPA)  
 HOMO : -6.22 eV  
 LUMO : -3.01 eV



### LT-S9941 | PFBS-C12, C60 PFBS **NEW**

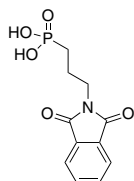
Formula :  $(C_{92}H_{55}S_2)_n$   
 M.W. : Mw~10000



**LT-S8002** | BPD-3PA **NEW**

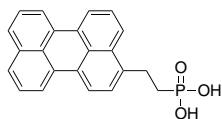
(3-(1,3-Dioxoisindolin-2-yl)propyl)phosphonic acid

Grade : > 98%  
 Formula :  $C_{11}H_{12}NO_5P$   
 M.W. : 269.19 g/mole  
 HOMO : -7.39 eV  
 LUMO : -2.56 eV

**LT-S8003** | **NEW**

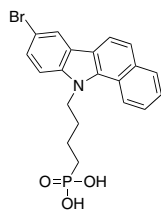
(2-(Perylen-3-yl)ethyl)phosphonic acid

Grade : > 98%  
 Formula :  $C_{22}H_{17}O_3P$   
 M.W. : 360.34 g/mole

**LT-S8004** | BrBACz **NEW**

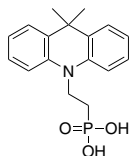
(4-(8-Bromo-11H-benzo[a]carbazol-11-yl)butyl)phosphonic acid

Grade : > 98%  
 Formula :  $C_{20}H_{19}BrNO_3P$   
 M.W. : 432.25 g/mole  
 HOMO : -5.51 eV  
 LUMO : -2.29 eV

**LT-S8005** | 2PADmA **NEW**

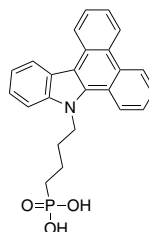
[2-(9,10-dihydro-9,9-dimethylacridine-10-yl)ethyl]phosphonic acid

Grade : > 98%  
 Formula :  $C_{17}H_{20}NO_3P$   
 M.W. : 317.32 g/mole  
 HOMO : -5.37 eV  
 LUMO : -1.58 eV

**LT-S8006** | A-4PADCB **NEW**

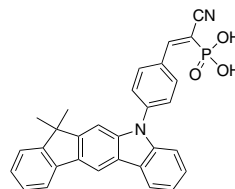
(4-(9H-dibenzo[a,c]carbazol-9-yl)butyl)phosphonic acid

Grade : > 98%  
 Formula :  $C_{24}H_{22}NO_3P$   
 M.W. : 403.41 g/mole  
 HOMO : -5.16 eV  
 LUMO : -1.08 eV

**LT-S8007** | XS10 **NEW**

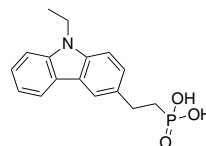
(1-Cyano-2-(4-(7,7-dimethylindeno[2-[2,1-b]carbazol-5(7H)-yl)phenyl](3-vinyl)phosphonic acid

Grade : > 98%  
 Formula :  $C_{30}H_{23}N_2O_3P$   
 M.W. : 490.49 g/mole  
 HOMO : -5.76 eV  
 LUMO : -2.67 eV

**LT-S8009** | EtCz3EPA **NEW**

(2-(9-Ethyl-9H-carbazol-3-yl)ethyl)phosphonic acid

Grade : > 98%  
 Formula :  $C_{16}H_{18}NO_3P$   
 M.W. : 303.29 g/mole

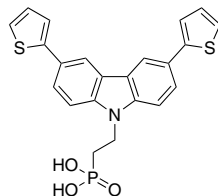


## LT-S8012 | S-2PACz

NEW

(2-(3,6-Di(thiophen-2-yl)-9H-carbazol-9-yl)ethyl)phosphonic acid

Grade : >98%  
 Formula :  $C_{22}H_{18}NO_3PS_2$   
 M.W. : 439.49 g/mole  
 HOMO : -5.48 eV  
 LUMO : -1.53 eV

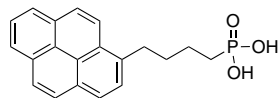


## LT-S8021 | 4PAPyr

NEW

(4-(Pyren-1-yl)butyl)phosphonic acid

Grade : >98%  
 Formula :  $C_{20}H_{19}O_3P$   
 M.W. : 338.34 g/mole

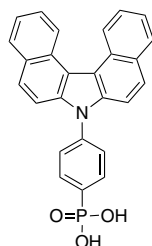


## LT-S8022 | CbzNaphPPA

NEW

(4-(7H-dibenzo[c,g]carbazol-7-yl)phenyl)phosphonic acid

Grade : >98%  
 Formula :  $C_{26}H_{18}NO_3P$   
 M.W. : 423.4 g/mole  
 HOMO : -5.67 eV  
 LUMO : -2.34 eV

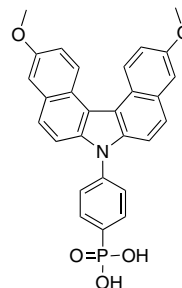


## LT-S8023 | MeO-PPADBC

NEW

(4-(3,11-Dimethoxy-7H-dibenzo[c,g]carbazol-7-yl)phenyl)phosphonic acid

Grade : >98%  
 Formula :  $C_{28}H_{22}NO_5P$   
 M.W. : 483.45 g/mole

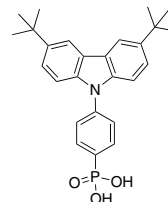


## LT-S8024 |

NEW

(4-(3,6-Di-tert-butyl-9H-carbazol-9-yl)phenyl)phosphonic acid

Grade : >98%  
 Formula :  $C_{26}H_{30}NO_3P$   
 M.W. : 435.5 g/mole

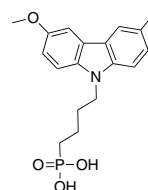


## LT-S8025 | MeOF-4PACz

NEW

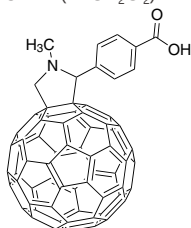
(4-(3-Fluoro-6-methoxy-9H-carbazol-9-yl)butyl)phosphonic acid

Grade : >98%  
 Formula :  $C_{17}H_{19}FNO_4P$   
 M.W. : 351.31 g/mole  
 HOMO : -5.48 eV  
 LUMO : -1.35 eV



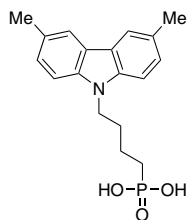
**LT-S9161** | C<sub>60</sub>-COOH-SAM4-(1',5'-Dihydro-1'-methyl-2'H-[5,6]fullereno-C<sub>60</sub>-1h-[1,9-c]-pyrrol-2'-yl)benzoic acid

CAS No. : 631918-72-4  
 Grade : >99%  
 Formula : C<sub>70</sub>H<sub>11</sub>NO<sub>2</sub>  
 M.W. : 897.84 g/mole  
 UV : 345 nm (in CH<sub>2</sub>Cl<sub>2</sub>)

**LT-S9557** | Me-4PACz

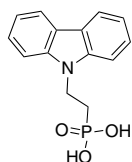
(4-(3,6-Dimethyl-9H-carbazol-9-yl)butyl)phosphonic acid

CAS No. : 2747959-96-0  
 Grade : >99%  
 Formula : C<sub>18</sub>H<sub>22</sub>NO<sub>3</sub>P  
 M.W. : 331.35 g/mole  
 HOMO : -5.74 eV  
 LUMO : -2.49 eV

**LT-S9566** | 2PACz

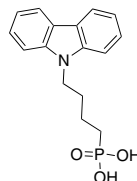
(2-(9H-carbazol-9-yl)ethyl)phosphonic acid

CAS No. : 20999-38-6  
 Grade : >99%  
 Formula : C<sub>14</sub>H<sub>14</sub>NO<sub>3</sub>P  
 M.W. : 275.24 g/mole

**LT-S9567** | 4PACz

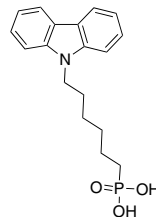
(4-(9H-carbazol-9-yl)butyl)phosphonic acid

CAS No. : 20999-36-4  
 Grade : >99%  
 Formula : C<sub>16</sub>H<sub>18</sub>NO<sub>3</sub>P  
 M.W. : 303.29 g/mole

**LT-S9568** | 6PACz

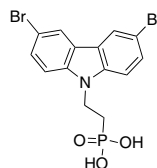
(6-(9H-carbazol-9-yl)hexyl)phosphonic acid

CAS No. : 3015516-21-6  
 Grade : >99%  
 Formula : C<sub>18</sub>H<sub>22</sub>NO<sub>3</sub>P  
 M.W. : 331.35 g/mole

**LT-S9569** | Br-2PACz

(2-(3,6-Dibromo-9H-carbazol-9-yl)ethyl)phosphonic acid

CAS No. : 2762888-11-7  
 Grade : >99%  
 Formula : C<sub>14</sub>H<sub>12</sub>Br<sub>2</sub>NO<sub>3</sub>P  
 M.W. : 433.03 g/mole  
 HOMO : -6.01 eV  
 LUMO : -2.64 eV



**LT-S9570** | Br-4PACz

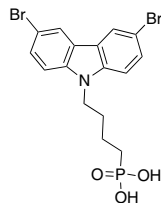
(4-(3,6-Dibromo-9H-carbazol-9-yl)butyl)phosphonic acid

CAS No. :2996161-28-3

Grade :&gt;99%

Formula :C<sub>16</sub>H<sub>16</sub>Br<sub>2</sub>NO<sub>3</sub>P

M.W. :461.08 g/mole

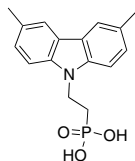
**LT-S9571** | Me-2PACz

(2-(3,6-Dimethyl-9H-carbazol-9-yl)ethyl)phosphonic acid

Grade :&gt;99%

Formula :C<sub>16</sub>H<sub>18</sub>NO<sub>3</sub>P

M.W. :303.29 g/mole

**LT-S9572** | Me-6PACz

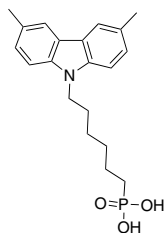
(6-(3,6-Dimethyl-9H-carbazol-9-yl)hexyl)phosphonic acid

CAS No. :2996161-29-4

Grade :&gt;99%

Formula :C<sub>20</sub>H<sub>26</sub>NO<sub>3</sub>P

M.W. :359.4 g/mole

**LT-S9573** | MeO-2PACz

(2-(3,6-Dimethoxy-9H-carbazol-9-yl)ethyl)phosphonic acid

CAS No. :2377770-18-6

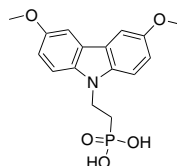
Grade :&gt;99%

Formula :C<sub>16</sub>H<sub>18</sub>NO<sub>5</sub>P

M.W. :335.29 g/mole

HOMO :-5.3 eV

LUMO :-2.12 eV

**LT-S9574** | MeO-4PACz

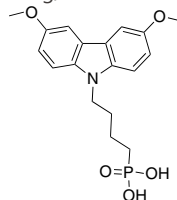
(4-(3,6-Dimethoxy-9H-carbazol-9-yl)butyl)phosphonic acid

CAS No. :2922526-56-3

Grade :&gt;99%

Formula :C<sub>18</sub>H<sub>22</sub>NO<sub>5</sub>P

M.W. :363.34 g/mole

**LT-S9583** | EADR03

4-(3,6-Bis(2,4-dimethoxyphenyl)-9H-carbazol-9-yl)benzoic acid

CAS No. :2918298-65-2

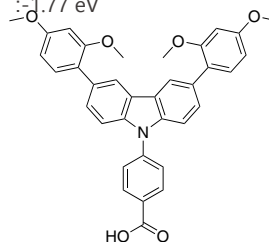
Grade :&gt;99%

Formula :C<sub>35</sub>H<sub>29</sub>NO<sub>6</sub>

M.W. :559.61 g/mole

HOMO :-5.05 eV

LUMO :-1.77 eV



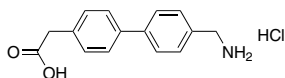
## LT-S9647

4'-(Aminomethyl)-[1,1'-biphenyl]-4-acetic acid

Grade : &gt;99%

Formula : C<sub>15</sub>H<sub>16</sub>ClNO<sub>2</sub>

M.W. : 277.75 g/mole



## LT-S9648 3PACz

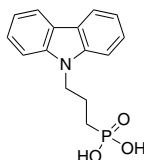
(3-(9H-carbazol-9-yl)propyl)phosphonic acid

CAS No. : 915376-57-7

Grade : &gt;99%

Formula : C<sub>15</sub>H<sub>16</sub>NO<sub>3</sub>P

M.W. : 289.27 g/mole



## LT-S9649 Br-2EPT

(2-(3,7-Dibromo-10H-phenothiazin-10-yl)ethyl)phosphonic acid

CAS No. : 2826271-17-2

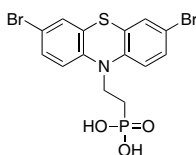
Grade : &gt;99%

Formula : C<sub>14</sub>H<sub>12</sub>BrNO<sub>3</sub>P

M.W. : 465.10 g/mole

HOMO : -5.47 eV

LUMO : -2.12 eV



## LT-S9650 LS1

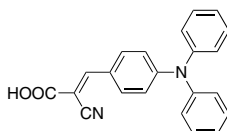
2-Cyano-3-[4-(N-phenylanilino)phenyl]prop-2-enoic acid

CAS No. : 30388-31-9

Grade : &gt;99%

Formula : C<sub>22</sub>H<sub>16</sub>N<sub>2</sub>O<sub>2</sub>

M.W. : 340.37 g/mole



## LT-S9667 MPA-Ph-CA

(Z)-3-(4'-(Bis(4-methoxyphenyl)amino)-[1,1'-biphenyl]-4-yl)-2-cyanoacrylic acid

CAS No. : 1813558-55-2

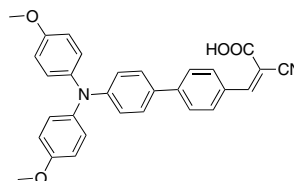
Grade : &gt;99%

Formula : C<sub>30</sub>H<sub>24</sub>N<sub>2</sub>O<sub>4</sub>

M.W. : 476.52 g/mole

HOMO : -5.39 eV

LUMO : -2.64 eV



## LT-S9673 Cl-2PACz

(2-(3,6-Dichloro-9H-carbazol-9-yl)ethyl)phosphonic acid

CAS No. : 3036926-72-1

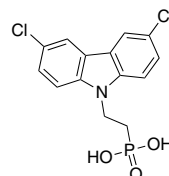
Grade : &gt;99%

Formula : C<sub>14</sub>H<sub>12</sub>Cl<sub>2</sub>NO<sub>3</sub>P

M.W. : 344.13 g/mole

HOMO : -6.05 eV

LUMO : -2.67 eV



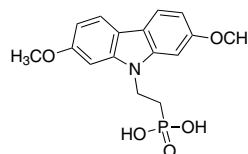
## LT-S9674 DC-PA

(2-(2,7-Dimethoxy-9H-carbazol-9-yl)ethyl)phosphonic acid

Grade : &gt;99%

Formula : C<sub>16</sub>H<sub>18</sub>NO<sub>5</sub>P

M.W. : 335.29 g/mole



**LT-S9675** | I-2PACz

(2-(3,6-Diiodo-9H-carbazol-9-yl)ethyl)phosphonic acid

CAS No. :3026275-69-1

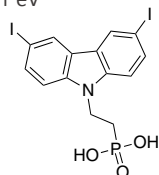
Grade :&gt;99%

Formula :C<sub>14</sub>H<sub>12</sub>I<sub>2</sub>NO<sub>3</sub>P

M.W. :527.03 g/mole

HOMO :-5.98 eV

LUMO :-2.61 eV

**LT-S9676** | Br-2EPO

(2-(3,7-Dibromo-10H-phenoxazin-10-yl)ethyl)phosphonic acid

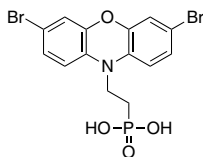
Grade :&gt;99%

Formula :C<sub>14</sub>H<sub>12</sub>Br<sub>2</sub>NO<sub>4</sub>P

M.W. :449.03 g/mole

HOMO :-5.25 eV

LUMO :-1.81 eV

**LT-S9677** | CbzNaph

(4-(7H-dibenzo[c,g]carbazol-7-yl)butyl)phosphonic acid

CAS No. :2882156-63-8

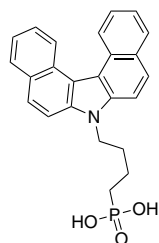
Grade :&gt;99%

Formula :C<sub>24</sub>H<sub>22</sub>NO<sub>3</sub>P

M.W. :403.41 g/mole

HOMO :-5.35 eV

LUMO :-2.28 eV

**LT-S9678** | 2BrPTZPA

(4-(3,7-dibromo-10H-phenothiazin-10-yl)butyl)phosphonic acid

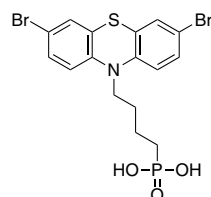
Grade :&gt;99%

Formula :C<sub>16</sub>H<sub>16</sub>Br<sub>2</sub>NO<sub>3</sub>PS

M.W. :493.15 g/mole

HOMO :-5.34 eV

LUMO :-1.16 eV

**LT-S9679** | 2BrPXZPA

(4-(3,7-dibromo-10H-phenoxazin-10-yl)butyl)phosphonic acid

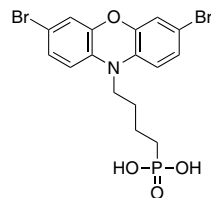
Grade :&gt;99%

Formula :C<sub>16</sub>H<sub>16</sub>Br<sub>2</sub>NO<sub>4</sub>P

M.W. :477.08 g/mole

HOMO :-5.22 eV

LUMO :-1.01 eV

**LT-S9727** | MPA-CPA **NEW**

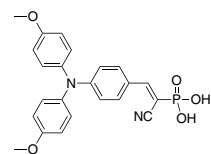
(2-(4-(Bis(4-methoxyphenyl)amino)phenyl)-1-cyanovinyl)phosphonic acid

CAS No. :2212003-31-9

Grade :&gt;98%

Formula :C<sub>23</sub>H<sub>21</sub>N<sub>2</sub>O<sub>5</sub>P

M.W. :436.4 g/mole

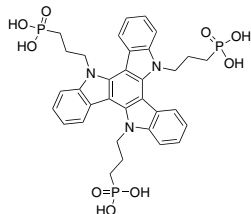




**LT-S9737** | 3PATAT-C3 **NEW**

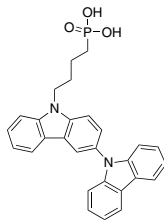
((5H-Diindolo[3,2-a:3',2'-c]carbazole-5,10,15-triyl)tris(propane-3,1-diyl)triphosphonic acid

Grade : >98%  
Formula :  $C_{33}H_{36}N_3O_9P_3$   
M.W. : 711.57 g/mole

**LT-S9738** | 4,3BuPACz **NEW**

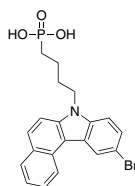
(4-(9H-[3,9'-bicarbazol]-9-yl)butyl)phosphonic acid

Grade : >98%  
Formula :  $C_{28}H_{25}N_2O_3P$   
M.W. : 468.48 g/mole

**LT-S9739** | BCBBr-C4PA **NEW**

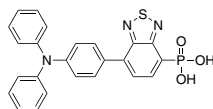
(4-(10-Bromo-7H-benzo[c]carbazol-7-yl)butyl)phosphonic acid

Grade : >99%  
Formula :  $C_{20}H_{19}BrNO_3P$   
M.W. : 432.25 g/mole

**LT-S9740** | PPA **NEW**

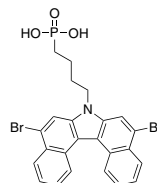
7-(4-(Diphenylamino)phenyl)benzo[c][1,2,5]thiadiazol-4-yl)phosphonic acid

CAS No : 2759856-06-7  
Grade : >98%  
Formula :  $C_{24}H_{18}N_3O_3PS$   
M.W. : 459.46 g/mole  
HOMO : -5.28 eV  
LUMO : -2.96 eV

**LT-S9741** | DCB-BPA **NEW**

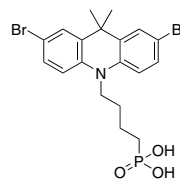
(4-(5,9-Dibromo-7H-dibenzo[c,g]carbazol-7-yl)butyl)phosphonic acid

Grade : >98%  
Formula :  $C_{24}H_{20}Br_2NO_3P$   
M.W. : 561.2 g/mole  
HOMO : -5.35 eV  
LUMO : -1.62 eV

**LT-S9747** | DMAcPA **NEW**

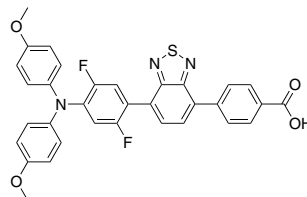
(4-(2,7-Dibromo-9,9-dimethylacridin-10(9H)-yl)butyl)phosphonic acid

CAS No : 2971088-37-4  
Grade : >98%  
Formula :  $C_{19}H_{22}Br_2NO_3P$   
M.W. : 503.16 g/mole

**LT-S9748** | MPA2FPh-BT-BA **NEW**

4-(7-(4-(Bis(4-methoxyphenyl)amino)-2,5-difluorophenyl)benzo[c][1,2,5]thiadiazol-4-yl)benzoic acid

CAS No : 2810129-96-3  
Grade : >98%  
Formula :  $C_{33}H_{23}F_2N_3O_4S$   
M.W. : 595.62 g/mole



**LT-S9750** | MPA-BT-CA **NEW**

(E)-3-(7-(4-(Bis(4-methoxyphenyl)amino)phenyl)benzo[c][1,2,5]thiadiazol-4-yl)-2-cyanoacrylic acid

CAS No : 2459726-14-6

Grade : &gt; 98%

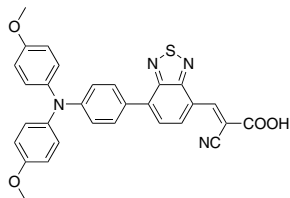
Formula :  $C_{30}H_{22}N_4O_4S$ 

M.W. : 534.59 g/mole

UV : 514 nm (in THF)

HOMO : -5.29 eV

LUMO : -3.26 eV

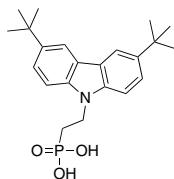
**LT-S9755** | tBu-2PACz

(2-(3,6-Di-tert-butyl-9H-carbazol-9-yl)ethyl)phosphonic acid

Grade : &gt; 98%

Formula :  $C_{22}H_{30}NO_3P$ 

M.W. : 387.45 g/mole

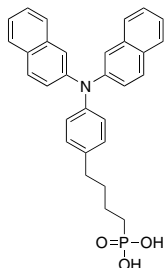
**LT-S9791** | **NEW**

(4-(4-(Di(naphthalen-2-yl)amino)phenyl)butyl)phosphonic acid

Grade : &gt; 98%

Formula :  $C_{30}H_{28}NO_3P$ 

M.W. : 481.52 g/mole

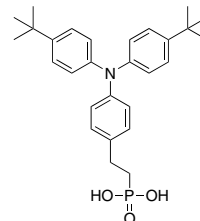
**LT-S9792** | **NEW**

(4-(Bis(4-(tert-butyl)phenyl)amino)phenethyl)phosphonic acid

Grade : &gt; 98%

Formula :  $C_{28}H_{36}NO_3P$ 

M.W. : 465.56 g/mole

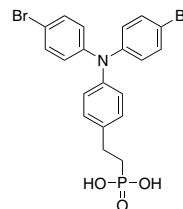
**LT-S9793** | **NEW**

(4-(bis(4-bromophenyl)amino)phenethyl)phosphonic acid

Grade : &gt; 98%

Formula :  $C_{20}H_{18}Br_2NO_3P$ 

M.W. : 511.14 g/mole

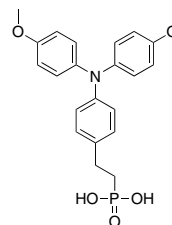
**LT-S9794** | **NEW**

(4-(Bis(4-methoxyphenyl)amino)phenethyl)phosphonic acid

Grade : &gt; 98%

Formula :  $C_{22}H_{24}NO_5P$ 

M.W. : 413.4 g/mole

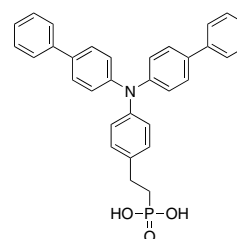
**LT-S9795** | **NEW**

(4-(Di([1,1'-biphenyl]-4-yl)amino)phenethyl)phosphonic acid

Grade : &gt; 98%

Formula :  $C_{32}H_{28}NO_3P$ 

M.W. : 505.54 g/mole



## LT-S9796

NEW

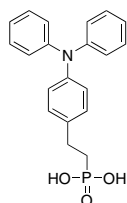
(4-(Diphenylamino)phenethyl)phosphonic acid

CAS No. :3015516-16-9

Grade :&gt;98%

Formula :C<sub>20</sub>H<sub>20</sub>NO<sub>3</sub>P

M.W. :353.35 g/mole



## LT-S9797

NEW

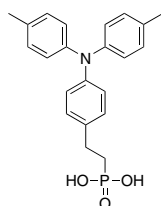
(4-(Di-p-tolylamino)phenethyl)phosphonic acid

CAS No. :3036995-73-7

Grade :&gt;98%

Formula :C<sub>22</sub>H<sub>24</sub>NO<sub>3</sub>P

M.W. :381.4 g/mole



## LT-S9798 4dp3PACz

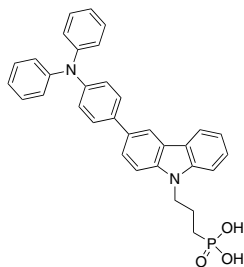
NEW

[3-[4-(Diphenylamino)phenyl]-9H-carbazol-9-yl] propylphosphonic acid

Grade :&gt;98%

Formula :C<sub>33</sub>H<sub>29</sub>N<sub>2</sub>O<sub>3</sub>P

M.W. :532.57 g/mole



## LT-S9799

DCB-C2-POOH

NEW

(2-(7H-dibenzo[c,g]carbazol-7-yl)ethyl)phosphonic acid

CAS No. :2882156-61-6

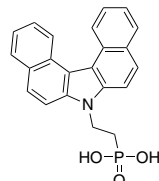
Grade :&gt;99%

Formula :C<sub>22</sub>H<sub>18</sub>NO<sub>3</sub>P

M.W. :375.36 g/mole

HOMO :-5.53 eV

LUMO :-2.34 eV



## LT-S9800

DCZ-C4POH

NEW

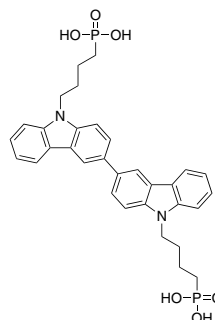
(9H,9'H-[3,3'-bicarbazole]-9,9'-diylbis(butane-4,1-diyl)) diphosphonic acid

CAS No. :2814500-05-3

Grade :&gt;98%

Formula :C<sub>32</sub>H<sub>34</sub>N<sub>2</sub>O<sub>6</sub>P<sub>2</sub>

M.W. :604.57 g/mole



## LT-S9801

Ph-2PACz

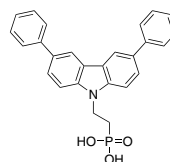
NEW

(2-(3,6-Diphenyl-9H-carbazol-9-yl)ethyl)phosphonic acid

Grade :&gt;99%

Formula :C<sub>26</sub>H<sub>22</sub>NO<sub>3</sub>P

M.W. :427.43 g/mole



**LT-S9802** | Ph-4PACz **NEW**

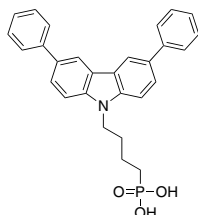
(4-(3,6-Diphenyl-9H-carbazol-9-yl)butyl)phosphonic acid

CAS No. :2814500-04-2

Grade :&gt;99%

Formula :C<sub>28</sub>H<sub>26</sub>NO<sub>3</sub>P

M.W. :455.48 g/mole

**LT-S9837** | MeO-PhPACz **NEW**

(4-(3,6-Dimethoxy-9H-carbazol-9-yl)phenyl)phosphonic acid

Grade :&gt;98%

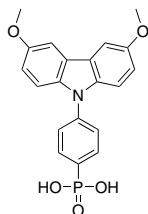
Formula :C<sub>20</sub>H<sub>18</sub>NO<sub>5</sub>P

M.W. :383.33 g/mole

UV :379 nm (in DMF)

HOMO :-5.61eV

LUMO :-2.41 eV

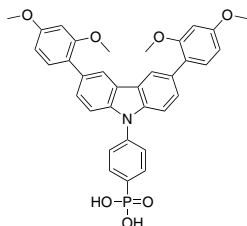
**LT-S9842** | **NEW**

(4-(3,6-Bis(2,4-dimethoxyphenyl)-9H-carbazol-9-yl)phenyl)phosphonic acid

Grade :&gt;98%

Formula :C<sub>34</sub>H<sub>30</sub>NO<sub>7</sub>P

M.W. :595.58 g/mole

**LT-S9843** | **NEW**

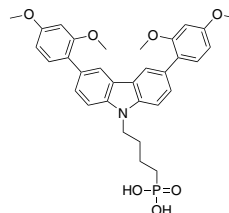
(4-(3,6-Bis(2,4-dimethoxyphenyl)-9H-carbazol-9-yl)butyl)phosphonic acid

CAS No. :2986396-31-8

Grade :&gt;98%

Formula :C<sub>32</sub>H<sub>34</sub>NO<sub>7</sub>P

M.W. :575.59 g/mole

**LT-S9844** | **NEW**

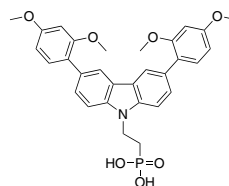
(2-(3,6-Bis(2,4-dimethoxyphenyl)-9H-carbazol-9-yl)ethyl)phosphonic acid

CAS No. :2986396-25-0

Grade :&gt;98%

Formula :C<sub>30</sub>H<sub>30</sub>NO<sub>7</sub>P

M.W. :547.54 g/mole

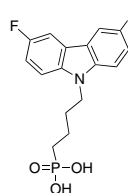
**LT-S9845** | F-4PACz **NEW**

(4-(3,6-Difluoro-9H-carbazol-9-yl)butyl)phosphonic acid

Grade :&gt;99%

Formula :C<sub>16</sub>H<sub>16</sub>F<sub>2</sub>NO<sub>3</sub>P

M.W. :339.27 g/mole

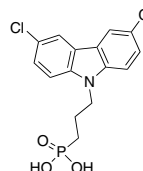
**LT-S9851** | Cl-3PACz **NEW**

(4-(3,6-Dichloro-9H-carbazol-9-yl)propyl)phosphonic acid

Grade :&gt;99%

Formula :C<sub>15</sub>H<sub>14</sub>Cl<sub>2</sub>NO<sub>3</sub>P

M.W. :358.16 g/mole



# Organic Photovoltaic (OPV)

## Self-Assembled Monolayers Materials

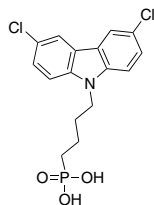
### LT-S9852 | Cl-4PACz **NEW**

(4-(3,6-Dichloro-9H-carbazol-9-yl)butyl)phosphonic acid

Grade : > 99%

Formula :  $C_{16}H_{16}Cl_2NO_3P$

M.W. : 372.18 g/mole



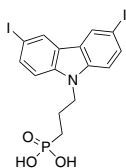
### LT-S9855 | I-3PACz **NEW**

(4-(3,6-Diiodo-9H-carbazol-9-yl)propyl)phosphonic acid

Grade : > 99%

Formula :  $C_{15}H_{14}I_2NO_3P$

M.W. : 541.06 g/mole



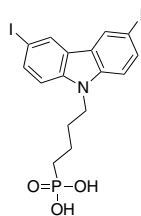
### LT-S9856 | I-4PACz **NEW**

(4-(3,6-Diiodo-9H-carbazol-9-yl)butyl)phosphonic acid

Grade : > 99%

Formula :  $C_{16}H_{16}I_2NO_3P$

M.W. : 555.09 g/mole



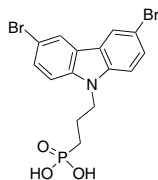
### LT-S9857 | Br-3PACz **NEW**

(4-(3,6-Dibromo-9H-carbazol-9-yl)propyl)phosphonic acid

Grade : > 99%

Formula :  $C_{15}H_{14}Br_2NO_3P$

M.W. : 447.06 g/mole



### LT-S9859 | Br-4PADBC **NEW**

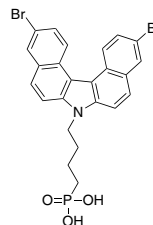
(4-(3,11-Dibromo-7H-dibenzo[c,g]carbazol-7-yl)butyl)phosphonic acid

CAS No. : 3023557-25-4

Grade : > 98%

Formula :  $C_{24}H_{20}Br_2NO_3P$

M.W. : 561.2 g/mole



### LT-S9860 | CbzFf **NEW**

(4-(5H-benzofuro[3,2-c]carbazol-5-yl)butyl)phosphonic acid

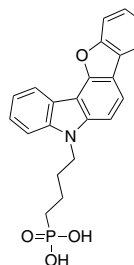
Grade : > 98%

Formula :  $C_{22}H_{20}NO_4P$

M.W. : 393.37 g/mole

HOMO : -5.5 eV

LUMO : -1.15 eV



### LT-S9861 | CbzBT **NEW**

(4-(5H-benzo[4,5]thieno[3,2-c]carbazol-5-yl)butyl)phosphonic acid

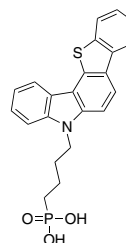
Grade : > 98%

Formula :  $C_{22}H_{20}NO_3PS$

M.W. : 409.44 g/mole

HOMO : -5.54 eV

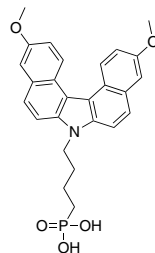
LUMO : -1.17 eV



LT-S9862 | MeO-4PADBC **NEW**

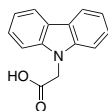
(4-(3,11-Dimethoxy-7H-dibenzo[c,g]carbazol-7-yl)butyl) phosphonic acid

Grade : >98%  
 Formula :  $C_{26}H_{26}NO_5P$   
 M.W. : 463.46 g/mole  
 HOMO : -4.91 eV  
 LUMO : -1.15 eV

LT-S9863 | 9CAA **NEW**

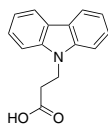
2-(9H-Carbazol-9-yl)acetic acid

CAS No : 524-80-1  
 Grade : >98%  
 Formula :  $C_{14}H_{11}NO_2$   
 M.W. : 225.24 g/mole

LT-S9864 | 9CPA **NEW**

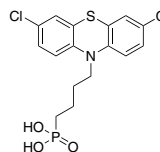
3-(9H-Carbazol-9-yl)propanoic acid

CAS No : 6622-54-4  
 Grade : >98%  
 Formula :  $C_{15}H_{13}NO_2$   
 M.W. : 239.27 g/mole

LT-S9867 | TDPA-Cl **NEW**

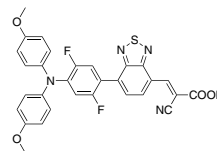
(4-(3,7-Dichloro-10H-phenothiazin-10-yl)butyl)phosphonic acid

Grade : >98%  
 Formula :  $C_{16}H_{16}Cl_2NO_3PS$   
 M.W. : 404.25 g/mole  
 HOMO : -5.42 eV  
 LUMO : -2.3 eV

LT-S9870 | 2FMPA-BT-CA **NEW**

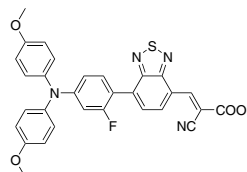
(E)-3-(7-(4-(Bis(4-methoxyphenyl)amino)-2,5-difluorophenyl)benzo[c][1,2,5]thiadiazol-4-yl)-2-cyanoacrylic acid

Grade : >98%  
 Formula :  $C_{30}H_{20}F_2N_4O_4S$   
 M.W. : 570.57 g/mole  
 HOMO : -5.37 eV  
 LUMO : -3.41 eV

LT-S9871 | FMPA-BT-CA **NEW**

(E)-3-(7-(4-(Bis(4-methoxyphenyl)amino)-2-fluorophenyl)benzo[c][1,2,5]thiadiazol-4-yl)-2-cyanoacrylic acid

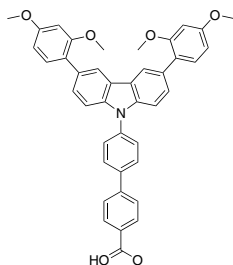
Grade : >98%  
 Formula :  $C_{30}H_{21}FN_4O_4S$   
 M.W. : 552.58 g/mole  
 HOMO : -5.45 eV  
 LUMO : -3.52 eV



**LT-S9872** | EADR04 **NEW**

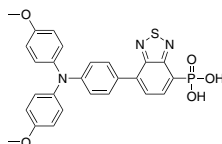
4'-(3,6-Bis(2,4-dimethoxyphenyl)-9H-carbazol-9-yl)-[1,1'-biphenyl]-4-carboxylic acid

Grade :>98%  
 Formula :C<sub>41</sub>H<sub>33</sub>NO<sub>6</sub>  
 M.W. :635.7 g/mole  
 HOMO :-5.06 eV  
 LUMO :-1.74 eV

**LT-S9873** | PPAOMe **NEW**

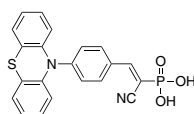
(7-(4-(Bis(4-methoxyphenyl)amino)phenyl)benzo[c][1,2,5]thiadiazol-4-yl)phosphonic acid

Grade :>98%  
 Formula :C<sub>26</sub>H<sub>22</sub>N<sub>3</sub>O<sub>5</sub>PS  
 M.W. :519.51 g/mole  
 HOMO :-5.02 eV  
 LUMO :-2.86 eV

**LT-S9874** | PTZ-CPA **NEW**

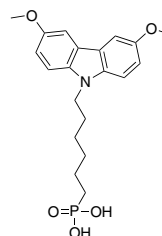
(E)-(2-(4-(10H-phenothiazin-10-yl)phenyl)-1-cyanovinyl) phosphonic acid

Grade :>98%  
 Formula :C<sub>21</sub>H<sub>15</sub>N<sub>2</sub>O<sub>3</sub>PS  
 M.W. :406.39 g/mole  
 HOMO :-5.5 eV  
 LUMO :-2.43 eV

**LT-S9875** | MeO-6PACz **NEW**

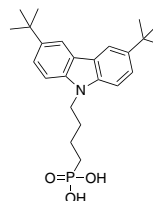
(6-(3,6-Dimethoxy-9H-carbazol-9-yl)hexyl)phosphonic acid

Grade :>99%  
 Formula :C<sub>20</sub>H<sub>26</sub>NO<sub>5</sub>P  
 M.W. :391.4 g/mole

**LT-S9876** | tBu-4PACz **NEW**

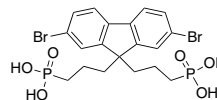
(4-(3,6-Di-tert-butyl-9H-carbazol-9-yl)butyl)phosphonic acid

Grade :>99%  
 Formula :C<sub>24</sub>H<sub>34</sub>NO<sub>3</sub>P  
 M.W. :415.51 g/mole

**LT-S9889** **NEW**

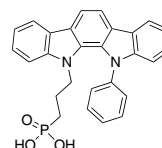
((2,7-dibromo-9H-fluorene-9,9-diyl)bis(propane-3,1-diyl)) diphosphonic acid

Grade :>98%  
 Formula :C<sub>19</sub>H<sub>22</sub>Br<sub>2</sub>O<sub>6</sub>P<sub>2</sub>  
 M.W. :568.13 g/mole

**LT-S9896** **NEW**

(3-(12-Phenylindolo[2,3-a]carbazol-11(12H)-yl)propyl) phosphonic acid

Grade :>98%  
 Formula :C<sub>27</sub>H<sub>23</sub>N<sub>2</sub>O<sub>3</sub>P  
 M.W. :454.46 g/mole



## LT-S9897

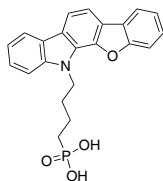
NEW

(4-(12H-benzofuro[2,3-a]carbazol-12-yl)butyl)phosphonic acid

Grade : &gt; 98%

Formula :  $C_{22}H_{20}NO_4P$ 

M.W. : 393.37 g/mole



## LT-S9898

NEW

(Indolo[2,3-b]carbazole-5,7-diylbis(propene-3,1-diyl)) diphosphonic acid

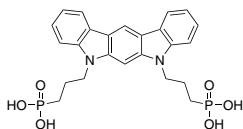
Grade : &gt; 98%

Formula :  $C_{24}H_{26}N_2O_6P_2$ 

M.W. : 500.42 g/mole

HOMO : -5.26 eV

LUMO : -2.03 eV



## LT-S9899

NEW

(Indolo[3,2-b]carbazole-5,11-diylbis(propene-3,1-diyl)) diphosphonic acid

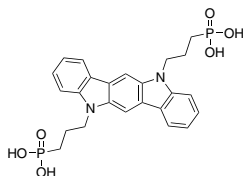
Grade : &gt; 98%

Formula :  $C_{24}H_{26}N_2O_6P_2$ 

M.W. : 500.42 g/mole

HOMO : -5.07 eV

LUMO : -2.94 eV



## LT-S9900

NEW

(Indolo[2,3-a]carbazole-11,12-diylbis(propene-3,1-diyl)) diphosphonic acid

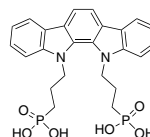
Grade : &gt; 98%

Formula :  $C_{24}H_{26}N_2O_6P_2$ 

M.W. : 500.42 g/mole

HOMO : -5.25 eV

LUMO : -0.96 eV



## LT-S9901

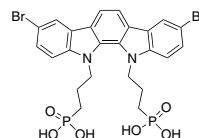
NEW

(3,8-Dibromoindolo[2,3-a]carbazole-11,12-diyl)bis(propene-3,1-diyl)diphosphonic acid

Grade : &gt; 98%

Formula :  $C_{24}H_{24}Br_2N_2O_6P_2$ 

M.W. : 658.21 g/mole



## LT-S9902

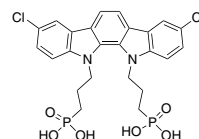
NEW

(3,8-Dichloroindolo[2,3-a]carbazole-11,12-diyl)bis(propene-3,1-diyl)diphosphonic acid

Grade : &gt; 98%

Formula :  $C_{24}H_{24}Cl_2N_2O_6P_2$ 

M.W. : 569.31 g/mole



## LT-S9903

NEW

(3,8-Difluoroindolo[2,3-a]carbazole-11,12-diyl)bis(propene-3,1-diyl)diphosphonic acid

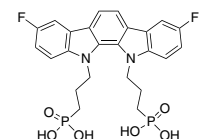
Grade : &gt; 98%

Formula :  $C_{24}H_{24}F_2N_2O_6P_2$ 

M.W. : 536.4 g/mole

HOMO : -5.39 eV

LUMO : -1.16 eV

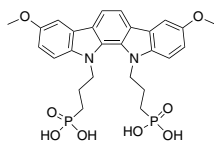




**LT-S9904** | 3-BPIC-OMe **NEW**

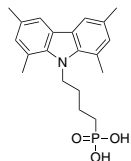
((3,8-Dimethoxyindolo[2,3-a]carbazole-11,12-diyl)bis(propane-3,1-diyl)diphosphonic acid

Grade :>98%  
Formula :C<sub>26</sub>H<sub>30</sub>N<sub>2</sub>O<sub>8</sub>P<sub>2</sub>  
M.W. :560.47 g/mole

**LT-S9905** | **NEW**

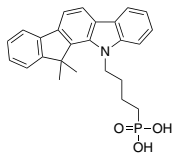
(4-(1,3,6,8-Tetramethyl-9H-carbazol-9-yl)butyl)phosphonic acid

Grade :>98%  
Formula :C<sub>20</sub>H<sub>26</sub>NO<sub>3</sub>P  
M.W. :359.4 g/mole

**LT-S9906** | **NEW**

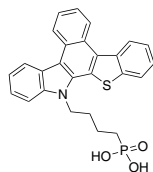
(4-(12,12-Dimethylindeno[2,1-a]carbazol-11(12H)-yl)butyl)phosphonic acid

Grade :>98%  
Formula :C<sub>25</sub>H<sub>26</sub>NO<sub>3</sub>P  
M.W. :419.45 g/mole

**LT-S9907** | **NEW**

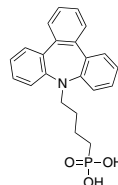
(4-(14H-benzo[c]benzo[4,5]thieno[2,3-a]carbazol-14-yl)butyl)phosphonic acid

Grade :>98%  
Formula :C<sub>26</sub>H<sub>22</sub>NO<sub>3</sub>PS  
M.W. :459.5 g/mole

**LT-S9908** | **NEW**

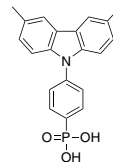
(4-(9H-tribenzo[b,d,f]azepin-9-yl)butyl)phosphonic acid

Grade :>98%  
Formula :C<sub>22</sub>H<sub>22</sub>NO<sub>3</sub>P  
M.W. :379.39 g/mole

**LT-S9909** | Me-PhpPACz **NEW**

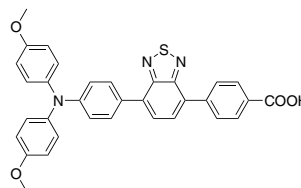
(4-(3,6-Dimethyl-9H-carbazol-9-yl)phenyl)phosphonic acid

Grade :>98%  
Formula :C<sub>20</sub>H<sub>18</sub>NO<sub>3</sub>P  
M.W. :351.34 g/mole

**LT-S9937** | TBT-BA **NEW**

4-(7-(4-(Bis(4-methoxyphenyl)amino)phenyl)benzo[c][1,2,5]thiadiazol-4-yl)benzoic acid

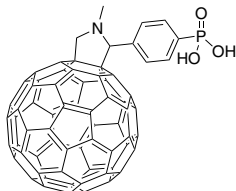
Grade :>98%  
Formula :C<sub>33</sub>H<sub>25</sub>N<sub>3</sub>O<sub>4</sub>S  
M.W. :559.63 g/mole  
UV :466 nm (in THF)  
HOMO :-5.19 eV  
LUMO :-2.92 eV



### LT-S9966 | C60-PA, CPPA, C60-C6-PA **NEW**

4-(1',5'-Dihydro-1'-methyl-2'H-[5,6]fullereno-C<sub>60</sub>-1h-[1,9-c]pyrrol-2'-yl)phenylphosphonic acid

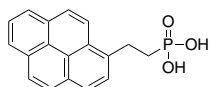
Formula :C<sub>69</sub>H<sub>11</sub>NO<sub>3</sub>P  
M.W. :932.8 g/mole



### LT-S9998 | Py3 **NEW**

(2-(Pyren-1-yl)ethyl)phosphonic acid

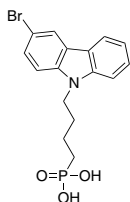
Grade :>98%  
Formula :C<sub>18</sub>H<sub>15</sub>O<sub>3</sub>P  
M.W. :310.28 g/mole



### LT-S9999 | BrCz **NEW**

(4-(3-Bromo-9H-carbazol-9-yl)butyl)phosphonic acid

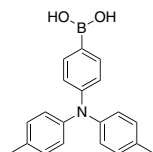
Grade :>98%  
Formula :C<sub>16</sub>H<sub>17</sub>BrNO<sub>3</sub>P  
M.W. :382.19 g/mole  
HOMO :-5.57 eV  
LUMO :-2.24 eV



### B1361 | MTPA-BA **NEW**

(4-(Di-p-tolylamino)phenyl)boronic acid

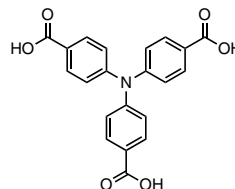
CAS No :654067-65-9  
Grade :>97%  
Formula :C<sub>20</sub>H<sub>20</sub>BNO<sub>2</sub>  
M.W. :317.2 g/mole



### LT-MOF0111 | NA **NEW**

4,4',4''-nitriлотriбензоic acid

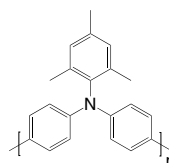
CAS No :118996-38-6  
Grade :>98%  
Formula :C<sub>21</sub>H<sub>15</sub>NO<sub>6</sub>  
M.W. :377.35 g/mole  
Boiling Point :690.0±50.0 °C at 760 mmHg  
Density :1.5±0.1 g/cm<sup>3</sup>



### LT-N168 | PTAA

Poly[bis(4-phenyl)(2,4,6-trimethylphenyl)amine]

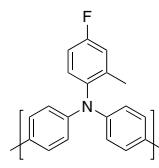
CAS No. :1333317-99-9  
Grade :Mw =20,000~100,000 (GPC)  
Formula :(C<sub>21</sub>H<sub>19</sub>N)<sub>n</sub>  
UV :388 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
PL :424 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
Solvent :Soluble in CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene



### LT-N1021 | 1F-PTAA

Poly[bis(4-phenyl)(4-fluoro-2-methylphenyl)amine]

Grade :Mw >10,000  
Formula :(C<sub>19</sub>H<sub>14</sub>FN)<sub>n</sub>  
HOMO :-5.52 eV  
LUMO :-2.55 eV

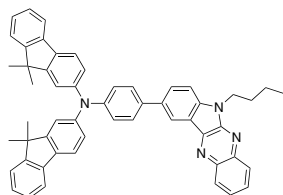


## Interfacial Layer

### LT-S9934 | IQTPAFlu **NEW**

N-(4-(6-butyl-6H-indolo[2,3-b]quinoxalin-9-yl)phenyl)-N-(9,9-dimethyl-9H-fluoren-2-yl)9,9-dimethyl-9H-fluoren-2-amine

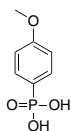
Grade : >99%  
 Formula :  $C_{54}H_{46}N_4$   
 M.W. : 750.97 g/mole  
 HOMO : -5.23 eV  
 LUMO : -3 eV



### LT-S9935 | MPA **NEW**

4-methoxyphenylphosphonic acid

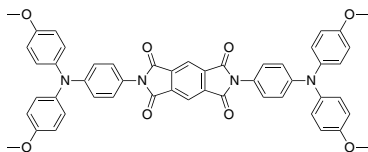
CAS No : 21778-19-8  
 Grade : >95%  
 Formula :  $C_7H_9O_4P$   
 M.W. : 188.12 g/mole



### LT-S9936 | Pyr-TPA **NEW**

2,6-Bis(4-(bis(4-methoxyphenyl) amino)phenyl)pyrrolo[3,4-f]isoindole-1,3,5,7(2H,6H)-tetraone

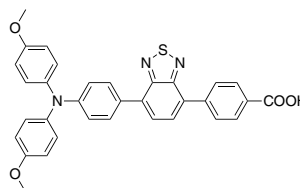
Grade : Sublimed >99%  
 Formula :  $C_{50}H_{38}N_4O_8$   
 M.W. : 822.86 g/mole  
 UV : 300 nm (in DCM)  
 HOMO : -5.34 eV  
 LUMO : -2.61 eV



### LT-S9937 | TBT-BA **NEW**

4-(7-(4-(Bis(4-methoxyphenyl)amino)phenyl)benzo[c][1,2,5]thiadiazol-4-yl)benzoic acid

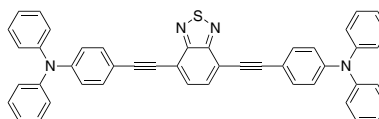
Grade : >98%  
 Formula :  $C_{33}H_{25}N_3O_4S$   
 M.W. : 559.63 g/mole  
 UV : 466 nm (in THF)  
 HOMO : -5.19 eV  
 LUMO : -2.92 eV



### LT-S9938 | TBT **NEW**

4,4'-(Benzo[c][1,2,5]thiadiazole-4,7-diylbis(ethyne-2,1-diyl))bis(N,N-diphenylaniline)

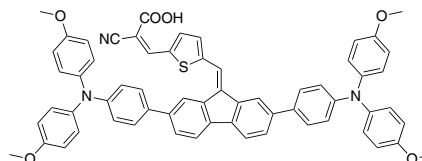
Grade : >99%  
 Formula :  $C_{46}H_{30}N_4S$   
 M.W. : 670.82 g/mole



### LT-S9939 | ThPCyAc **NEW**

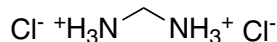
(Z)-3-(5-((2,7-Bis(4-(bis(4-methoxyphenyl)amino)phenyl)-9H-fluoren-9-ylidene)methyl)thiophen-2-yl)-2-cyanoacrylic acid

Grade : >98%  
 Formula :  $C_{62}H_{47}N_3O_6S$   
 M.W. : 962.12 g/mole  
 UV : 391 nm (film)  
 HOMO : -5.29 eV  
 LUMO : -2.92 eV

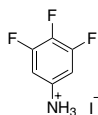


**LT-S8001** | MDACl2 **NEW**

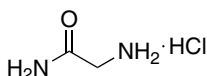
Methylenediammonium dichloride  
 CAS No : 57166-92-4  
 Grade : >95%  
 Formula :  $\text{CH}_8\text{Cl}_2\text{N}_2$   
 M.W. : 118.99 g/mole

**LT-S8008** | 345FAn **NEW**

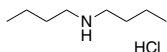
3,4,5-Trifluoroanilinium iodide  
 Grade : >99%  
 Formula :  $\text{C}_6\text{H}_5\text{F}_3\text{IN}$   
 M.W. : 275.01 g/mole

**LT-S8010** | AAH / GAH **NEW**

Glycinamide hydrochloride  
 CAS No : 1668-10-6  
 Grade : >99.5%, recrystallized 4 times  
 Formula :  $\text{C}_2\text{H}_7\text{ClN}_2\text{O}$   
 M.W. : 110.54 g/mole

**LT-S8013** | **NEW**

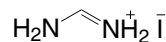
Dibutylamine hydrochloride  
 CAS No : 6287-40-7  
 Grade : >98%  
 Formula :  $\text{C}_8\text{H}_{20}\text{ClN}$   
 M.W. : 165.7 g/mole

**LT-S9126** | MAI

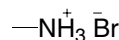
Methylammonium iodide  
 CAS No. : 14965-49-2  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $\text{CH}_6\text{IN}$   
 M.W. : 158.97 g/mole

**LT-S9136** | FAI

Formamidinium iodide  
 CAS No. : 879643-71-7  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $\text{CH}_5\text{IN}_2$   
 M.W. : 171.97 g/mole

**LT-S9137** | MABr

Methylammonium bromide  
 CAS No. : 6876-37-5  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $\text{CH}_6\text{BrN}$   
 M.W. : 111.97 g/mole

**LT-S9147** | PbI<sub>2</sub>

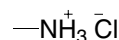
Lead(II) iodide  
 CAS No. : 10101-63-0  
 Grade : 99.999% (trace metals basis)  
 Formula :  $\text{PbI}_2$   
 M.W. : 461.01 g/mole

**LT-S9148** | PbCl<sub>2</sub>

Lead(II) chloride  
 CAS No. : 7758-95-4  
 Grade : 99.999% (trace metals basis)  
 Formula :  $\text{PbCl}_2$   
 M.W. : 278.11 g/mole

**LT-S9151** | MACl

Methylammonium chloride  
 CAS No. : 593-51-1  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $\text{CH}_6\text{ClN}$   
 M.W. : 67.52 g/mole

**LT-S9152** | PbBr<sub>2</sub>

Lead(II) bromide  
 CAS No. : 10031-22-8  
 Grade : 99.999% trace metals basis  
 Formula :  $\text{PbBr}_2$   
 M.W. : 367.01 g/mole

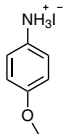


## Perovskite Precursor

## LT-S9206

## 4-Methoxyphenylammonium iodide

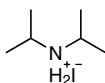
Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_7H_{10}INO$   
 M.W. : 251.06 g/mole



## LT-S9207

## Diisopropylammonium iodide

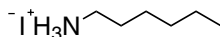
Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_6H_{16}IN$   
 M.W. : 229.1 g/mole



## LT-S9208

## Hexylammonium iodide

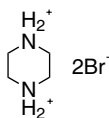
Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_6H_{16}IN+$   
 M.W. : 229.1 g/mole



## LT-S9217

## Piperazine-1,4-dium bromide

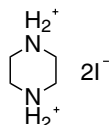
CAS No. : 59813-05-7  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_4H_{12}Br_2N_2$   
 M.W. : 247.96 g/mole



## LT-S9218

## Piperazine-1,4-dium iodide

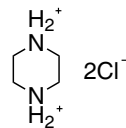
CAS No. : 58464-47-4  
 Grade : >99% (NMR & EA)  
 Formula :  $C_4H_{12}I_2N_2$   
 M.W. : 341.96 g/mole



## LT-S9219

## Piperazine-1,4-dium chloride

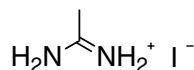
CAS No. : 142-64-3  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_4H_{12}Cl_2N_2$   
 M.W. : 159.06 g/mole



## LT-S9220

## Acetamidinium iodide

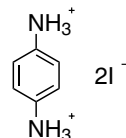
CAS No. : 1452099-14-7  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_2H_7IN_2$   
 M.W. : 185.99 g/mole



## LT-S9224

## 1,4-Benzene diammonium iodide

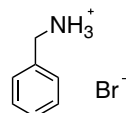
CAS No. : 116469-02-4  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_6H_{10}I_2N_2$   
 M.W. : 363.97 g/mole



## LT-S9225

## Benzylammonium bromide

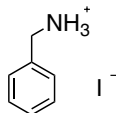
CAS No. : 37488-40-7  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_7H_{10}BrN$   
 M.W. : 188.06 g/mole



## LT-S9226

## Benzylammonium iodide

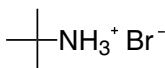
Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_7H_{10}IN$   
 M.W. : 235.07 g/mole



## LT-S9227

## t-Butylammonium bromide

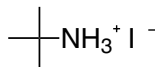
CAS No. : 60469-70-7  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_4H_{12}BrN$   
 M.W. : 154.05 g/mole



## LT-S9228

## t-Butylammonium iodide

CAS No. : 39557-45-4  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_4H_{12}IN$   
 M.W. : 201.05 g/mole



## LT-S9229

## n-Butylammonium bromide

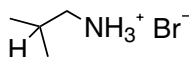
CAS No. : 15567-09-6  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_4H_{12}BrN$   
 M.W. : 154.05 g/mole



## LT-S9230

## iso-Butylammonium bromide

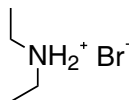
Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_4H_{12}BrN$   
 M.W. : 154.05 g/mole



## LT-S9231

## Diethylammonium bromide

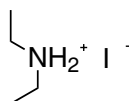
CAS No. : 6274-12-0  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_4H_{12}BrN$   
 M.W. : 154.05 g/mole



## LT-S9232

## Diethylammonium iodide

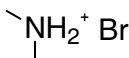
CAS No. : 19833-78-4  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_4H_{12}IN$   
 M.W. : 201.05 g/mole



## LT-S9233

## Dimethylammonium bromide

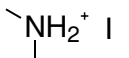
CAS No. : 6912-12-5  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_2H_8BrN$   
 M.W. : 126 g/mole



## LT-S9234

## Dimethylammonium iodide

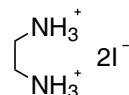
CAS No. : 51066-74-1  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_2H_8IN$   
 M.W. : 173 g/mole



## LT-S9235

## 1,2-Diammoniummethane iodide

CAS No. : 5700-49-2  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_2H_{10}I_2N_2$   
 M.W. : 315.92 g/mole

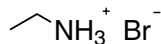


## Perovskite Precursor

## LT-S9236

## Ethylammonium bromide

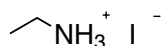
CAS No. : 593-55-5  
 Grade : >99.5% , recrystallized 4 times  
 Formula : C<sub>2</sub>H<sub>8</sub>BrN  
 M.W. : 125.99 g/mole



## LT-S9237

## Ethylammonium iodide

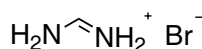
CAS No. : 506-58-1  
 Grade : >99.5% , recrystallized 4 times  
 Formula : C<sub>2</sub>H<sub>8</sub>IN  
 M.W. : 173 g/mole



## LT-S9238

## Formamidinium bromide

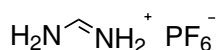
CAS No. : 146958-06-7  
 Grade : >99.5% , recrystallized 4 times  
 Formula : CH<sub>5</sub>BrN<sub>2</sub>  
 M.W. : 124.97 g/mole



## LT-S9239

## Formamidinium hexafluorophosphate

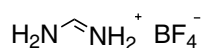
Grade : >99.5% , recrystallized 4 times  
 Formula : CH<sub>5</sub>F<sub>6</sub>N<sub>2</sub>P  
 M.W. : 190.03 g/mole



## LT-S9240

## Formamidinium tetrafluoroborate

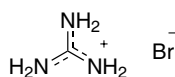
Grade : >99.5% , recrystallized 4 times  
 Formula : CH<sub>5</sub>BF<sub>4</sub>N<sub>2</sub>  
 M.W. : 131.87 g/mole



## LT-S9241

## Guanidinium bromide

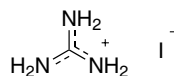
CAS No. : 19244-98-5  
 Grade : >99.5% , recrystallized 4 times  
 Formula : CH<sub>6</sub>BrN<sub>3</sub>  
 M.W. : 139.98 g/mole



## LT-S9242

## Guanidinium iodide

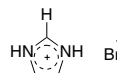
CAS No. : 19227-70-4  
 Grade : >99.5% , recrystallized 4 times  
 Formula : CH<sub>6</sub>IN<sub>3</sub>  
 M.W. : 186.98 g/mole



## LT-S9243

## Imidazolium bromide

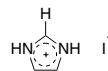
CAS No. : 101023-55-6  
 Grade : >99.5% , recrystallized 4 times  
 Formula : C<sub>3</sub>H<sub>5</sub>BrN<sub>2</sub>  
 M.W. : 148.99 g/mole



## LT-S9244

## Imidazolium iodide

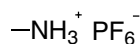
CAS No. : 68007-08-9  
 Grade : >99.5% , recrystallized 4 times  
 Formula : C<sub>3</sub>H<sub>5</sub>IN<sub>2</sub>  
 M.W. : 195.99 g/mole



## LT-S9245

## Methylammonium hexafluorophosphate

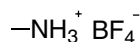
CAS No. : 28302-50-3  
 Grade : >99.5% , recrystallized 4 times  
 Formula : CH<sub>6</sub>PF<sub>6</sub>N  
 M.W. : 177.03 g/mole



## LT-S9246

## Methylammonium tetrafluoroborate

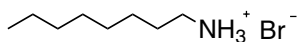
CAS No. : 42539-74-2  
 Grade : >99.5% , recrystallized 4 times  
 Formula : CH<sub>6</sub>BF<sub>4</sub>N  
 M.W. : 118.87 g/mole



## LT-S9247

## n-Octylammonium bromide

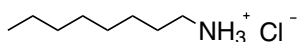
CAS No. : 14846-47-0  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_8H_{20}BrN$   
 M.W. : 210.16 g/mole



## LT-S9248

## n-Octylammonium chloride

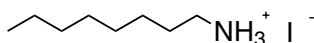
CAS No. : 142-95-0  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_8H_{20}ClN$   
 M.W. : 165.7 g/mole



## LT-S9249

## n-Octylammonium iodide

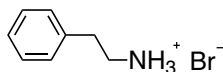
CAS No. : 60734-63-6  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_8H_{20}IN$   
 M.W. : 257.16 g/mole



## LT-S9250

## Phenethylammonium bromide

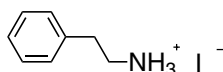
CAS No. : 53916-94-2  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_8H_{12}BrN$   
 M.W. : 202.09 g/mole



## LT-S9251

## Phenethylammonium iodide

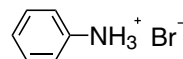
CAS No. : 151059-43-7  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_8H_{12}IN$   
 M.W. : 249.09 g/mole



## LT-S9252

## Phenylammonium bromide

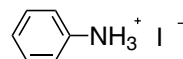
CAS No. : 542-11-0  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_6H_8BrN$   
 M.W. : 174.04 g/mole



## LT-S9253

## Phenylammonium iodide

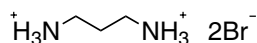
CAS No. : 45497-73-2  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_6H_8IN$   
 M.W. : 221.04 g/mole



## LT-S9254

## 1,3-Diammoniumpropane bromide

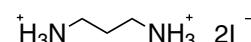
CAS No. : 18773-03-0  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_3H_{12}Br_2N_2$   
 M.W. : 235.95 g/mole



## LT-S9255 PDAI

## 1,3-Diammoniumpropane iodide

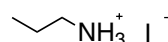
CAS No. : 120675-53-8  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_3H_{12}I_2N_2$   
 M.W. : 329.95 g/mole



## LT-S9256

## n-Propylammonium iodide

CAS No. : 14488-45-0  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_3H_{10}IN$   
 M.W. : 187.02 g/mole



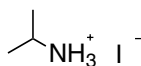


## Perovskite Precursor

## LT-S9257

## iso-Propylammonium iodide

Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_3H_{10}IN$   
 M.W. : 187.02 g/mole



## LT-S9258

## Pyrrolidinium iodide

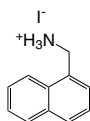
CAS No. : 45361-12-4  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_4H_{10}IN$   
 M.W. : 199.03 g/mole



## LT-S9286

## 1-Naphthylmethylamine iodide

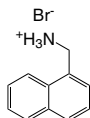
CAS No. : 256222-11-4  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_{11}H_{12}IN$   
 M.W. : 285.12 g/mole



## LT-S9287

## 1-Naphthylmethylamine bromide

CAS No. : 217309-83-6  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_{11}H_{12}BrN$   
 M.W. : 238.12 g/mole



## LT-S9300

## Butane-1,4-diammonium iodide

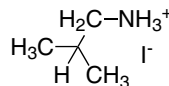
CAS No. : 916849-52-0  
 Grade : >99%  
 Formula :  $C_4H_{14}I_2N_2$   
 M.W. : 343.98 g/mole



## LT-S9301

## iso-Butylammonium iodide

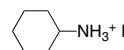
CAS No. : 205508-75-4  
 Grade : >99%  
 Formula :  $C_4H_{12}IN$   
 M.W. : 201.05 g/mole



## LT-S9302

## Cyclohexylammonium iodide

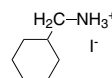
CAS No. : 45492-87-3  
 Grade : >99%  
 Formula :  $C_6H_{14}IN$   
 M.W. : 227.09 g/mole



## LT-S9303

## Cyclohexylmethylammonium iodide

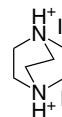
CAS No. : 2153504-15-3  
 Grade : >99%  
 Formula :  $C_7H_{16}IN$   
 M.W. : 241.11 g/mole



## LT-S9304

## 1,4-Diazabicyclo[2,2,2]octane-1,4-dium iodide

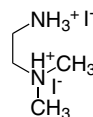
CAS No. : 33322-06-4  
 Grade : >99%  
 Formula :  $C_6H_{14}I_2N_2$   
 M.W. : 368 g/mole



## LT-S9305

## N,N-Dimethyl-1,2-ethanediammonium iodide

CAS No. : 244234-52-4  
 Grade : >99%  
 Formula :  $C_4H_{14}I_2N_2$   
 M.W. : 343.98 g/mole

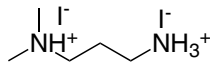


## Perovskite Precursor

## LT-S9306

N,N-Dimethyl-1,3-propanediammonium iodide

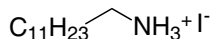
Grade : >99%  
 Formula :  $C_5H_{16}I_2N_2$   
 M.W. : 358 g/mole



## LT-S9307

n-Dodecylammonium iodide

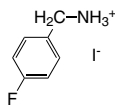
CAS No. : 34099-97-3  
 Grade : >99%  
 Formula :  $C_{12}H_{28}IN$   
 M.W. : 313.26 g/mole



## LT-S9308

4-Fluoro-benzylammonium iodide

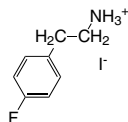
CAS No. : 2097121-30-5  
 Grade : >99%  
 Formula :  $C_7H_9FIN$   
 M.W. : 253.06 g/mole



## LT-S9309

4-Fluoro-phenethylammonium iodide

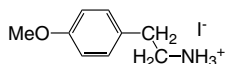
CAS No. : 1413269-55-2  
 Grade : >99%  
 Formula :  $C_8H_{11}FIN$   
 M.W. : 267.08 g/mole



## LT-S9311

4-Methoxy-phenethylammonium iodide

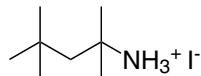
Grade : >99%  
 Formula :  $C_9H_{14}INO$   
 M.W. : 279.12 g/mole



## LT-S9312

tert-Octylammonium iodide

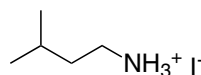
Grade : >99%  
 Formula :  $C_8H_{20}IN$   
 M.W. : 257.16 g/mole



## LT-S9313

iso-Pentylammonium iodide

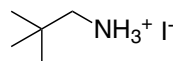
Grade : >99%  
 Formula :  $C_5H_{14}IN$   
 M.W. : 215.06 g/mole



## LT-S9314

neo-Pentylammonium iodide

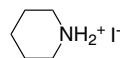
Grade : >99%  
 Formula :  $C_5H_{14}IN$   
 M.W. : 215.08 g/mole



## LT-S9315

Piperidinium iodide

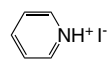
CAS No. : 21701-42-8  
 Grade : >99%  
 Formula :  $C_5H_{12}IN$   
 M.W. : 213.06 g/mole



## LT-S9316

Pyridinium iodide

CAS No. : 18820-83-2  
 Grade : >99%  
 Formula :  $C_5H_6IN$   
 M.W. : 207.01 g/mole

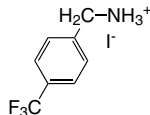


## Perovskite Precursor

## LT-S9317

## 4-Trifluoromethyl-benzylammonium iodide

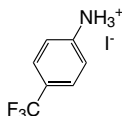
Grade : >99%  
 Formula :  $C_8H_9F_3IN$   
 M.W. : 303.06 g/mole



## LT-S9318

## 4-Trifluoromethyl-phenylammonium iodide

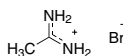
Grade : >99%  
 Formula :  $C_7H_7F_3N$   
 M.W. : 289.04 g/mole



## LT-S9319

## Acetamidinium bromide

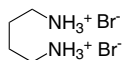
CAS No. : 1040352-82-6  
 Grade : >99%  
 Formula :  $C_2H_7BrN_2$   
 M.W. : 138.99 g/mole



## LT-S9320

## Butane-1,4-diammonium bromide

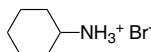
CAS No. : 18773-04-1  
 Grade : >99%  
 Formula :  $C_4H_{14}Br_2N_2$   
 M.W. : 249.98 g/mole



## LT-S9321

## Cyclohexylammonium bromide

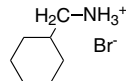
CAS No. : 26227-54-3  
 Grade : >99%  
 Formula :  $C_6H_{14}BrN$   
 M.W. : 180.09 g/mole



## LT-S9322

## Cyclohexylmethylammonium bromide

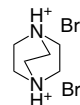
Grade : >99%  
 Formula :  $C_7H_{16}BrN$   
 M.W. : 194.11 g/mole



## LT-S9323

## 1,4-Diazabicyclo[2,2,2]octane-1,4-dium bromide

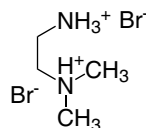
CAS No. : 54581-69-0  
 Grade : >99%  
 Formula :  $C_8H_{14}Br_2N_2$   
 M.W. : 274 g/mole



## LT-S9324

## N,N-Dimethylethane-1,2-ethanediammonium bromide

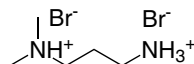
CAS No. : 1245570-04-0  
 Grade : >99%  
 Formula :  $C_4H_{14}Br_2N_2$   
 M.W. : 249.98 g/mole



## LT-S9325

## N,N-Dimethyl-1,3-propanediammonium bromide

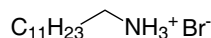
Grade : >99%  
 Formula :  $C_5H_{16}Br_2N_2$   
 M.W. : 264 g/mole



## LT-S9326

## n-Dodecylammonium bromide

CAS No. : 26204-55-7  
 Grade : >99%  
 Formula :  $C_{12}H_{28}BrN$   
 M.W. : 266.26 g/mole

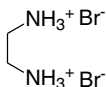


## Perovskite Precursor

## LT-S9327

## Ethane-1,2-diammonium bromide

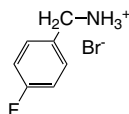
CAS No. : 624-59-9  
 Grade : >99%  
 Formula :  $C_2H_{10}Br_2N_2$   
 M.W. : 221.92 g/mole



## LT-S9328

## 4-Fluoro-benzylammonium bromide

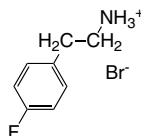
Grade : >99%  
 Formula :  $C_7H_9FBrN$   
 M.W. : 206.06 g/mole



## LT-S9329

## 4-Fluoro-phenethylammonium bromide

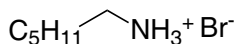
CAS No. : 1807536-06-6  
 Grade : >99%  
 Formula :  $C_8H_{11}BrFN$   
 M.W. : 220.08 g/mole



## LT-S9330

## n-Hexylammonium bromide

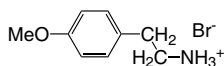
CAS No. : 7334-95-4  
 Grade : >99%  
 Formula :  $C_6H_{16}BrN$   
 M.W. : 182.1 g/mole



## LT-S9331

## 4-Methoxy-phenethylammonium bromide

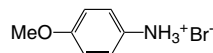
Grade : >99%  
 Formula :  $C_9H_{14}BrNO$   
 M.W. : 232.12 g/mole



## LT-S9332

## 4-Methoxy-phenylammonium bromide

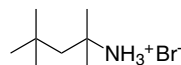
CAS No. : 116436-31-8  
 Grade : >99%  
 Formula :  $C_9H_{14}BrNO$   
 M.W. : 232.12 g/mole



## LT-S9333

## tert-Octylammonium bromide

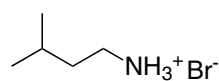
CAS No. : 1093859-61-0  
 Grade : >99%  
 Formula :  $C_8H_{20}BrN$   
 M.W. : 210.16 g/mole



## LT-S9334

## iso-Pentylammonium bromide

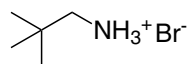
Grade : >99%  
 Formula :  $C_5H_{14}BrN$   
 M.W. : 168.08 g/mole



## LT-S9335

## neo-Pentylammonium bromide

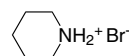
Grade : >99%  
 Formula :  $C_5H_{14}BrN$   
 M.W. : 168.08 g/mole



## LT-S9336

## Piperidinium bromide

CAS No. : 14066-85-4  
 Grade : >99%  
 Formula :  $C_5H_{12}BrN$   
 M.W. : 166.06 g/mole

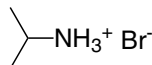


## Perovskite Precursor

## LT-S9337

iso-Propylammonium bromide

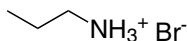
CAS No. : 29552-58-7  
 Grade : >99%  
 Formula : C<sub>3</sub>H<sub>10</sub>BrN  
 M.W. : 140.02 g/mole



## LT-S9338

n-Propylammonium bromide

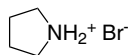
CAS No. : 4905-83-3  
 Grade : >99%  
 Formula : C<sub>3</sub>H<sub>10</sub>BrN  
 M.W. : 140.02 g/mole



## LT-S9339

Pyrrolidinium bromide

CAS No. : 55810-80-5  
 Grade : >99%  
 Formula : C<sub>4</sub>H<sub>10</sub>BrN  
 M.W. : 152.03 g/mole



## LT-S9340

Quinuclidin-1-ium bromide

CAS No. : 60662-68-2  
 Grade : >99%  
 Formula : C<sub>7</sub>H<sub>14</sub>BrN  
 M.W. : 192.1 g/mole



## LT-S9341

4-Trifluoromethyl-benzylammonium bromide

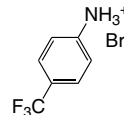
Grade : >99%  
 Formula : C<sub>8</sub>H<sub>9</sub>F<sub>3</sub>BrN  
 M.W. : 256.06 g/mole



## LT-S9342

4-Trifluoromethyl-phenylammonium bromide

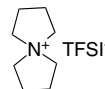
Grade : >99%  
 Formula : C<sub>7</sub>H<sub>7</sub>BrF<sub>3</sub>N  
 M.W. : 242.03 g/mole



## LT-S9343

5-Azaspiro[4.4]nonan-5-ium bis(trifluoromethane)sulfonimide

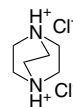
CAS No. : 706759-44-6  
 Grade : >99%  
 Formula : C<sub>10</sub>H<sub>16</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>  
 M.W. : 406.37 g/mole



## LT-S9344

1,4-Diazabicyclo[2.2.2]octane-1,4-dium chloride

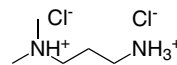
CAS No. : 49563-87-3  
 Grade : >99%  
 Formula : C<sub>6</sub>H<sub>14</sub>Cl<sub>2</sub>N<sub>2</sub>  
 M.W. : 185.09 g/mole



## LT-S9345

N,N-Dimethyl-1,3-propanediammonium chloride

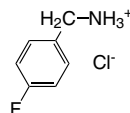
CAS No. : 52198-63-7  
 Grade : >99%  
 Formula : C<sub>5</sub>H<sub>16</sub>Cl<sub>2</sub>N<sub>2</sub>  
 M.W. : 175.1 g/mole



## LT-S9346

4-Fluoro-benzylammonium chloride

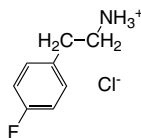
CAS No. : 659-41-6  
 Grade : >99%  
 Formula : C<sub>7</sub>H<sub>9</sub>FCIN  
 M.W. : 161.6 g/mole



## LT-S9347

## 4-Fluoro-phenethylammonium chloride

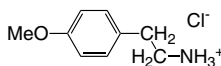
CAS No. : 459-19-8  
 Grade : >99%  
 Formula :  $C_8H_{11}ClFN$   
 M.W. : 175.63 g/mole



## LT-S9348

## 4-Methoxy-phenethylammonium chloride

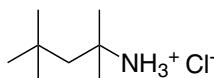
CAS No. : 645-58-9  
 Grade : >99%  
 Formula :  $C_9H_{14}ClNO$   
 M.W. : 187.67 g/mole



## LT-S9349

## tert-Octylammonium chloride

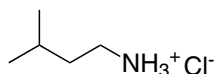
CAS No. : 58618-91-0  
 Grade : >99%  
 Formula :  $C_8H_{20}ClN$   
 M.W. : 165.7 g/mole



## LT-S9350

## iso-Pentylammonium chloride

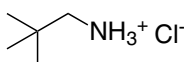
CAS No. : 541-23-1  
 Grade : >99%  
 Formula :  $C_5H_{14}ClN$   
 M.W. : 123.62 g/mole



## LT-S9351

## neo-Pentylammonium chloride

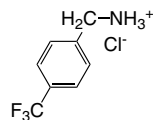
CAS No. : 15925-18-5  
 Grade : >99%  
 Formula :  $C_5H_{14}ClN$   
 M.W. : 123.62 g/mole



## LT-S9352

## 4-Trifluoromethyl-benzylammonium chloride

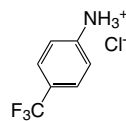
CAS No. : 3047-99-2  
 Grade : >99%  
 Formula :  $C_8H_9F_3ClN$   
 M.W. : 211.61 g/mole



## LT-S9353

## 4-Trifluoromethyl-phenethylammonium chloride

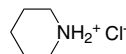
CAS No. : 90774-69-9  
 Grade : >99%  
 Formula :  $C_7H_7ClF_3N$   
 M.W. : 197.59 g/mole



## LT-S9354

## Piperidinium chloride

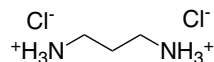
CAS No. : 6091-44-7  
 Grade : >99%  
 Formula :  $C_5H_{12}ClN$   
 M.W. : 121.61 g/mole



## LT-S9355

## Propane-1,3-diammonium chloride

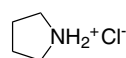
CAS No. : 10517-44-9  
 Grade : >99%  
 Formula :  $C_3H_{12}Cl_2N_2$   
 M.W. : 147.05 g/mole



## LT-S9356

## Pyrrolidinium chloride

CAS No. : 25150-61-2  
 Grade : >99%  
 Formula :  $C_4H_{10}ClN$   
 M.W. : 107.58 g/mole



## Perovskite Precursor

## LT-S9357

Quinuclidin-1-ium chloride

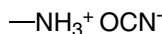
CAS No. : 39896-06-5  
 Grade : >99%  
 Formula : C<sub>7</sub>H<sub>14</sub>ClN  
 M.W. : 147.65 g/mole



## LT-S9358

Methylammonium cyanate

CAS No. : 63405-91-4  
 Grade : >99%  
 Formula : C<sub>2</sub>H<sub>6</sub>N<sub>2</sub>O  
 M.W. : 74.08 g/mole



## LT-S9359

5-Azaspiro[4.4]nonan-5-ium tetrafluoroborate

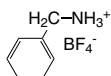
CAS No. : 129211-47-8  
 Grade : >99%  
 Formula : C<sub>8</sub>H<sub>16</sub>BF<sub>4</sub>N  
 M.W. : 213.02 g/mole



## LT-S9360

Benzylammonium tetrafluoroborate

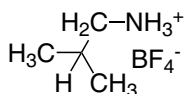
CAS No. : 41579-49-1  
 Grade : >99%  
 Formula : C<sub>7</sub>H<sub>10</sub>BF<sub>4</sub>N  
 M.W. : 194.97 g/mole



## LT-S9361

iso-Butylammonium tetrafluoroborate

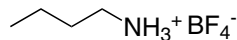
CAS No. : 71852-72-7  
 Grade : >99%  
 Formula : C<sub>4</sub>H<sub>12</sub>BF<sub>4</sub>N  
 M.W. : 160.95 g/mole



## LT-S9362

n-Butylammonium tetrafluoroborate

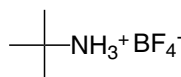
CAS No. : 71852-73-8  
 Grade : >99%  
 Formula : C<sub>4</sub>H<sub>12</sub>BF<sub>4</sub>N  
 M.W. : 160.95 g/mole



## LT-S9363

t-Butylammonium tetrafluoroborate

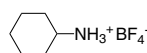
CAS No. : 24418-92-6  
 Grade : >99%  
 Formula : C<sub>4</sub>H<sub>12</sub>BF<sub>4</sub>N  
 M.W. : 160.95 g/mole



## LT-S9364

Cyclohexylammonium tetrafluoroborate

CAS No. : 71893-43-1  
 Grade : >99%  
 Formula : C<sub>6</sub>H<sub>14</sub>BF<sub>4</sub>N  
 M.W. : 186.99 g/mole



## LT-S9365

1,4-Diazabicyclo[2,2,2]octane-1,4-dium tetrafluoroborate

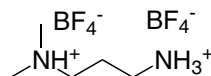
Grade : >99%  
 Formula : C<sub>6</sub>H<sub>14</sub>B<sub>2</sub>F<sub>8</sub>N<sub>2</sub>  
 M.W. : 287.8 g/mole



## LT-S9366

N,N-Dimethyl-1,3-propanediammonium tetrafluoroborate

Grade : >99%  
 Formula : C<sub>5</sub>H<sub>16</sub>B<sub>2</sub>F<sub>8</sub>N<sub>2</sub>  
 M.W. : 277.8 g/mole

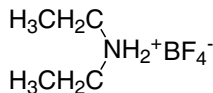


## Perovskite Precursor

## LT-S9367

## Diethylammonium tetrafluoroborate

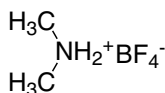
CAS No. : 17085-33-5  
 Grade : >99%  
 Formula :  $C_4H_{12}BF_4N$   
 M.W. : 160.95 g/mole



## LT-S9368

## Dimethylammonium tetrafluoroborate

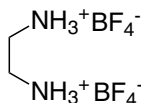
CAS No. : 16970-97-1  
 Grade : >99%  
 Formula :  $C_2H_8BF_4N$   
 M.W. : 132.9 g/mole



## LT-S9369

## Ethane-1,2-diammonium tetrafluoroborate

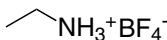
Grade : >99%  
 Formula :  $C_2H_{10}B_2F_8N_2$   
 M.W. : 235.72 g/mole



## LT-S9370

## Ethylammonium tetrafluoroborate

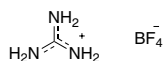
CAS No. : 12070-78-9  
 Grade : >99%  
 Formula :  $C_2H_8BF_4N$   
 M.W. : 132.9 g/mole



## LT-S9371

## Guanidinium tetrafluoroborate

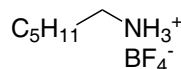
CAS No. : 36595-00-3  
 Grade : >99%  
 Formula :  $CH_5BF_4N_3$   
 M.W. : 146.88 g/mole



## LT-S9372

## n-Hexylammonium tetrafluoroborate

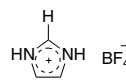
CAS No. : 41579-47-9  
 Grade : >99%  
 Formula :  $C_6H_{16}BF_4N$   
 M.W. : 378.01 g/mole



## LT-S9373

## Imidazolium tetrafluoroborate

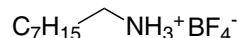
CAS No. : 112725-76-5  
 Grade : >99%  
 Formula :  $C_3H_5BF_4N_2$   
 M.W. : 155.89 g/mole



## LT-S9374

## n-Octylammonium tetrafluoroborate

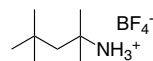
CAS No. : 790269-39-5  
 Grade : >99%  
 Formula :  $C_8H_{20}BF_4N$   
 M.W. : 217.06 g/mole



## LT-S9375

## tert-Octylammonium tetrafluoroborate

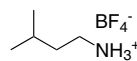
Grade : >99%  
 Formula :  $C_8H_{20}BF_4N$   
 M.W. : 217.06 g/mole



## LT-S9376

## iso-Pentylammonium tetrafluoroborate

CAS No. : 150178-33-9  
 Grade : >99%  
 Formula :  $C_5H_{14}BF_4N$   
 M.W. : 174.97 g/mole



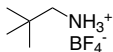


## Perovskite Precursor

## LT-S9377

neo-Pentylammonium tetrafluoroborate

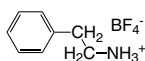
Grade : >99%  
 Formula :  $C_5H_{14}BF_4N$   
 M.W. : 174.98 g/mole



## LT-S9378

Phenethylammonium tetrafluoroborate

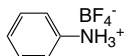
Grade : >99%  
 Formula :  $C_8H_{12}BF_4N$   
 M.W. : 208.99 g/mole



## LT-S9379

Phenylammonium tetrafluoroborate

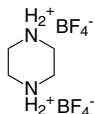
CAS No. : 3796-29-0  
 Grade : >99%  
 Formula :  $C_6H_8BF_4N$   
 M.W. : 180.94 g/mole



## LT-S9380

Piperazine-1,4-dium tetrafluoroborate

Grade : >99%  
 Formula :  $C_4H_{12}B_2F_8N_2$   
 M.W. : 261.76 g/mole



## LT-S9381

Piperidinium tetrafluoroborate

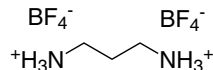
CAS No. : 20935-77-7  
 Grade : >99%  
 Formula :  $C_5H_{12}BF_4N$   
 M.W. : 172.96 g/mole



## LT-S9382

Propane-1,3-diammonium tetrafluoroborate

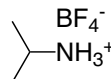
Grade : >99%  
 Formula :  $C_3H_{12}B_2F_8N_2$   
 M.W. : 249.75 g/mole



## LT-S9383

iso-Propylammonium tetrafluoroborate

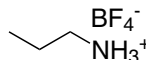
CAS No. : 71852-74-9  
 Grade : >99%  
 Formula :  $C_3H_{10}BF_4N$   
 M.W. : 146.92 g/mole



## LT-S9384

n-Propylammonium tetrafluoroborate

CAS No. : 71852-75-0  
 Grade : >99%  
 Formula :  $C_3H_{10}BF_4N$   
 M.W. : 146.92 g/mole



## LT-S9385

Pyridinium tetrafluoroborate

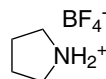
CAS No. : 505-07-7  
 Grade : >99%  
 Formula :  $C_5H_6BF_4N$   
 M.W. : 166.91 g/mole



## LT-S9386

Pyrrolidinium tetrafluoroborate

CAS No. : 95647-26-0  
 Grade : >99%  
 Formula :  $C_4H_{10}BF_4N$   
 M.W. : 158.93 g/mole



## Perovskite Precursor

## LT-S9387

Quinuclidin-1-ium tetrafluoroborate

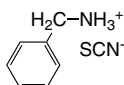
CAS No. : 936025-25-1  
 Grade : >99%  
 Formula : C<sub>7</sub>H<sub>14</sub>BF<sub>4</sub>N  
 M.W. : 199 g/mole



## LT-S9388

Benzylammonium thiocyanate

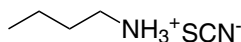
CAS No. : 51571-89-2  
 Grade : >99%  
 Formula : C<sub>8</sub>H<sub>10</sub>N<sub>2</sub>S  
 M.W. : 166.24 g/mole



## LT-S9389

n-Butylammonium thiocyanate

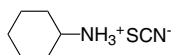
CAS No. : 25162-84-9  
 Grade : >99%  
 Formula : C<sub>5</sub>H<sub>12</sub>N<sub>2</sub>S  
 M.W. : 132.23 g/mole



## LT-S9390

Cyclohexylammonium thiocyanate

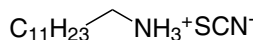
CAS No. : 96943-17-8  
 Grade : >99%  
 Formula : C<sub>7</sub>H<sub>14</sub>N<sub>2</sub>S  
 M.W. : 158.26 g/mole



## LT-S9391

n-Dodecylammonium thiocyanate

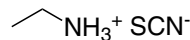
CAS No. : 22031-31-8  
 Grade : >99%  
 Formula : C<sub>13</sub>H<sub>28</sub>N<sub>2</sub>S  
 M.W. : 244.44 g/mole



## LT-S9392

Ethylammonium thiocyanate

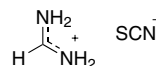
CAS No. : 25153-19-9  
 Grade : >99%  
 Formula : C<sub>3</sub>H<sub>8</sub>N<sub>2</sub>S  
 M.W. : 104.17 g/mole



## LT-S9393

Formamidinium thiocyanate

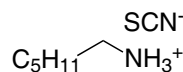
CAS No. : 1821033-48-0  
 Grade : >99%  
 Formula : CH<sub>5</sub>N<sub>3</sub>S  
 M.W. : 103.15 g/mole



## LT-S9394

n-Hexylammonium thiocyanate

CAS No. : 25162-85-0  
 Grade : >99%  
 Formula : C<sub>7</sub>H<sub>16</sub>N<sub>2</sub>S  
 M.W. : 160.28 g/mole



## LT-S9395

Methylammonium thiocyanate

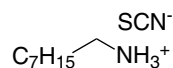
CAS No. : 61540-63-4  
 Grade : >99%  
 Formula : C<sub>2</sub>H<sub>6</sub>N<sub>2</sub>S  
 M.W. : 90.15 g/mole



## LT-S9396

n-Octylammonium thiocyanate

CAS No. : 25162-86-1  
 Grade : >99%  
 Formula : C<sub>9</sub>H<sub>20</sub>N<sub>2</sub>S  
 M.W. : 188.33 g/mole

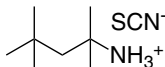


## Perovskite Precursor

## LT-S9397

## tert-Octylammonium thiocyanate

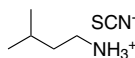
CAS No. : 41115-58-6  
 Grade : >99%  
 Formula :  $C_9H_{20}N_2S$   
 M.W. : 188.33 g/mole



## LT-S9398

## iso-Pentylammonium thiocyanate

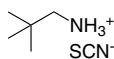
Grade : >99%  
 Formula :  $C_6H_{14}N_2S$   
 M.W. : 146.25 g/mole



## LT-S9399

## neo-Pentylammonium thiocyanate

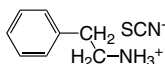
CAS No. : 61540-71-4  
 Grade : >99%  
 Formula :  $C_6H_{14}N_2S$   
 M.W. : 146.25 g/mole



## LT-S9400

## Phenethylammonium thiocyanate

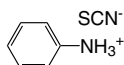
CAS No. : 2656409-76-4  
 Grade : >99%  
 Formula :  $C_9H_{12}N_2S$   
 M.W. : 180.27 g/mole



## LT-S9401

## Phenylammonium thiocyanate

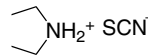
CAS No. : 27248-14-2  
 Grade : >99%  
 Formula :  $C_7H_9N_2S$   
 M.W. : 152.22 g/mole



## LT-S9402

## Pyrrolidinium thiocyanate

CAS No. : 217309-80-3  
 Grade : >99%  
 Formula :  $C_5H_{10}N_2S$   
 M.W. : 130.21 g/mole



## LT-S9403

## 5-Azaspiro[4.4]nonan-5-ium hexafluorophosphate

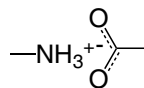
CAS No. : 129211-50-3  
 Grade : >99%  
 Formula :  $C_8H_{16}F_6NP$   
 M.W. : 271.18 g/mole



## LT-S9404

## Methylammonium acetate

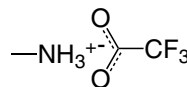
CAS No. : 6998-30-7  
 Grade : >99%  
 Formula :  $C_3H_9NO_2$   
 M.W. : 91.11 g/mole



## LT-S9405

## Methylammonium trifluoroacetate

CAS No. : 107326-29-4  
 Grade : >99%  
 Formula :  $C_3H_7F_3NO_2$   
 M.W. : 146.09 g/mole

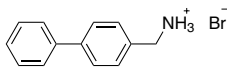


## LT-S9510

**NEW**

4-Phenylbenzylammonium bromide

Grade : >99%  
Formula :  $C_{13}H_{14}BrN$   
M.W. : 264.16 g/mole



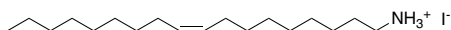
## LT-S9539

**NEW**

Oleylammonium Iodide

Perovskite Precursors

CAS No : 1802520-56-4  
Grade : >99.5%  
Formula :  $C_{18}H_{38}IN$   
M.W. : 395.41 g/mole

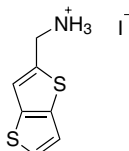


## LT-S9588

TTMAI

Thieno[3,2-b]thiophen-2-ylmethanaminium iodide

Grade : > 99.5%  
Formula :  $C_7H_8INS_2$   
M.W. : 297.18 g/mole

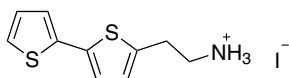


## LT-S9644

2TEAI

2-([2,2'-Bithiophen]-5-yl)ethan-1-aminium iodide

Grade : >99%  
Formula :  $C_{10}H_{12}INS_2$   
M.W. : 337.24 g/mole

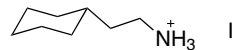


## LT-S9645

CEAI

Cyclohexylethylammonium iodide

Grade : >99%  
Formula :  $C_8H_{18}I_2$   
M.W. : 255.14 g/mole



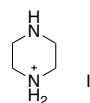
## LT-S9671

Pipl

**NEW**

Piperazinium Iodide

CAS No : 56310-12-4  
Grade : >99.5%  
Formula :  $C_4H_{11}IN_2$   
M.W. : 214.05 g/mole

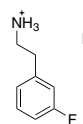


## LT-S9680

**NEW**

3-Fluoro-phenethylammonium iodide

CAS No. : 2810129-43-0  
Grade : >99%  
Formula :  $C_8H_{11}FIN$   
M.W. : 267.08 g/mole



## LT-S9690

**NEW**

Cesium bromide

CAS No. : 7787-69-1  
Grade : 99.9% trace metals basis  
Formula :  $CsBr$   
M.W. : 212.81 g/mole

**CsBr**

LT-S9691

NEW

Cesium chloride

CAS No. :7647-17-8  
 Grade :99.9% trace metals basis  
 Formula :CsCl  
 M.W. :168.36 g/mole



LT-S9692

NEW

Cesium iodide

CAS No. :7789-17-5  
 Grade :99.9% trace metals basis  
 Formula :CsI  
 M.W. :259.81 g/mole



LT-S9693

NEW

Copper(II) chloride dihydrate

CAS No. :10125-13-0  
 Grade :>99%  
 Formula :CuCl<sub>2</sub> · 2H<sub>2</sub>O  
 M.W. :170.48 g/mole



LT-S9694

NEW

Tin(II) bromide

CAS No. :10031-24-0  
 Grade :>99%  
 Formula :SnBr<sub>2</sub>  
 M.W. :278.52 g/mole



LT-S9695

NEW

Tin(II) chloride

CAS No. :7772-99-8  
 Grade :>99%  
 Formula :SnCl<sub>2</sub>  
 M.W. :189.62 g/mole



LT-S9696

NEW

Tin(II) iodide

CAS No. :10294-70-9  
 Grade :>99%  
 Formula :SnI<sub>2</sub>  
 M.W. :372.52 g/mole

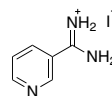


LT-S9729 3API

NEW

Iodized 3-pyridinecarboximidamide

Grade :>99%  
 Formula :C<sub>6</sub>H<sub>8</sub>N<sub>3</sub>  
 M.W. :249.05 g/mole

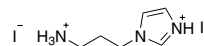


LT-S9730 APDI

NEW

N-(3-Aminopropyl)-imidazole Diiodide

CAS No. :1350616-11-3  
 Grade :>99%  
 Formula :C<sub>6</sub>H<sub>13</sub>I<sub>2</sub>N<sub>3</sub>  
 M.W. :381 g/mole

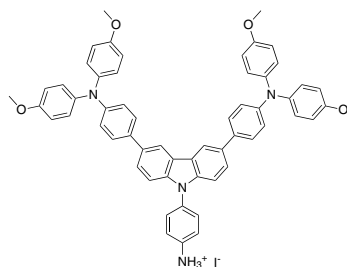


LT-S9731 CBZ-PAI

NEW

4-(3,6-Bis(4-(bis(4-methoxyphenyl)amino)phenyl)-9H-carbazol-9-yl)benzenaminium iodide

Grade :>99%  
 Formula :C<sub>58</sub>H<sub>49</sub>IN<sub>4</sub>O<sub>4</sub>  
 M.W. :992.94 g/mole  
 HOMO :-5.36 eV  
 LUMO :-2.26 eV



## Perovskite Precursor

### LT-S9732 | PNEACl NEW

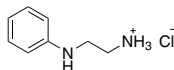
2-(Phenylamino)ethanaminium chloride

CAS No :108445-06-3

Grade :>99%

Formula :C<sub>8</sub>H<sub>13</sub>ClN<sub>2</sub>

M.W. :172.66 g/mole



### LT-S9733 | TMBAI NEW

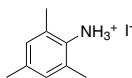
2,4,6-Trimethylbenzenaminium iodide

CAS No :947749-12-4

Grade :>99%

Formula :C<sub>9</sub>H<sub>14</sub>IN

M.W. :263.12 g/mole



### LT-S9734 | 5-AVAI NEW

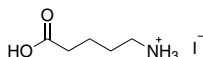
5-Ammoniumvaleric acid iodide

CAS No :705581-28-7

Grade :>99%

Formula :C<sub>5</sub>H<sub>12</sub>INO<sub>2</sub>

M.W. :245.06 g/mole



### LT-S9735 | 5-AVACl NEW

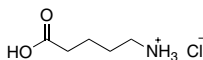
5-Ammoniumvaleric acid chloride

CAS No :627-95-2

Grade :>99%

Formula :C<sub>5</sub>H<sub>12</sub>ClNO<sub>2</sub>

M.W. :153.61 g/mole



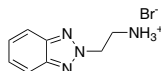
### LT-S9749 | BTaBr NEW

2-(2H-benzo[d][1,2,3]triazol-2-yl)ethylammonium bromide

Grade :>99%

Formula :C<sub>8</sub>H<sub>11</sub>BrN<sub>4</sub>

M.W. :243.1 g/mole



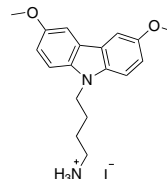
### LT-S9751 | MeO-4CzNH3I NEW

4-(3,6-Dimethoxy-9H-carbazol-9-yl)butan-1-aminium iodide

Grade :>99%

Formula :C<sub>18</sub>H<sub>23</sub>IN<sub>2</sub>O<sub>2</sub>

M.W. :426.29 g/mole



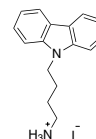
### LT-S9752 | 4CzNH3I NEW

4-(9H-carbazol-9-yl)butan-1-ammonium iodide

Grade :>99%

Formula :C<sub>16</sub>H<sub>19</sub>IN<sub>2</sub>

M.W. :366.24 g/mole



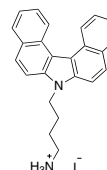
### LT-S9753 | 4DBCNH3I NEW

4-(7H-dibenzo[c,g]carbazol-7-yl)butan-1-aminium iodide

Grade :>99%

Formula :C<sub>24</sub>H<sub>23</sub>IN<sub>2</sub>

M.W. :466.36 g/mole



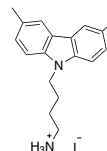
### LT-S9754 | Me-4CzNH3I NEW

4-(3,6-Dimethyl-9H-carbazol-9-yl)butan-1-aminium iodide

Grade :>99%

Formula :C<sub>18</sub>H<sub>23</sub>IN<sub>2</sub>

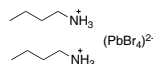
M.W. :394.29 g/mole



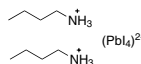
## Perovskite Precursor

**LT-S9763** | (BA)2PbBr4 **NEW**

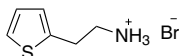
Di-n-butylammonium lead tetrabromide  
 CAS No :274903-07-0  
 Grade :>99%  
 Formula :C<sub>8</sub>H<sub>24</sub>Br<sub>4</sub>N<sub>2</sub>Pb  
 M.W. :675.11 g/mole

**LT-S9764** | (BA)2PbI4 **NEW**

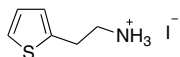
Di-n-butylammonium lead tetraiodide  
 CAS No :132069-10-4  
 Grade :>99%  
 Formula :C<sub>8</sub>H<sub>24</sub>I<sub>4</sub>N<sub>2</sub>Pb  
 M.W. :863.11 g/mole

**LT-S9765** | 2-ThEABr **NEW**

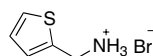
2-Thiophenethylammonium bromide  
 CAS No :2490324-60-0  
 Grade :>99%  
 Formula :C<sub>6</sub>H<sub>10</sub>BrNS  
 M.W. :208.12 g/mole

**LT-S9766** | 2-ThEAI **NEW**

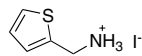
2-Thiopheneethylammonium iodide  
 CAS No :2414055-94-8  
 Grade :>99%  
 Formula :C<sub>6</sub>H<sub>10</sub>INS  
 M.W. :255.12 g/mole

**LT-S9767** | 2-ThMABr **NEW**

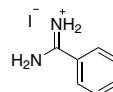
2-Thiophenemethylammonium bromide  
 CAS No :59852-33-4  
 Grade :>99%  
 Formula :C<sub>5</sub>H<sub>8</sub>BrNS  
 M.W. :194.09 g/mole

**LT-S9768** | 2-ThMAI **NEW**

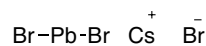
2-Thiophenemethylammonium iodide  
 CAS No :2247100-32-7  
 Grade :>99%  
 Formula :C<sub>5</sub>H<sub>8</sub>INS  
 M.W. :241.09 g/mole

**LT-S9769** | BFAI **NEW**

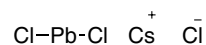
Benzimidamide hydroiodide  
 CAS No :860684-44-2  
 Grade :>99%  
 Formula :C<sub>7</sub>H<sub>9</sub>IN<sub>2</sub>  
 M.W. :248.06 g/mole

**LT-S9770** | CsPbBr3 **NEW**

Cesium lead tribromide  
 CAS No :15243-48-8  
 Grade :>99%  
 Formula :Br<sub>3</sub>CsPb  
 M.W. :579.82 g/mole

**LT-S9771** | CsPbCl3 **NEW**

Cesium lead trichloride  
 CAS No :15203-83-5  
 Grade :>99%  
 Formula :Cl<sub>3</sub>CsPb  
 M.W. :446.46 g/mole



## Perovskite Precursor

### LT-S9772 | CsPbI3

**NEW**

Cesium lead triiodide

CAS No :18041-25-3  
Grade :>99%  
Formula :CsI<sub>3</sub>Pb  
M.W. :720.82 g/mole

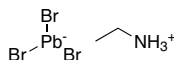


### LT-S9773 | EAPbBr3

**NEW**

Ethylammonium tribromoplumbate

CAS No :17251-33-1  
Grade :>99%  
Formula :C<sub>2</sub>H<sub>8</sub>Br<sub>3</sub>NPb  
M.W. :493 g/mole

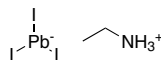


### LT-S9774 | EAPbI3

**NEW**

Ethylammonium triiodoplumbate

CAS No :1640335-04-1  
Grade :>99%  
Formula :C<sub>2</sub>H<sub>8</sub>I<sub>3</sub>NPb  
M.W. :634.01 g/mole

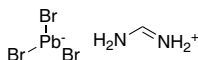


### LT-S9775 | FAPbBr3

**NEW**

Formamidinium tribromoplumbate

CAS No :1008105-17-6  
Grade :>99%  
Formula :CH<sub>3</sub>Br<sub>3</sub>N<sub>2</sub>Pb  
M.W. :491.98 g/mole

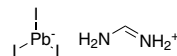


### LT-S9776 | FAPbI3

**NEW**

Formamidinium triiodoplumbate

CAS No :1451592-07-6  
Grade :>99%  
Formula :CH<sub>3</sub>I<sub>3</sub>N<sub>2</sub>Pb  
M.W. :632.98 g/mole

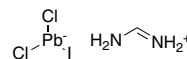


### LT-S9777 | FAPbClI2

**NEW**

Formamidinium Lead Chloride Iodide

CAS No :1616115-25-3  
Grade :>99%  
Formula :CH<sub>3</sub>Cl<sub>2</sub>I<sub>2</sub>N<sub>2</sub>Pb  
M.W. :450.07 g/mole

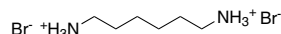


### LT-S9778 | HDADBr

**NEW**

Hexane-1,6-diammonium bromide

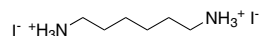
CAS No :24731-81-5  
Grade :>99%  
Formula :C<sub>6</sub>H<sub>18</sub>Br<sub>2</sub>N<sub>2</sub>  
M.W. :278.03 g/mole



### LT-S9779 | HDADI

Hexane-1,6-diammonium iodide

CAS No :20208-23-5  
Grade :>99%  
Formula :C<sub>6</sub>H<sub>18</sub>I<sub>2</sub>N<sub>2</sub>  
M.W. :372.03 g/mole





## Perovskite Precursor

**LT-S9780** | HPbBr3 **NEW**

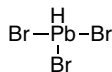
Hydrogen lead tribromide

CAS No :192874-55-8

Grade :&gt;99%

Formula :Br<sub>3</sub>HPb

M.W. :447.92 g/mole

**LT-S9781** | HPbI3 **NEW**

Hydrogen lead triiodide

CAS No :134879-44-0

Grade :&gt;99%

Formula :HI<sub>3</sub>Pb

M.W. :588.92 g/mole

**LT-S9782** | MAPbBr2Cl **NEW**

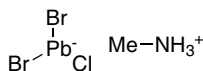
Methylammonium Lead Chloride Bromide

CAS No :479066-07-4

Grade :&gt;99%

Formula :CH<sub>6</sub>Br<sub>2</sub>ClNPb

M.W. :434.53 g/mole

**LT-S9783** | MAPbBr2I **NEW**

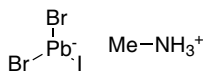
Methylammonium Lead Bromide Iodide

CAS No :1472068-58-8

Grade :&gt;99%

Formula :CH<sub>6</sub>Br<sub>2</sub>INPb

M.W. :525.98 g/mole

**LT-S9784** | MAPbBr3 **NEW**

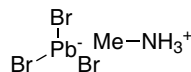
Methylammonium tribromoplumbate

CAS No :69276-13-7

Grade :&gt;99%

Formula :CH<sub>6</sub>Br<sub>3</sub>NPb

M.W. :478.98 g/mole

**LT-S9785** | MAPbBrCl2 **NEW**

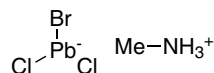
Methylammonium Lead Chloride Bromide

CAS No :479066-09-6

Grade :&gt;99%

Formula :CH<sub>6</sub>BrCl<sub>2</sub>NPb

M.W. :390.08 g/mole

**LT-S9786** | MAPbBrI2 **NEW**

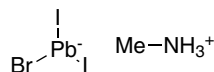
Methylammonium Lead Bromide Iodide

CAS No :1446121-02-3

Grade :&gt;99%

Formula :CH<sub>6</sub>BrI<sub>2</sub>NPb

M.W. :572.98 g/mole

**LT-S9787** | MAPbI2Cl **NEW**

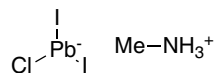
Methylammonium Lead Chloride Iodide

CAS No :1446121-07-8

Grade :&gt;99%

Formula :CH<sub>6</sub>ClI<sub>2</sub>NPb

M.W. :528.53 g/mole



**LT-S9788** | MAPbI3 **NEW**

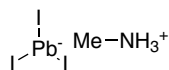
Methylammonium triiodoplumbate

CAS No :69507-98-8

Grade :&gt;99%

Formula :CH<sub>6</sub>I<sub>3</sub>NPb

M.W. :619.98 g/mole

**LT-S9789** | MAPbClI2 **NEW**

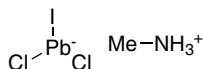
Methylammonium Lead Chloride Iodide

CAS No :1472068-56-6

Grade :&gt;99%

Formula :CH<sub>6</sub>Cl<sub>2</sub>INPb

M.W. :437.08 g/mole

**LT-S9790** | mPhDMADBr **NEW**

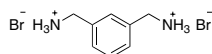
1,3-Phenylenedimethanamine dihydrobromide

CAS No :2265236-82-4

Grade :&gt;99%

Formula :C<sub>8</sub>H<sub>14</sub>Br<sub>2</sub>N<sub>2</sub>

M.W. :298.02 g/mole

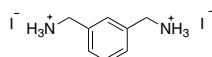
**LT-S9811** | mPhDMADI **NEW**

1,3-Phenylenedimethanamine dihydroiodide

Grade :&gt;99%

Formula :C<sub>8</sub>H<sub>14</sub>I<sub>2</sub>N<sub>2</sub>

M.W. :392.02 g/mole

**LT-S9812** | PAPbI3 **NEW**

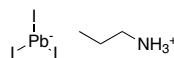
Propylammonium triiodoplumbate

CAS No :1646171-78-9

Grade :&gt;99%

Formula :C<sub>3</sub>H<sub>10</sub>I<sub>3</sub>NPb

M.W. :648.03 g/mole

**LT-S9813** | PbAc2 **NEW**

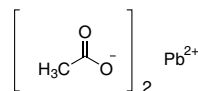
Lead(II) Acetate

CAS No :301-04-2

Grade :&gt;99%

Formula :C<sub>4</sub>H<sub>6</sub>O<sub>4</sub>Pb

M.W. :325.29 g/mole

**LT-S9814** | p-Br-MBACl **NEW**

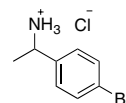
1-(4-Bromophenyl)ethylamine hydrochloride

CAS No :90006-14-7

Grade :&gt;99%

Formula :C<sub>9</sub>H<sub>11</sub>BrClN

M.W. :236.54 g/mole

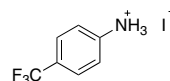
**LT-S9815** | p-CF3PhAI **NEW**

4-Trifluoromethyl-Phenylammonium iodide

Grade :&gt;99%

Formula :C<sub>7</sub>H<sub>7</sub>F<sub>3</sub>IN

M.W. :289.04 g/mole



## Perovskite Precursor

**LT-S9816** | PentABr**NEW**

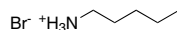
n-Pentylammonium bromide

CAS No :7334-94-3

Grade :&gt;99%

Formula :C<sub>5</sub>H<sub>14</sub>BrN

M.W. :168.08 g/mole

**LT-S9817** | PentACl**NEW**

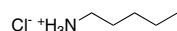
n-Pentylammonium chloride

CAS No :142-65-4

Grade :&gt;99%

Formula :C<sub>5</sub>H<sub>14</sub>ClN

M.W. :123.62 g/mole

**LT-S9818** | PentAI**NEW**

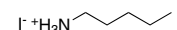
n-Pentylammonium iodide

CAS No :60762-85-8

Grade :&gt;99%

Formula :C<sub>5</sub>H<sub>14</sub>IN

M.W. :215.08 g/mole

**LT-S9819** | p-F-PMABr**NEW**

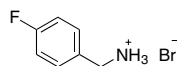
4-Fluorobenzylamine hydrobromide

CAS No :2270172-94-4

Grade :&gt;99%

Formula :C<sub>7</sub>H<sub>9</sub>BrFN

M.W. :206.06 g/mole

**LT-S9820** | PhBABr**NEW**

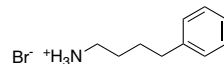
4-Phenylbutylammonium bromide

CAS No :120375-52-2

Grade :&gt;99%

Formula :C<sub>10</sub>H<sub>16</sub>BrN

M.W. :230.14 g/mole

**LT-S9821** | PhBACl**NEW**

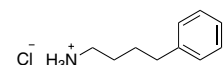
4-Phenylbutylamine hydrochloride

CAS No :30684-06-1

Grade :&gt;99%

Formula :C<sub>10</sub>H<sub>16</sub>ClN

M.W. :185.69 g/mole

**LT-S9822** | PhBAI**NEW**

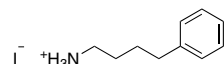
4-Phenylbutylammonium iodide

CAS No :2602663-31-8

Grade :&gt;99%

Formula :C<sub>10</sub>H<sub>16</sub>IN

M.W. :277.15 g/mole

**LT-S9823** | PhDADBr**NEW**

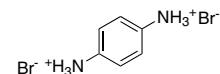
1,4-Benzene diammonium bromide

CAS No :116469-01-3

Grade :&gt;99%

Formula :C<sub>6</sub>H<sub>10</sub>Br<sub>2</sub>N<sub>2</sub>

M.W. :269.96 g/mole



## Perovskite Precursor

**LT-S9824** | PhDMADBr **NEW**

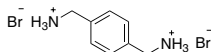
1,4-Phenylenedimethanamine dihydrobromide

CAS No :1294005-02-9

Grade :&gt;99%

Formula :C<sub>8</sub>H<sub>14</sub>Br<sub>2</sub>N<sub>2</sub>

M.W. :298.02 g/mole

**LT-S9825** | PhDMADI **NEW**

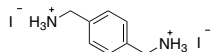
1,4-Phenylenedimethanamine dihydroiodide

CAS No :2304829-65-8

Grade :&gt;99%

Formula :C<sub>8</sub>H<sub>14</sub>I<sub>2</sub>N<sub>2</sub>

M.W. :392.02 g/mole

**LT-S9826** | PhPABr **NEW**

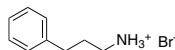
3-Phenylpropylammonium bromide

CAS No :120375-53-3

Grade :&gt;99%

Formula :C<sub>9</sub>H<sub>14</sub>BrN

M.W. :216.12 g/mole

**LT-S9827** | PhPAI **NEW**

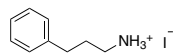
3-Phenylpropylammonium iodide

CAS No :2673196-34-2

Grade :&gt;99%

Formula :C<sub>9</sub>H<sub>14</sub>IN

M.W. :263.12 g/mole

**LT-S9828** | PipBr **NEW**

Piperazine hydrobromide

CAS No :59813-07-9

Grade :&gt;99%

Formula :C<sub>4</sub>H<sub>11</sub>BrN<sub>2</sub>

M.W. :167.05 g/mole

**LT-S9829** | PMACI **NEW**

Benzylamine hydrochloride

CAS No :3287-99-8

Grade :&gt;99%

Formula :C<sub>7</sub>H<sub>10</sub>ClN

M.W. :143.61 g/mole

**LT-S9831** | p-CF3PEAI **NEW**

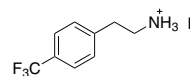
4-Trifluorophenylethylammonium iodide

CAS No :2770278-13-0

Grade :&gt;99%

Formula :C<sub>9</sub>H<sub>11</sub>F<sub>3</sub>IN

M.W. :317.09 g/mole

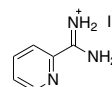
**LT-S9832** | 2API **NEW**

Iodized 2-pyridinecarboximidamide

Grade :&gt;99%

Formula :C<sub>6</sub>H<sub>8</sub>IN<sub>3</sub>

M.W. :249.05 g/mole



## Perovskite Precursor

## LT-S9833 | BPMAl

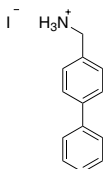
NEW

4-Biphenylmethyl ammonium iodide

Grade :&gt;99%

Formula :C<sub>13</sub>H<sub>14</sub>IN

M.W. :311.16 g/mole



## LT-S9834 | BPMACl

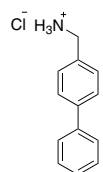
NEW

4-Biphenylmethyl ammonium chloride

Grade :&gt;99%

Formula :C<sub>13</sub>H<sub>14</sub>ClN

M.W. :219.71 g/mole



## LT-S9835 | GBAC

NEW

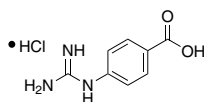
4-Guanidinobenzoic acid hydrochloride

CAS No :42823-46-1

Grade :&gt;98%

Formula :C<sub>8</sub>H<sub>10</sub>ClN<sub>3</sub>O<sub>2</sub>

M.W. :215.64 g/mole



## LT-S9838 | 2F-2CN

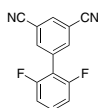
NEW

2',6'-Difluoro-[1,1'-biphenyl]-3,5-dicarbonitrile

Grade :&gt;99%

Formula :C<sub>14</sub>H<sub>6</sub>F<sub>2</sub>N<sub>2</sub>

M.W. :240.21 g/mole



## LT-S9839 | EVL

NEW

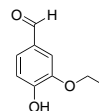
3-Ethoxy-4-hydroxybenzaldehyde

CAS No :121-32-4

Grade :&gt;99%

Formula :C<sub>9</sub>H<sub>10</sub>O<sub>3</sub>

M.W. :166.17 g/mole



## LT-S9840 | MS

NEW

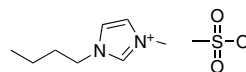
1-Butyl-3-methylimidazolium methanesulfonate

CAS No :342789-81-5

Grade :&gt;98%

Formula :C<sub>9</sub>H<sub>18</sub>N<sub>2</sub>O<sub>3</sub>S

M.W. :234.32 g/mole



## LT-S9841 | PSP

NEW

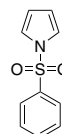
1-(Phenylsulfonyl)pyrrole

CAS No :16851-82-4

Grade :&gt;98%

Formula :C<sub>10</sub>H<sub>9</sub>NO<sub>2</sub>S

M.W. :207.25 g/mole



## LT-S9846 | VBAI

NEW

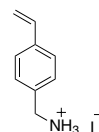
4-Vinylbenzylammonium iodide

CAS No :2387694-61-1

Grade :&gt;99%

Formula :C<sub>9</sub>H<sub>12</sub>IN

M.W. :261.1 g/mole



## Perovskite Precursor

LT-S9858

NEW

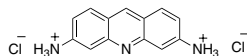
Acridine-3,6-diamine dihydrochloride

CAS No :531-73-7

Grade :&gt;99%

Formula :C<sub>13</sub>H<sub>13</sub>Cl<sub>2</sub>N<sub>3</sub>

M.W. :282.17 g/mole



LT-S9865

NEW

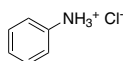
Phenylammonium chloride

CAS No :142-04-1

Grade :&gt;99%

Formula :C<sub>6</sub>H<sub>8</sub>ClN

M.W. :129.59 g/mole



LT-S9866

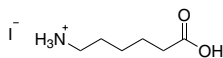
NEW

6-(Iodo-λ5-azanyl) hexanoic acid

Grade :&gt;99%

Formula :C<sub>6</sub>H<sub>14</sub>INO<sub>2</sub>

M.W. :259.09 g/mole



LT-S9878

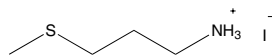
NEW

3-(methylthio)propylamine hydroiodide

Grade :&gt;99%

Formula :C<sub>4</sub>H<sub>12</sub>INS

M.W. :233.11 g/mole



LT-S9879

NEW

Bismuth(III) iodide

CAS No :7787-64-6

Grade :&gt;99%

Formula :BiI<sub>3</sub>

M.W. :589.69 g/mole

BiI<sub>3</sub>

LT-S9880

DFPI

NEW

4,4-Difluoropiperidinehydriodide

Grade :&gt;99%

Formula :C<sub>5</sub>H<sub>10</sub>F<sub>2</sub>IN

M.W. :249.04 g/mole



LT-S9881

MORI

NEW

Morpholine hydriodide

Grade :&gt;99%

Formula :C<sub>4</sub>H<sub>10</sub>INO

M.W. :215.03 g/mole



LT-S9882

SMORI

NEW

Thiomorpholine hydriodide

Grade :&gt;99%

Formula :C<sub>4</sub>H<sub>10</sub>INS

M.W. :231.1 g/mole



LT-S9883

TTMABr

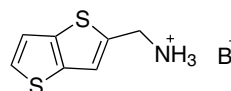
NEW

Thieno[3,2-b]thiophen-2-ylmethanaminium bromide

Grade :&gt;99%

Formula :C<sub>7</sub>H<sub>8</sub>BrNS<sub>2</sub>

M.W. :250.18 g/mole



LT-S9884

SnF<sub>2</sub>

NEW

Tin(II) fluoride

CAS No :7783-47-3

Grade :&gt;99.99% (trace metals basis)

Formula :SnF<sub>2</sub>

M.W. :156.71 g/mole

SnF<sub>2</sub>

## Perovskite Precursor

## LT-S9887 | PHSCN

**NEW**

Phenyl hydrazinium thiocyanate

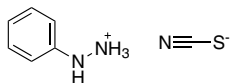
Grade : Mw &gt;20,000 (GPC)

Formula : C<sub>7</sub>H<sub>9</sub>N<sub>3</sub>S

M.W. : 167.23 g/mole

HOMO : -5.08 eV

LUMO : -3.59 eV



## LT-S9996 | HBzAI

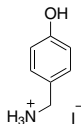
**NEW**

4-Hydroxybenzylammonium iodide

Grade : &gt;99%

Formula : C<sub>7</sub>H<sub>10</sub>INO

M.W. : 251.06 g/mole



## LT-PM2050 | DGACI

**NEW**

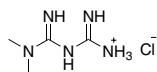
Metformin hydrochloride

CAS No : 1115-70-4

Grade : &gt;97%

Formula : C<sub>4</sub>H<sub>12</sub>ClN<sub>5</sub>

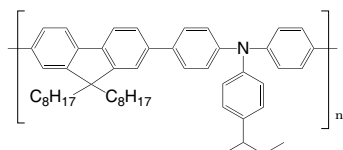
M.W. : 165.62 g/mole



### LT-N148 | TFB

Poly[(9,9-dioctylfluorenyl-2,7-diyl)-co-(4,4'-(N-(4-sec-butylphenyl)diphenylamine)]

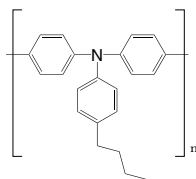
CAS No. : 220797-16-0  
 Grade : Mw >30,000 (GPC)  
 Formula : (C<sub>51</sub>H<sub>61</sub>N)<sub>n</sub>  
 UV : 389 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 PL : 443 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 Solubility : Soluble in CH<sub>2</sub>Cl<sub>2</sub>, Toluene, CHCl<sub>3</sub>



### LT-N149 | Poly-TPD

Poly[N,N'-bis(4-butylphenyl)-N,N'-bis(phenyl)-benzidine]

CAS No. : 472960-35-3  
 Grade : Mw =20,000~200,000 (GPC)  
 Formula : (C<sub>22</sub>H<sub>21</sub>N)<sub>n</sub>  
 UV : 371, 388 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 PL : 424 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene

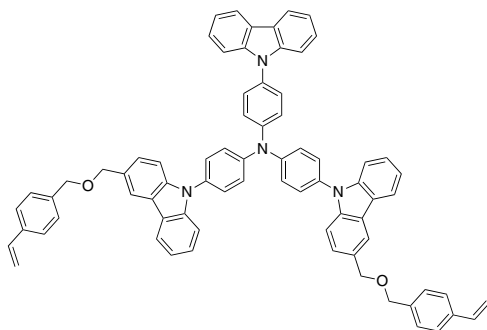


### LT-N1013 | VB-TCTA

**NEW**

N-(4-(9H-carbazol-9-yl)phenyl)-4-(3-(((4-vinylbenzyl)oxy)methyl)-9H-carbazol-9-yl)-N-(4-(3-(((4-vinylbenzyl)oxy)methyl)-9H-carbazol-9-yl)phenyl)aniline

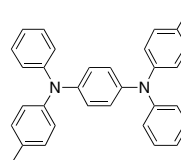
CAS No. : 931398-01-5  
 Grade : >98%  
 Formula : C<sub>74</sub>H<sub>56</sub>N<sub>4</sub>O<sub>2</sub>  
 M.W. : 1033.26 g/mole  
 HOMO : -5.2 eV  
 LUMO : -1.9 eV



### LT-N1024 | NTD, m-PDA **NEW**

N<sub>1</sub>,N<sub>4</sub>-diphenyl-N<sub>1</sub>,N<sub>4</sub>-di-p-tolylbenzene-1,4-diamine

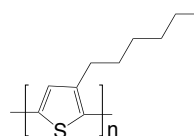
CAS No. : 138171-14-9  
 Grade : >97%  
 Formula : C<sub>32</sub>H<sub>28</sub>N<sub>2</sub>  
 M.W. : 440.58 g/mole



### LT-S909 | P3HT

Poly(3-hexylthiophene-2,5-diyl)

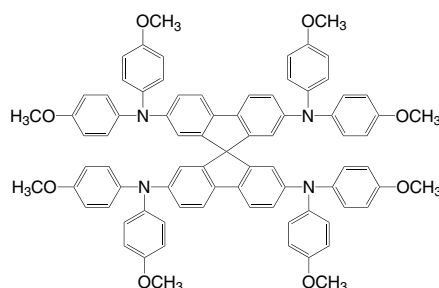
CAS No. : 110134-47-9 / 104934-50-1  
 Grade : Mw >45,000 (GPC) Electronic  
 Grade : Regio Regular >93%  
 Formula : (C<sub>10</sub>H<sub>14</sub>S)<sub>n</sub>  
 UV : 445 nm (in THF)  
 PL : 564 nm (in THF)  
 Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene



### LT-S922 | Spiro-MeOTAD / Spiro-OMeTAD

2,2',7,7'-Tetrakis(N,N-di-p-methoxyphenylamino)-9,9'-spirobifluorene

CAS No. : 207739-72-8  
 Grade : >99.5% (HPLC)  
 Formula : C<sub>81</sub>H<sub>68</sub>N<sub>4</sub>O<sub>8</sub>  
 M.W. : 1225.43 g/mole  
 UV : 306, 385 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 PL : 429 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 TGA : >360 °C (0.5% weight loss)

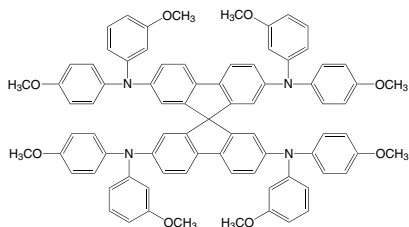




**LT-S9145** | p,m-Spiro-MeOTAD

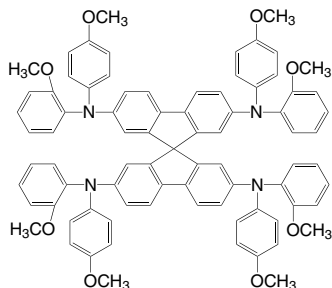
*N*<sup>2</sup>,*N*<sup>2</sup>,*N*<sup>7</sup>,*N*<sup>7</sup>-Tetrakis(3-methoxyphenyl)-*N*<sup>2</sup>,*N*<sup>2</sup>,*N*<sup>7</sup>,*N*<sup>7</sup>-tetrakis(4-methoxyphenyl)-9,9'-spirobifluorene]-2,2',7,7'-tetraamine

CAS No. : 1573202-44-4  
 Grade : >99% (HPLC)  
 Formula : C<sub>81</sub>H<sub>68</sub>N<sub>4</sub>O<sub>8</sub>  
 M.W. : 1225.43 g/mole  
 UV : 308, 378 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 PL : 414 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 TGA : >280 °C (0.5% weight loss)

**LT-S9146** | p,o-Spiro-MeOTAD

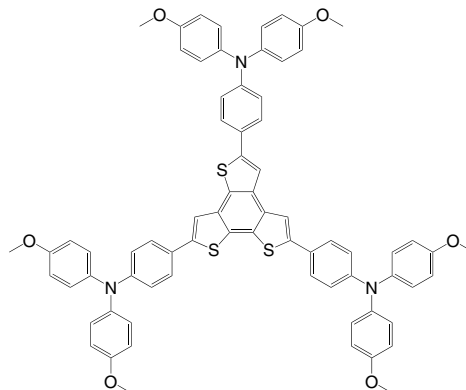
*N*<sup>2</sup>,*N*<sup>2</sup>,*N*<sup>7</sup>,*N*<sup>7</sup>-Tetrakis(2-methoxyphenyl)-*N*<sup>2</sup>,*N*<sup>2</sup>,*N*<sup>7</sup>,*N*<sup>7</sup>-tetrakis(4-methoxyphenyl)-9,9'-spirobifluorene]-2,2',7,7'-tetraamine

CAS No. : 1628961-22-7  
 Grade : >98.5% (HPLC)  
 Formula : C<sub>81</sub>H<sub>68</sub>N<sub>4</sub>O<sub>8</sub>  
 M.W. : 1225.43 g/mole  
 UV : 316, 375 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 PL : 418 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 TGA : >280 °C (0.5% weight loss)

**LT-S9276** | BTT-4

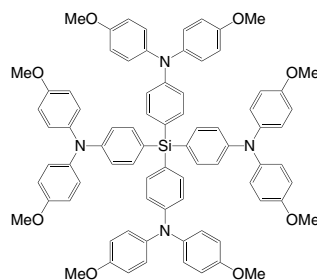
2,5,8-Tris(4-(bis(4-methoxyphenyl)amino)phenyl)benzotrithiophene

CAS No. : 1908506-93-3  
 Grade : >99%  
 Formula : C<sub>72</sub>H<sub>57</sub>N<sub>3</sub>O<sub>6</sub>S<sub>3</sub>  
 M.W. : 1156.43 g/mole

**LT-S9290** | Si-OMeTPA

4,4',4''',4''''-Silane-tetrayl-tetrakis(N,N-bis(4-methoxyphenyl)aniline)

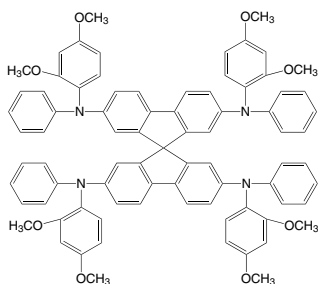
CAS No. : 2202763-90-2  
 Grade : >99% (HPLC)  
 Formula : C<sub>80</sub>H<sub>72</sub>N<sub>4</sub>O<sub>8</sub>Si  
 M.W. : 1245.54 g/mole  
 HOMO : -5.39 eV  
 LUMO : -1.96 eV



### LT-S9437 | 2,4-spiro-OMeTAD

*N*<sup>2</sup>,*N*<sup>2</sup>,*N*<sup>2</sup>,*N*<sup>2</sup>-Tetrakis(2,4-dimethoxyphenyl)-*N*<sup>2</sup>,*N*<sup>2</sup>,*N*<sup>2</sup>,*N*<sup>2</sup>-tetraphenyl-9,9'-spirobifluorene]-2,2',7,7'-tetraamine

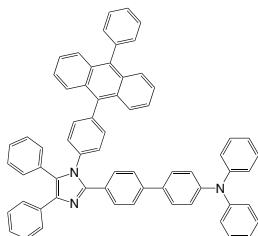
CAS No. : 2102348-92-3  
 Grade : >99% (HPLC)  
 Formula : C<sub>81</sub>H<sub>68</sub>N<sub>4</sub>O<sub>8</sub>  
 M.W. : 1225.43 g/mole  
 HOMO : -5.24 eV  
 LUMO : -2.08 eV



### LT-S9446 | PTN

*N,N*-Diphenyl-[1,1'-biphenyl]-4-amine-4'-[4,5-diphenyl-1-[4-(10-phenyl-9-4'-[4,5-diphenyl-1-[4-(10-phenyl-9-anthracenyl)phenyl]-1*H*-imidazol-2-yl)]

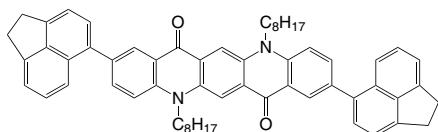
CAS No. : 2252254-01-4  
 Grade : Sublimed >99%  
 Formula : C<sub>65</sub>H<sub>45</sub>N<sub>3</sub>  
 M.W. : 868.07 g/mole  
 PCE : 11.13 %



### LT-S9484 | ACE-QA-ACE

2,9-Bis(1,2-dihydroacenaphthyl-5-yl)-5,12-dioctyl-5,12-dihydroquinolino[2,3-*b*]acridine-7,14-dione

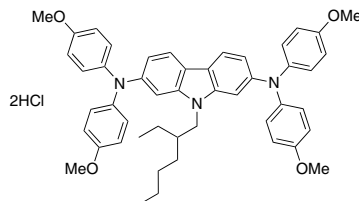
Grade : >99% (HPLC)  
 Formula : C<sub>60</sub>H<sub>60</sub>N<sub>2</sub>O<sub>2</sub>  
 M.W. : 841.13 g/mole  
 UV : 301 nm (in CHCl<sub>3</sub>)  
 PL : 558 nm  
 HOMO : -5.59 eV  
 LUMO : -3.47 eV



### LT-S9555 | EH-44

9-(2-Ethylhexyl)-*N*<sup>2</sup>,*N*<sup>2</sup>,*N*<sup>2</sup>,*N*<sup>2</sup>-tetrakis(4-methoxyphenyl)-9*H*-carbazole-2,7-diamine hydrochloride salt

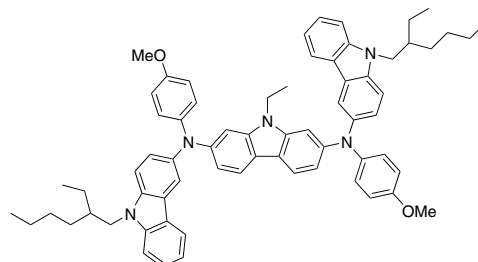
Grade : >99%  
 Formula : C<sub>48</sub>H<sub>53</sub>Cl<sub>2</sub>N<sub>3</sub>O<sub>4</sub>  
 M.W. : 806.86 g/mole



### LT-S9556 | EtCz-3EHCz

9-Ethyl-*N*<sup>2</sup>,*N*<sup>2</sup>-bis(9-(2-ethylhexyl)-9*H*-carbazol-3-yl)-*N*<sup>2</sup>,*N*<sup>2</sup>-bis(4-methoxyphenyl)-9*H*-carbazole-2,7-diamine hydrochloride salt

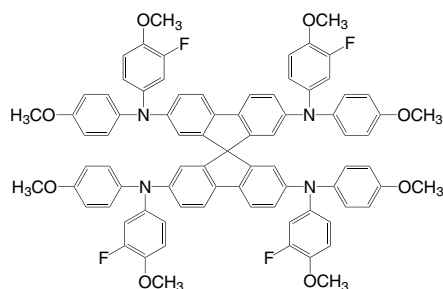
Grade : >99%  
 Formula : C<sub>68</sub>H<sub>75</sub>N<sub>5</sub>O<sub>2</sub>  
 M.W. : 1065.26 g/mole



### LT-S9564 | Spiro-mF

*N*<sup>2</sup>,*N*<sup>2</sup>,*N*<sup>2</sup>,*N*<sup>2</sup>-Tetrakis(3-fluoro-4-methoxyphenyl)-*N*<sup>2</sup>,*N*<sup>2</sup>,*N*<sup>2</sup>,*N*<sup>2</sup>-tetrakis(4-methoxyphenyl)-9,9'-spirobifluorene]-2,2',7,7'-tetraamine

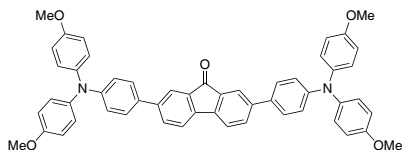
CAS No. : 2644017-35-4  
 Grade : >99%  
 Formula : C<sub>81</sub>H<sub>64</sub>F<sub>4</sub>N<sub>4</sub>O<sub>8</sub>  
 M.W. : 1297.39 g/mole  
 HOMO : -5.19 eV  
 LUMO : -2.23 eV



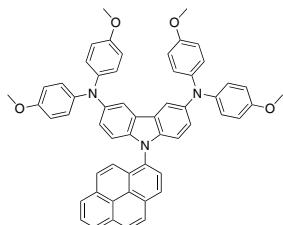
**LT-S9651** | TPA-2F

2,7-Bis(4-(bis(4-methoxyphenyl)amino)phenyl)-9H-fluoren

Grade : > 99%  
 Formula :  $C_{53}H_{42}N_2O_5$   
 M.W. : 786.91 g/mole  
 HOMO : -5.35 eV  
 LUMO : -3.23 eV

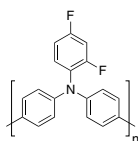
**LT-S9654** | Cz-PyrN<sub>3</sub>,N<sub>3</sub>,N<sub>6</sub>,N<sub>6</sub>-Tetrakis(4-methoxyphenyl)-9-(pyren-1-yl)-9H-carbazole-3,6-diamine

Grade : > 99%  
 Formula :  $C_{56}H_{43}N_3O_4$   
 M.W. : 821.96 g/mole  
 HOMO : -5.18 eV  
 LUMO : -2.32 eV

**LT-S9756** | PTAA-2F

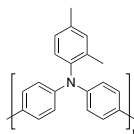
Poly[bis(4-phenyl)(2,4-difluorophenyl)amine]

CAS No : 1414662-10-4  
 Grade : Mw > 20,000  
 Formula :  $(C_{18}H_{11}F_2N)_n$

**NEW****LT-S9757** | PTAA-2Me**NEW**

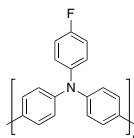
Poly[bis(4-phenyl)(2,4-dimethylphenyl)amine]

CAS No : 313996-10-0  
 Grade : Mw > 20,000  
 Formula :  $(C_{20}H_{17}N)_n$

**LT-S9758** | PTAA-F**NEW**

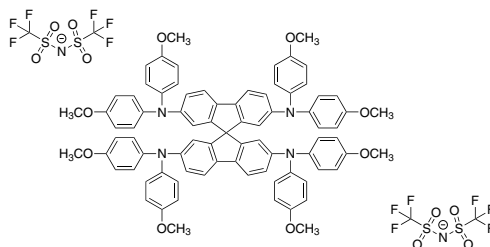
Poly[bis(4-phenyl)(4-fluorophenyl)amine]

CAS No : 618108-64-8  
 Grade : Mw > 20,000  
 Formula :  $(C_{18}H_{12}FN)_n$

**LT-S9759** | Spiro(TFSI)2

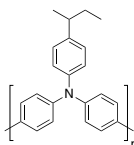
2,2',7,7'-Tetrakis(N,N-di-p-methoxyphenylamino)-9,9'-spirobifluorene di[bis-(trifluoromethanesulfonyl)imide]

Grade : > 99%  
 Formula :  $C_{85}H_{69}F_{12}N_6O_{16}S_4$   
 M.W. : 1785.72 g/mole

**LT-S9760** | s-Poly-TPD**NEW**

Poly[4,4'-(N-(4-secbutylphenyl)diphenyl)amine]

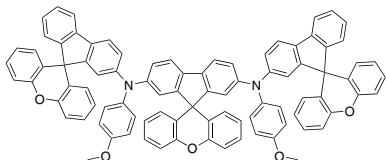
CAS No : 860495-18-7  
 Grade : > 20,000  
 Formula :  $(C_{22}H_{21}N)_n$



### LT-S9761 | X55 NEW

$N_2,N_7$ -bis(4-methoxyphenyl)- $N_2,N_7$ -di(spiro[fluorene-9,9'-xanthen]-2-yl)spiro[fluorene-9,9'-xanthen]-2,7-diamine

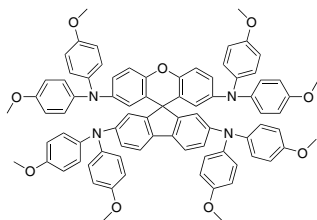
CAS No : 2128308-79-0  
 Grade : > 99%  
 Formula :  $C_{89}H_{58}N_2O_5$   
 M.W. : 1235.42 g/mole



### LT-S9762 | X60 NEW

$N_2,N_2',N_2'',N_2''',N_7,N_7',N_7'',N_7'''$ -octakis(4-methoxyphenyl)spiro[fluorene-9,9'-xanthen]-2,2',7,7'-tetraamine

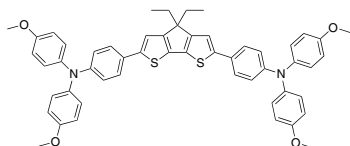
CAS No : 1887794-22-0  
 Grade : > 99%  
 Formula :  $C_{81}H_{68}N_4O_9$   
 M.W. : 1241.43 g/mole



### LT-S9807 | CPDT NEW

4,4'-(4,4-Diethyl-4H-cyclopenta[2,1-b:3,4-b']dithiophene-2,6-diy)bis(N,N-bis(4-methoxyphenyl)aniline)

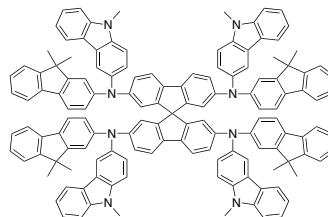
Grade : > 99%  
 Formula :  $C_{53}H_{48}N_2O_4S_2$   
 M.W. : 841.09 g/mole  
 HOMO : -5.13 eV  
 LUMO : -2.65 eV



### LT-S9808 | SBF-FC NEW

$N_2,N_2',N_7,N_7'$ -Tetrakis(9,9-dimethyl-9H-fluorene-2-yl)- $N_2,N_2',N_7,N_7'$ -tetrakis(9-methyl-9H-carbazole-3-yl)-9,9'-spirobi[fluorene]-2,2',7,7'-tetraamine

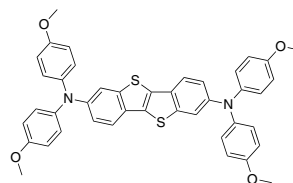
Grade : > 99%  
 Formula :  $C_{137}H_{104}N_8$   
 M.W. : 1862.35 g/mole



### LT-S9809 | TBSD NEW

$N_2,N_2',N_7,N_7'$ -tetrakis(4-methoxyphenyl)benzo[b]benzo[4,5]thieno[2,3-d]thiophene-2,7-diamine

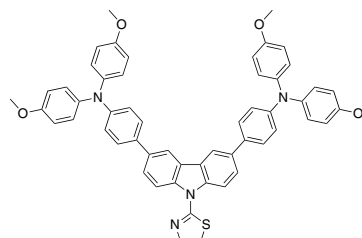
Grade : > 99%  
 Formula :  $C_{42}H_{34}N_2O_4S_2$   
 M.W. : 694.86 g/mole  
 HOMO : -5.56 eV



### LT-S9810 | TC-36 NEW

(4,4'-(9-(Thiazol-2-yl)-9H-carbazole-3,6-diy)bis(N,N-bis(4-methoxyphenyl)aniline))

Grade : > 99%  
 Formula :  $C_{55}H_{44}N_4O_4S$   
 M.W. : 857.03 g/mole  
 HOMO : -5.26 eV  
 LUMO : -2.05 eV

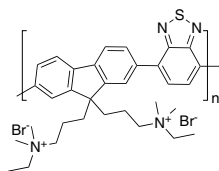


### LT-S9913 | PFNBr-BT NEW

Poly(9,9-bis(3'-(N,N-dimethyl)-N-ethylammonium-propyl-2,7-fluorene)-alt-2,7-(1,4-benzothiadiazole)] dibromide

Grade :Mw =25000~250000

Formula :(C<sub>33</sub>H<sub>42</sub>Br<sub>2</sub>N<sub>4</sub>S)n

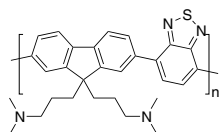


### LT-S9914 | PFN-BT NEW

Poly[(9,9-di(2,2'-N,N'-dimethylamine)propylfluorenyl-2,7-diyl)-alt-co-(1,4-benzothiadiazole)]

Grade :Mw =15000~40000

Formula :(C<sub>29</sub>H<sub>32</sub>N<sub>4</sub>S)n

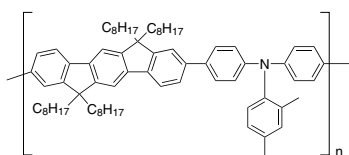


### LT-S9917 | PIF8-TAA NEW

Poly[[(2,4-dimethylphenyl)imino]-1,4-phenylene(6,12-dihydro-6,6,12,12-tetraoctylindeno[1,2-b]fluorene-2,8-diyl)-1,4-phenylene]

CAS No :1178569-79-3

Formula :(C<sub>72</sub>H<sub>93</sub>N)n

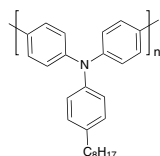


### LT-S9918 | Poly-TPD-C8 NEW

Poly(4-octyl triphenylamine)

Grade :Mw =5000~50000

Formula :(C<sub>26</sub>H<sub>29</sub>N)n

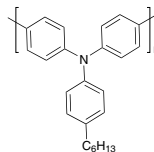


### LT-S9919 | Poly-TPD-C6 NEW

Poly(4-hexyl triphenylamine)

Grade :Mw =5000~50000

Formula :(C<sub>24</sub>H<sub>25</sub>N)n



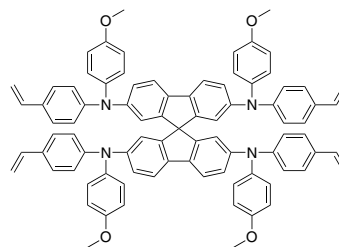
### LT-S9933 | V1382 NEW

N<sub>2</sub>,N<sub>2</sub>',N<sub>7</sub>,N<sub>7</sub>'-tetrakis(4-methoxyphenyl)-N<sub>2</sub>,N<sub>2</sub>',N<sub>7</sub>,N<sub>7</sub>'-tetrakis(4-vinylphenyl)-9,9'-spirobifluorene]-2,2',7,7'-tetraamine

Grade :>98%

Formula :C<sub>85</sub>H<sub>68</sub>N<sub>4</sub>O<sub>4</sub>

M.W. :1209.47 g/mole



### LT-S9994 | T2 NEW

N<sub>3</sub>,N<sub>7</sub>,N<sub>11</sub>,N<sub>16</sub>-Tetrakis(9,9-dimethyl-7-(methylthio)-9H-fluorene-2-yl)-N<sub>3</sub>,N<sub>7</sub>,N<sub>11</sub>,N<sub>16</sub>-tetrakis(4-methoxyphenyl)tetraabenzob[b,d,f,h]oxonine-3,7,11,16-tetraamine

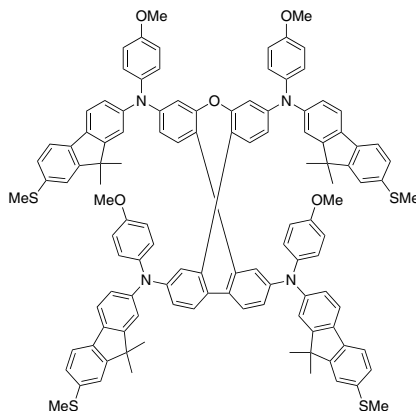
Grade :>98%

Formula :C<sub>116</sub>H<sub>100</sub>N<sub>4</sub>O<sub>5</sub>S<sub>4</sub>

M.W. :1758.32 g/mole

HOMO :-5.13 eV

LUMO :-2.32 eV



## Hole Transport

### LT-PS001 | PEDOT:PSS

Poly(3,4-ethylenedioxythiophene)-poly(styrenesulfonate)

#### Specification

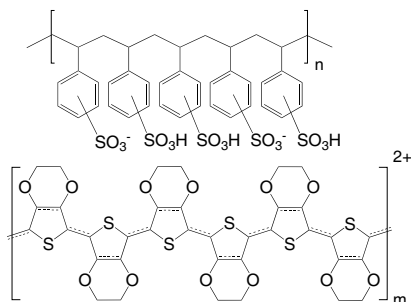
CAS No. : 155090-83-8  
 Description : Aqueous dispersion, blue liquid.  
 Sodium : Max. 400 ppm  
 Sulfate : Max. 40 ppm  
 Solid content: 1.3 - 1.7 wt%  
 PSD d50 : 80 nm  
 PSD d90 : 100 nm  
 Resistivity : 500-5000 Ωcm  
 Viscosity : 5-12 mPas

#### Technical Data (guide values, not a specification)

Form : liquid  
 Odour : odourless  
 Colour : dark blue  
 PEDOT:PSS ratio : 1:6 (by weight)  
 PEDOT work function : approx 5.2 eV  
 pH : 1.2 - 2.2 at 20°C  
 Boiling Point : approx 100°C

#### Storage:

The product is sensitive to frost and should therefore not be stored at temperatures below 5°C.  
 Avoid freezing!

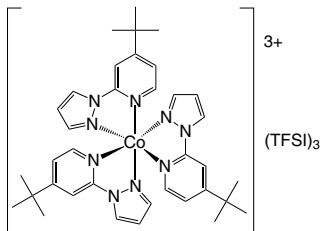


## Hole Transport Dopant

### LT-S9127 | FK209 Co(III) TFSI Salt

Tris(2-(1*H*-pyrazol-1-yl)-4-*tert*-butylpyridine)-cobalt(III) tris(bis(trifluoromethylsulfonyl)imide)

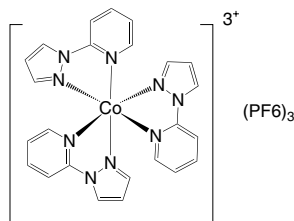
CAS No. : 1447938-61-5  
 Grade : >99% (NMR)  
 Formula : C<sub>42</sub>H<sub>45</sub>CoF<sub>18</sub>N<sub>12</sub>O<sub>12</sub>S<sub>6</sub>  
 M.W. : 1503.18 g/mole  
 UV : 227, 287 nm (in Acetonitrile)



### LT-S9135 | FK102 Co(III) PF6 Salt

Tris(1-(pyridin-2-yl)-1*H*-pyrazol)cobalt(III) tris(hexafluorophosphate)

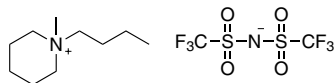
CAS No. : 1346416-70-3  
 Grade : >99% (NMR)  
 Formula : C<sub>24</sub>H<sub>21</sub>CoF<sub>18</sub>N<sub>9</sub>P<sub>3</sub>  
 UV : 929.31 g/mole



### LT-S9803 | [BMP]<sup>+</sup>[TFSI]<sup>-</sup> **NEW**

1-Butyl-1-methylpiperidinium bis(trifluoromethylsulfonyl)imide

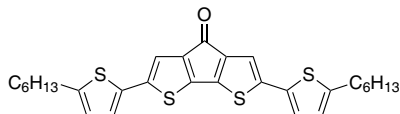
CAS No : 623580-02-9  
 Grade : >99%  
 Formula : C<sub>12</sub>H<sub>22</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>  
 M.W. : 436.43 g/mole



### LT-S9804 | LQ **NEW**

2,6-Bis(5-hexylthiophen-2-yl)-4*H*-cyclopenta[1,2-*b*:5,4-*b'*]dithiophen-4-one

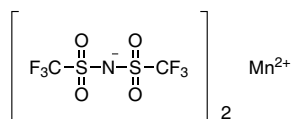
Grade : >99%  
 Formula : C<sub>29</sub>H<sub>32</sub>OS<sub>4</sub>  
 M.W. : 524.82 g/mole



### LT-S9805 | Mn(TFSI)<sub>2</sub> **NEW**

Manganese bis(trifluoromethanesulfonyl)imide

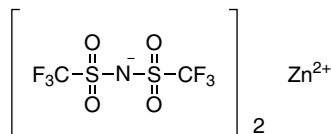
CAS No : 207861-55-0  
 Grade : >97%  
 Formula : C<sub>4</sub>F<sub>12</sub>MnN<sub>2</sub>O<sub>8</sub>S<sub>4</sub>  
 M.W. : 615.23 g/mole



### LT-S9806 | Zn(TFSI)<sub>2</sub> **NEW**

Zinc bis(trifluoromethylsulfonyl)imide

CAS No : 168106-25-0  
 Grade : >98%  
 Formula : C<sub>4</sub>F<sub>12</sub>N<sub>2</sub>O<sub>8</sub>S<sub>4</sub>Zn  
 M.W. : 625.67 g/mole

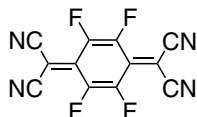


## Hole Transport Dopant

### LT-E208 | F4-TCNQ

2,3,5,6-Tetrafluoro-7,7,8,8-tetracyano-quinodimethane

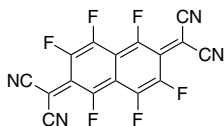
CAS No :29261-33-4  
Grade :Sublimed >99%  
Formula :C<sub>12</sub>F<sub>4</sub>N<sub>4</sub>  
M.W. :276.15 g/mole  
UV :394 nm (in Chloroform)  
PL :600 nm (in Chloroform)  
TGA :>210 °C (0.5% weight loss)



### LT-N223 | F6TCNNQ

1,3,4,5,7,8-hexafluorotetracyanonaphthoquinodimethane

CAS No :912482-15-6  
Grade :Sublimed >98%(By Element Analysis)  
Formula :C<sub>16</sub>F<sub>6</sub>N<sub>4</sub>  
M.W. :362.19 g/mole

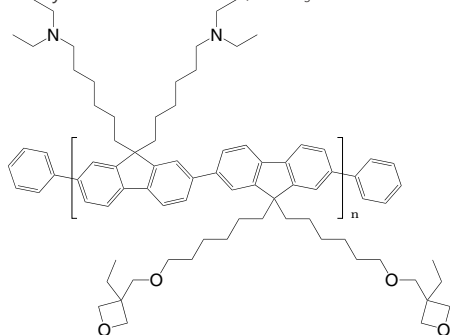




### LT-N177 | PFN-OX

Poly[2,7-[9,9-bis(6'-(N,N-diethylamino)hexyl)fluorene]-*alt*-2,7-[9,9-bis(6-(3-ethoxyetan-3-yl)methoxy)hexyl)fluorene]]

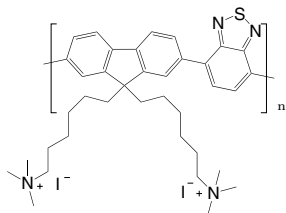
CAS No. : 1345045-27-3  
 Formula :  $(C_{70}H_{102}N_2O_4)_n C_{12}H_{10}$   
 UV :  $378 \pm 10$  nm (in THF)  
 Solubility : Soluble in THF,  $CHCl_3$



### LT-N181 | PFNIBT

Poly(9,9-bis(6-trimethylammoniumiodide)-hexylfluorene-2,7-diyl-*alt*-(benzo[2,1,3]thiadiazol-4,7-diyl))

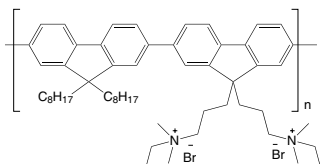
Grade : Mw > 10,000 (GPC)  
 Formula :  $(C_{35}H_{42}I_2N_4S)_n$   
 UV : 317, 448 nm (in DMSO)  
 Solubility : Soluble in MeOH



### LT-N878 | PFN-Br

Poly[(9,9-bis(3'-(N,N-dimethyl)-N-ethylammonium-propyl)-2,7-fluorene)-*alt*-2,7-(9,9-dioctylfluorene)]dibromide

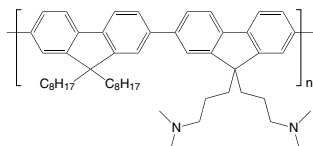
CAS No. : 889672-99-5  
 Grade : Mw > 10,000 (GPC)  
 Formula :  $(C_{56}H_{80}N_2Br_2)_n$   
 UV : 375 nm (in MeOH)  
 PL : 440 nm (in MeOH)  
 Solubility : Soluble in MeOH



### LT-N4027 | PFN-DOF

Poly[(9,9-bis(3'-(N,N-dimethylamino)propyl)-2,7-fluorene)-*alt*-2,7-(9,9-dioctylfluorene)]

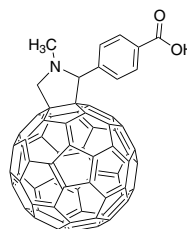
CAS No. : 673474-75-4  
 Grade : Mw > 10,000 (GPC)  
 Formula :  $(C_{52}H_{70}N_2)_n$   
 UV : 391 nm (in  $CH_2Cl_2$ )  
 PL : 414 nm (in  $CH_2Cl_2$ )  
 Solubility : Soluble in  $CH_2Cl_2$ ,  $CHCl_3$ , Toluene



### LT-S9161 | C<sub>60</sub>-COOH-SAM

4-(1',5'-Dihydro-1'-methyl-2'H-[5,6]fullereno-C<sub>60</sub>-1h-[1,9-c]-pyrrol-2'-yl)benzoic acid

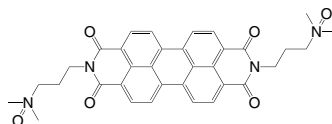
CAS No. : 631918-72-4  
 Grade : >99%  
 Formula :  $C_{70}H_{11}NO_2$   
 M.W. : 897.84 g/mole  
 UV : 345 nm (in  $CH_2Cl_2$ )



### LT-S9479 | PDINO

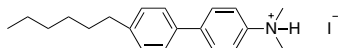
2,9-Bis[3-(dimethyloxidoamino)propyl]anthra[2,1,9-def:6,5,10-d'e'f']diisoquinoline-1,3,8,10(2H,9H)-tetrone

CAS No. : 1558023-86-1  
 Grade : >97%  
 Formula :  $C_{34}H_{32}N_4O_6$   
 M.W. : 592.64 g/mole  
 HOMO : -6.21 eV  
 LUMO : -3.63 eV



### LT-S9646 | HBPC NEW

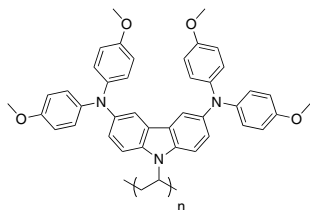
4'-Hexyl-N,N-dimethyl-[1,1'-biphenyl]-4-aminium iodide  
 Grade : >99%  
 Formula :  $C_{20}H_{28}IN$   
 M.W. : 409.35 g/mole



### LT-S9652 | PV(Cz-DMPA) NEW

Poly[3,6-bis[N,N'-di(4-methoxyphenyl)amino]-9-vinyl-carbazole]

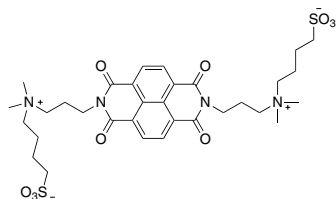
Grade : Mw > 10,000  
 Formula :  $(C_{42}H_{37}N_3O_4)_n$   
 HOMO : -5.24 eV  
 LUMO : -2.49 eV



### LT-S9653 | NDI-B NEW

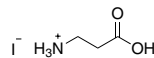
4,4'-((1,3,6,8-Tetraoxo-1,3,6,8-tetrahydrobenzo[Imn][3,8]phenanthroline-2,7-diyl)bis(propane-3,1-diyl))bis(dimethylammoniumdiyl))bis(butane-1-sulfonate)

Grade : >98%  
 Formula :  $C_{32}H_{44}N_4O_{10}S_2$   
 M.W. : 708.84 g/mole  
 HOMO : -6.91 eV  
 LUMO : -3.74 eV



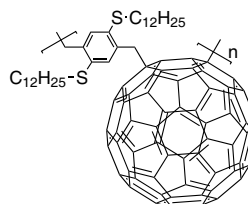
### LT-S9736 | 3AAH NEW

3-Aminopropanoic acid hydroiodide  
 CAS No : 2096495-59-7  
 Grade : >99%  
 Formula :  $C_3H_8INO_2$   
 M.W. : 217.01 g/mole



### LT-S9941 | PFBS-C12, C60 PFBS NEW

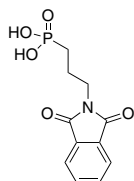
Formula :  $(C_{92}H_{55}S_2)_n$   
 M.W. : Mw~10000



**LT-S8002** | BPD-3PA **NEW**

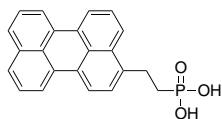
(3-(1,3-Dioxoisindolin-2-yl)propyl)phosphonic acid

Grade : > 98%  
 Formula :  $C_{11}H_{12}NO_5P$   
 M.W. : 269.19 g/mole  
 HOMO : -7.39 eV  
 LUMO : -2.56 eV

**LT-S8003** | **NEW**

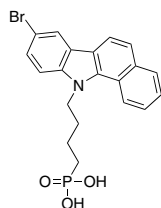
(2-(Perylen-3-yl)ethyl)phosphonic acid

Grade : > 98%  
 Formula :  $C_{22}H_{17}O_3P$   
 M.W. : 360.34 g/mole

**LT-S8004** | BrBACz **NEW**

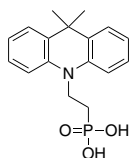
(4-(8-Bromo-11H-benzo[a]carbazol-11-yl)butyl)phosphonic acid

Grade : > 98%  
 Formula :  $C_{20}H_{19}BrNO_3P$   
 M.W. : 432.25 g/mole  
 HOMO : -5.51 eV  
 LUMO : -2.29 eV

**LT-S8005** | 2PADmA **NEW**

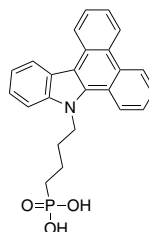
[2-(9,10-dihydro-9,9-dimethylacridine-10-yl)ethyl]phosphonic acid

Grade : > 98%  
 Formula :  $C_{17}H_{20}NO_3P$   
 M.W. : 317.32 g/mole  
 HOMO : -5.37 eV  
 LUMO : -1.58 eV

**LT-S8006** | A-4PADCB **NEW**

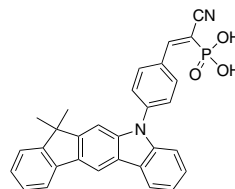
(4-(9H-dibenzo[a,c]carbazol-9-yl)butyl)phosphonic acid

Grade : > 98%  
 Formula :  $C_{24}H_{22}NO_3P$   
 M.W. : 403.41 g/mole  
 HOMO : -5.16 eV  
 LUMO : -1.08 eV

**LT-S8007** | XS10 **NEW**

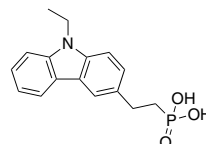
(1-Cyano-2-(4-(7,7-dimethylindeno[2-[2,1-b]carbazol-5(7H)-yl)phenyl](3-vinyl)phosphonic acid

Grade : > 98%  
 Formula :  $C_{30}H_{23}N_2O_3P$   
 M.W. : 490.49 g/mole  
 HOMO : -5.76 eV  
 LUMO : -2.67 eV

**LT-S8009** | EtCz3EPA **NEW**

(2-(9-Ethyl-9H-carbazol-3-yl)ethyl)phosphonic acid

Grade : > 98%  
 Formula :  $C_{16}H_{18}NO_3P$   
 M.W. : 303.29 g/mole

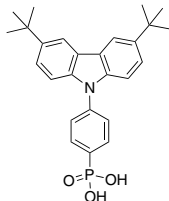


### LT-S8024

**NEW**

(4-(3,6-Di-tert-butyl-9H-carbazol-9-yl)phenyl)phosphonic acid

Grade : >98%  
 Formula :  $C_{26}H_{30}NO_3P$   
 M.W. : 435.5 g/mole



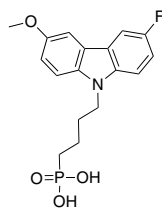
### LT-S8025

MeOF-4PACz

**NEW**

(4-(3-Fluoro-6-methoxy-9H-carbazol-9-yl)butyl)phosphonic acid

Grade : >98%  
 Formula :  $C_{17}H_{19}FNO_4P$   
 M.W. : 351.31 g/mole



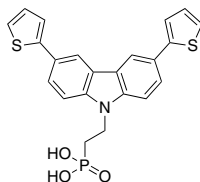
### LT-S8012

S-2PACz

**NEW**

(2-(3,6-Di(thiophen-2-yl)-9H-carbazol-9-yl)ethyl)phosphonic acid

Grade : >98%  
 Formula :  $C_{22}H_{18}NO_3PS_2$   
 M.W. : 439.49 g/mole  
 HOMO : -5.48 eV  
 LUMO : -1.53 eV



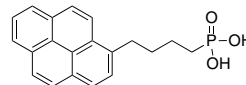
### LT-S8021

4PAPyr

**NEW**

(4-(Pyren-1-yl)butyl)phosphonic acid

Grade : >98%  
 Formula :  $C_{20}H_{19}O_3P$   
 M.W. : 338.34 g/mole



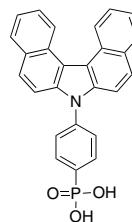
### LT-S8022

CbzNaphPPA

**NEW**

(4-(7H-dibenzo[c,g]carbazol-7-yl)phenyl)phosphonic acid

Grade : >98%  
 Formula :  $C_{26}H_{18}NO_3P$   
 M.W. : 423.4 g/mole  
 HOMO : -5.67 eV  
 LUMO : -2.34 eV



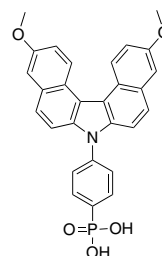
### LT-S8023

MeO-PPADBC

**NEW**

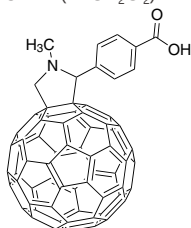
(4-(3,11-Dimethoxy-7H-dibenzo[c,g]carbazol-7-yl)phenyl)phosphonic acid

Grade : >98%  
 Formula :  $C_{28}H_{22}NO_5P$   
 M.W. : 483.45 g/mole



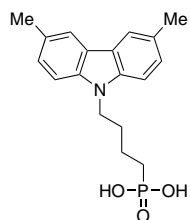
**LT-S9161** | C<sub>60</sub>-COOH-SAM4-(1',5'-Dihydro-1'-methyl-2'H-[5,6]fullereno-C<sub>60</sub>-1h-[1,9-c]-pyrrol-2'-yl)benzoic acid

CAS No. : 631918-72-4  
 Grade : >99%  
 Formula : C<sub>70</sub>H<sub>11</sub>NO<sub>2</sub>  
 M.W. : 897.84 g/mole  
 UV : 345 nm (in CH<sub>2</sub>Cl<sub>2</sub>)

**LT-S9557** | Me-4PACz

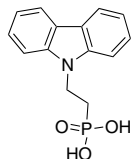
(4-(3,6-Dimethyl-9H-carbazol-9-yl)butyl)phosphonic acid

CAS No. : 2747959-96-0  
 Grade : >99%  
 Formula : C<sub>18</sub>H<sub>22</sub>NO<sub>3</sub>P  
 M.W. : 331.35 g/mole  
 HOMO : -5.74 eV  
 LUMO : -2.49 eV

**LT-S9566** | 2PACz

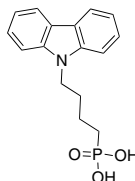
(2-(9H-carbazol-9-yl)ethyl)phosphonic acid

CAS No. : 20999-38-6  
 Grade : >99%  
 Formula : C<sub>14</sub>H<sub>14</sub>NO<sub>3</sub>P  
 M.W. : 275.24 g/mole

**LT-S9567** | 4PACz

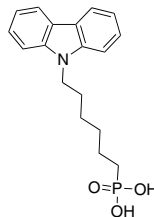
(4-(9H-carbazol-9-yl)butyl)phosphonic acid

CAS No. : 20999-36-4  
 Grade : >99%  
 Formula : C<sub>16</sub>H<sub>18</sub>NO<sub>3</sub>P  
 M.W. : 303.29 g/mole

**LT-S9568** | 6PACz

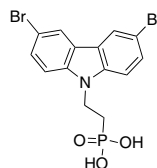
(6-(9H-carbazol-9-yl)hexyl)phosphonic acid

CAS No. : 3015516-21-6  
 Grade : >99%  
 Formula : C<sub>18</sub>H<sub>22</sub>NO<sub>3</sub>P  
 M.W. : 331.35 g/mole

**LT-S9569** | Br-2PACz

(2-(3,6-Dibromo-9H-carbazol-9-yl)ethyl)phosphonic acid

CAS No. : 2762888-11-7  
 Grade : >99%  
 Formula : C<sub>14</sub>H<sub>12</sub>Br<sub>2</sub>NO<sub>3</sub>P  
 M.W. : 433.03 g/mole  
 HOMO : -6.01 eV  
 LUMO : -2.64 eV



### LT-S9570 | Br-4PACz

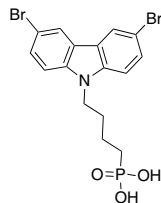
(4-(3,6-Dibromo-9H-carbazol-9-yl)butyl)phosphonic acid

CAS No. :2996161-28-3

Grade :>99%

Formula :C<sub>16</sub>H<sub>16</sub>Br<sub>2</sub>NO<sub>3</sub>P

M.W. :461.08 g/mole



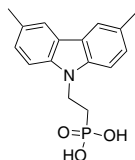
### LT-S9571 | Me-2PACz

(2-(3,6-Dimethyl-9H-carbazol-9-yl)ethyl)phosphonic acid

Grade :>99%

Formula :C<sub>16</sub>H<sub>18</sub>NO<sub>3</sub>P

M.W. :303.29 g/mole



### LT-S9572 | Me-6PACz

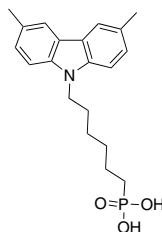
(6-(3,6-Dimethyl-9H-carbazol-9-yl)hexyl)phosphonic acid

CAS No. :2996161-29-4

Grade :>99%

Formula :C<sub>20</sub>H<sub>26</sub>NO<sub>3</sub>P

M.W. :359.4 g/mole



### LT-S9573 | MeO-2PACz

(2-(3,6-Dimethoxy-9H-carbazol-9-yl)ethyl)phosphonic acid

CAS No. :2377770-18-6

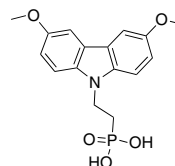
Grade :>99%

Formula :C<sub>16</sub>H<sub>18</sub>NO<sub>5</sub>P

M.W. :335.29 g/mole

HOMO :-5.3 eV

LUMO :-2.12 eV



### LT-S9574 | MeO-4PACz

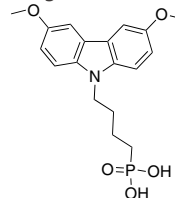
(4-(3,6-Dimethoxy-9H-carbazol-9-yl)butyl)phosphonic acid

CAS No. :2922526-56-3

Grade :>99%

Formula :C<sub>18</sub>H<sub>22</sub>NO<sub>5</sub>P

M.W. :363.34 g/mole



### LT-S9583 | EADR03

4-(3,6-Bis(2,4-dimethoxyphenyl)-9H-carbazol-9-yl)benzoic acid

CAS No. :2918298-65-2

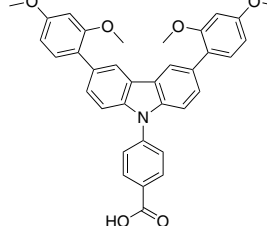
Grade :>99%

Formula :C<sub>35</sub>H<sub>29</sub>NO<sub>6</sub>

M.W. :559.61 g/mole

HOMO :-5.05 eV

LUMO :-1.77 eV



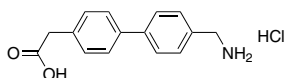
## LT-S9647

4'-(Aminomethyl)-[1,1'-biphenyl]-4-acetic acid

Grade :&gt;99%

Formula :C<sub>15</sub>H<sub>16</sub>ClNO<sub>2</sub>

M.W. :277.75 g/mole



## LT-S9648 | 3PACz

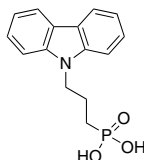
(3-(9H-carbazol-9-yl)propyl)phosphonic acid

CAS No. :915376-57-7

Grade :&gt;99%

Formula :C<sub>15</sub>H<sub>16</sub>NO<sub>3</sub>P

M.W. :289.27 g/mole



## LT-S9649 | Br-2EPT

(2-(3,7-Dibromo-10H-phenothiazin-10-yl)ethyl)phosphonic acid

CAS No. :2826271-17-2

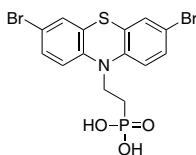
Grade :&gt;99%

Formula :C<sub>14</sub>H<sub>12</sub>BrNO<sub>3</sub>PS

M.W. :465.10 g/mole

HOMO :-5.47 eV

LUMO :-2.12 eV



## LT-S9650 | LS1

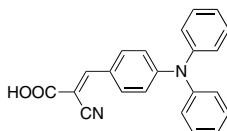
2-Cyano-3-[4-(N-phenylanilino)phenyl]prop-2-enoic acid

CAS No. :30388-31-9

Grade :&gt;99%

Formula :C<sub>22</sub>H<sub>16</sub>N<sub>2</sub>O<sub>2</sub>

M.W. :340.37 g/mole



## LT-S9667 | MPA-Ph-CA

(Z)-3-(4'-(Bis(4-methoxyphenyl)amino)-[1,1'-biphenyl]-4-yl)-2-cyanoacrylic acid

CAS No. :1813558-55-2

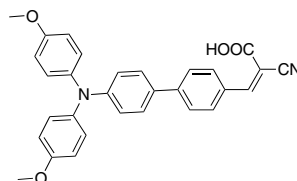
Grade :&gt;99%

Formula :C<sub>30</sub>H<sub>24</sub>N<sub>2</sub>O<sub>4</sub>

M.W. :476.52 g/mole

HOMO :-5.39 eV

LUMO :-2.64 eV



## LT-S9673 | Cl-2PACz

(2-(3,6-Dichloro-9H-carbazol-9-yl)ethyl)phosphonic acid

CAS No. :3036926-72-1

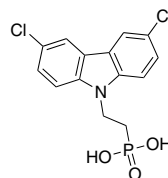
Grade :&gt;99%

Formula :C<sub>14</sub>H<sub>12</sub>Cl<sub>2</sub>NO<sub>3</sub>P

M.W. :344.13 g/mole

HOMO :-6.05 eV

LUMO :-2.67 eV



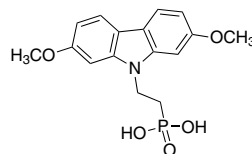
## LT-S9674 | DC-PA

(2-(2,7-Dimethoxy-9H-carbazol-9-yl)ethyl)phosphonic acid

Grade :&gt;99%

Formula :C<sub>16</sub>H<sub>18</sub>NO<sub>5</sub>P

M.W. :335.29 g/mole



**LT-S9675** | I-2PACz

(2-(3,6-Diiodo-9H-carbazol-9-yl)ethyl)phosphonic acid

CAS No. :3026275-69-1

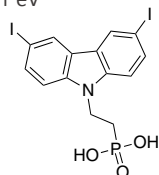
Grade :&gt;99%

Formula :C<sub>14</sub>H<sub>12</sub>I<sub>2</sub>NO<sub>3</sub>P

M.W. :527.03 g/mole

HOMO :-5.98 eV

LUMO :-2.61 eV

**LT-S9676** | Br-2EPO

(2-(3,7-Dibromo-10H-phenoxazin-10-yl)ethyl)phosphonic acid

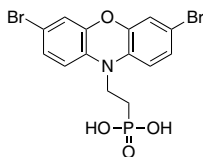
Grade :&gt;99%

Formula :C<sub>14</sub>H<sub>12</sub>Br<sub>2</sub>NO<sub>4</sub>P

M.W. :449.03 g/mole

HOMO :-5.25 eV

LUMO :-1.81 eV

**LT-S9677** | CbzNaph

(4-(7H-dibenzo[c,g]carbazol-7-yl)butyl)phosphonic acid

CAS No. :2882156-63-8

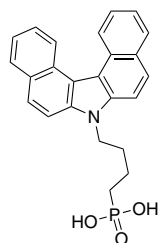
Grade :&gt;99%

Formula :C<sub>24</sub>H<sub>22</sub>NO<sub>3</sub>P

M.W. :403.41 g/mole

HOMO :-5.35 eV

LUMO :-2.28 eV

**LT-S9678** | 2BrPTZPA

(4-(3,7-dibromo-10H-phenothiazin-10-yl)butyl)phosphonic acid

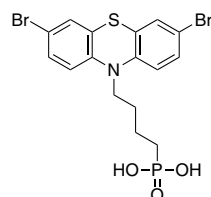
Grade :&gt;99%

Formula :C<sub>16</sub>H<sub>16</sub>Br<sub>2</sub>NO<sub>3</sub>PS

M.W. :493.15 g/mole

HOMO :-5.34 eV

LUMO :-1.16 eV

**LT-S9679** | 2BrPXZPA

(4-(3,7-dibromo-10H-phenoxazin-10-yl)butyl)phosphonic acid

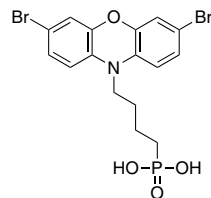
Grade :&gt;99%

Formula :C<sub>16</sub>H<sub>16</sub>Br<sub>2</sub>NO<sub>4</sub>P

M.W. :477.08 g/mole

HOMO :-5.22 eV

LUMO :-1.01 eV

**LT-S9727** | MPA-CPA **NEW**

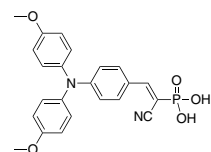
(2-(4-(Bis(4-methoxyphenyl)amino)phenyl)-1-cyanovinyl)phosphonic acid

CAS No. :2212003-31-9

Grade :&gt;98%

Formula :C<sub>23</sub>H<sub>21</sub>N<sub>2</sub>O<sub>5</sub>P

M.W. :436.4 g/mole

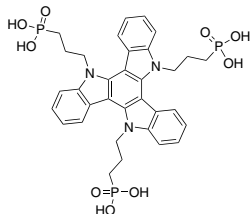




### LT-S9737 | 3PATAT-C3 NEW

((5H-Diindolo[3,2-a:3',2'-c]carbazole-5,10,15-triyl)tris(propane-3,1-diyl)triphosphonic acid

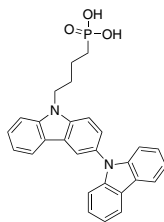
Grade : >98%  
Formula :  $C_{33}H_{36}N_3O_9P_3$   
M.W. : 711.57 g/mole



### LT-S9738 | 4,3BuPACz NEW

(4-(9H-[3,9'-bicarbazol]-9-yl)butyl)phosphonic acid

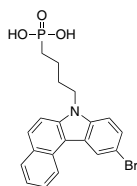
Grade : >98%  
Formula :  $C_{28}H_{25}N_2O_3P$   
M.W. : 468.48 g/mole



### LT-S9739 | BCBBr-C4PA NEW

(4-(10-Bromo-7H-benzo[c]carbazol-7-yl)butyl)phosphonic acid

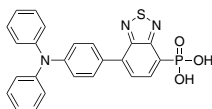
Grade : >99%  
Formula :  $C_{20}H_{19}BrNO_3P$   
M.W. : 432.25 g/mole



### LT-S9740 | PPA NEW

7-(4-(Diphenylamino)phenyl)benzo[c][1,2,5]thiadiazol-4-yl)phosphonic acid

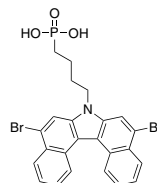
CAS No : 2759856-06-7  
Grade : >98%  
Formula :  $C_{24}H_{18}N_3O_3PS$   
M.W. : 459.46 g/mole  
HOMO : -5.28 eV  
LUMO : -2.96 eV



### LT-S9741 | DCB-BPA NEW

(4-(5,9-Dibromo-7H-dibenzo[c,g]carbazol-7-yl)butyl)phosphonic acid

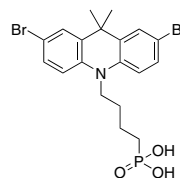
Grade : >98%  
Formula :  $C_{24}H_{20}Br_2NO_3P$   
M.W. : 561.2 g/mole  
HOMO : -5.35 eV  
LUMO : -1.62 eV



### LT-S9747 | DMAcPA NEW

(4-(2,7-Dibromo-9,9-dimethylacridin-10(9H)-yl)butyl)phosphonic acid

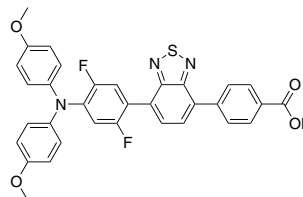
CAS No : 2971088-37-4  
Grade : >98%  
Formula :  $C_{19}H_{22}Br_2NO_3P$   
M.W. : 503.16 g/mole



### LT-S9748 | MPA2FPh-BT-BA NEW

4-(7-(4-(Bis(4-methoxyphenyl)amino)-2,5-difluorophenyl)benzo[c][1,2,5]thiadiazol-4-yl)benzoic acid

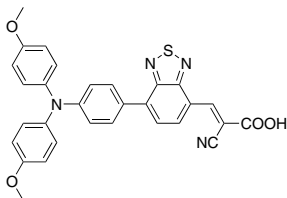
CAS No : 2810129-96-3  
Grade : >98%  
Formula :  $C_{33}H_{23}F_2N_3O_4S$   
M.W. : 595.62 g/mole



### LT-S9750 | MPA-BT-CA **NEW**

(E)-3-(7-(4-(Bis(4-methoxyphenyl)amino)phenyl)benzo[c][1,2,5]thiadiazol-4-yl)-2-cyanoacrylic acid

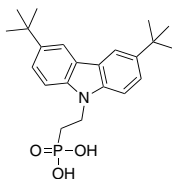
CAS No : 2459726-14-6  
 Grade : > 98%  
 Formula :  $C_{30}H_{22}N_4O_4S$   
 M.W. : 534.59 g/mole  
 UV : 514 nm (in THF)  
 HOMO : -5.29 eV  
 LUMO : -3.26 eV



### LT-S9755 | tBu-2PACz **NEW**

(2-(3,6-Di-tert-butyl-9H-carbazol-9-yl)ethyl)phosphonic acid

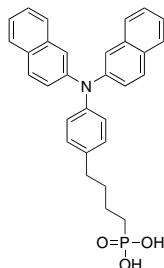
Grade : > 98%  
 Formula :  $C_{22}H_{30}NO_3P$   
 M.W. : 387.45 g/mole



### LT-S9791 | **NEW**

(4-(4-(Di(naphthalen-2-yl)amino)phenyl)butyl)phosphonic acid

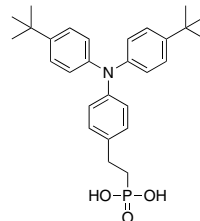
Grade : > 98%  
 Formula :  $C_{30}H_{28}NO_3P$   
 M.W. : 481.52 g/mole



### LT-S9792 | **NEW**

(4-(Bis(4-(tert-butyl)phenyl)amino)phenethyl)phosphonic acid

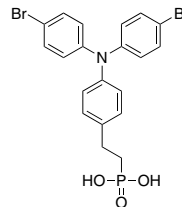
Grade : > 98%  
 Formula :  $C_{28}H_{36}NO_3P$   
 M.W. : 465.56 g/mole



### LT-S9793 | **NEW**

(4-(bis(4-bromophenyl)amino)phenethyl)phosphonic acid

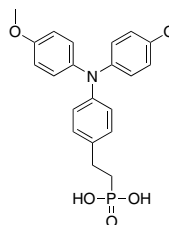
Grade : > 98%  
 Formula :  $C_{20}H_{18}Br_2NO_3P$   
 M.W. : 511.14 g/mole



### LT-S9794 | **NEW**

(4-(Bis(4-methoxyphenyl)amino)phenethyl)phosphonic acid

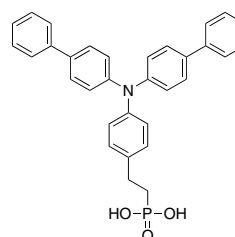
Grade : > 98%  
 Formula :  $C_{22}H_{24}NO_5P$   
 M.W. : 413.4 g/mole



### LT-S9795 | **NEW**

(4-(Di([1,1'-biphenyl]-4-yl)amino)phenethyl)phosphonic acid

Grade : > 98%  
 Formula :  $C_{32}H_{28}NO_3P$   
 M.W. : 505.54 g/mole



### LT-S9796

**NEW**

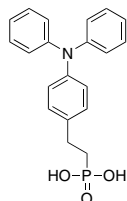
(4-(Diphenylamino)phenethyl)phosphonic acid

CAS No. :3015516-16-9

Grade :>98%

Formula :C<sub>20</sub>H<sub>20</sub>NO<sub>3</sub>P

M.W. :353.35 g/mole



### LT-S9797

**NEW**

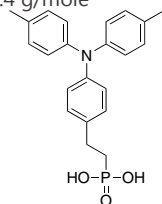
(4-(Di-p-tolylamino)phenethyl)phosphonic acid

CAS No. :3036995-73-7

Grade :>98%

Formula :C<sub>22</sub>H<sub>24</sub>NO<sub>3</sub>P

M.W. :381.4 g/mole



### LT-S9798 4dp3PACz

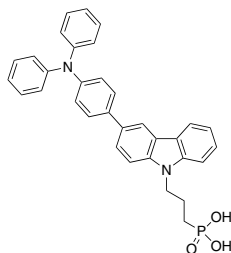
**NEW**

[3-[4-(Diphenylamino)phenyl]-9H-carbazol-9-yl] propylphosphonic acid

Grade :>98%

Formula :C<sub>33</sub>H<sub>29</sub>N<sub>2</sub>O<sub>3</sub>P

M.W. :532.57 g/mole



### LT-S9799

**NEW**

(2-(7H-dibenzo[c,g]carbazol-7-yl)ethyl)phosphonic acid

CAS No. :2882156-61-6

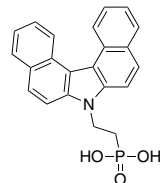
Grade :>99%

Formula :C<sub>22</sub>H<sub>18</sub>NO<sub>3</sub>P

M.W. :375.36 g/mole

HOMO :-5.53 eV

LUMO :-2.34 eV



### LT-S9800

**NEW**

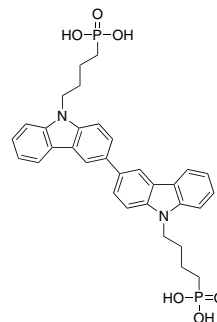
(9H,9'H-[3,3'-bicarbazole]-9,9'-diylbis(butane-4,1-diyl)) diphosphonic acid

CAS No. :2814500-05-3

Grade :>98%

Formula :C<sub>32</sub>H<sub>34</sub>N<sub>2</sub>O<sub>6</sub>P<sub>2</sub>

M.W. :604.57 g/mole



### LT-S9801 Ph-2PACz

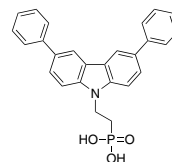
**NEW**

(2-(3,6-Diphenyl-9H-carbazol-9-yl)ethyl)phosphonic acid

Grade :>99%

Formula :C<sub>26</sub>H<sub>22</sub>NO<sub>3</sub>P

M.W. :427.43 g/mole



### LT-S9802 | Ph-4PACz **NEW**

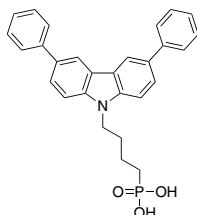
(4-(3,6-Diphenyl-9H-carbazol-9-yl)butyl)phosphonic acid

CAS No. :2814500-04-2

Grade :>99%

Formula :C<sub>28</sub>H<sub>26</sub>NO<sub>3</sub>P

M.W. :455.48 g/mole



### LT-S9837 | MeO-PhPACz **NEW**

(4-(3,6-Dimethoxy-9H-carbazol-9-yl)phenyl)phosphonic acid

Grade :>98%

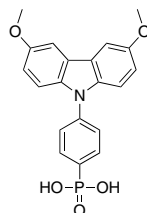
Formula :C<sub>20</sub>H<sub>18</sub>NO<sub>5</sub>P

M.W. :383.33 g/mole

UV :379 nm (in DMF)

HOMO :-5.61eV

LUMO :-2.41 eV



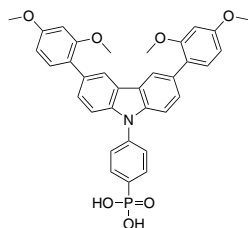
### LT-S9842 | **NEW**

(4-(3,6-Bis(2,4-dimethoxyphenyl)-9H-carbazol-9-yl)phenyl)phosphonic acid

Grade :>98%

Formula :C<sub>34</sub>H<sub>30</sub>NO<sub>7</sub>P

M.W. :595.58 g/mole



### LT-S9843 | **NEW**

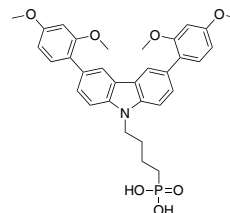
(4-(3,6-Bis(2,4-dimethoxyphenyl)-9H-carbazol-9-yl)butyl)phosphonic acid

CAS No. :2986396-31-8

Grade :>98%

Formula :C<sub>32</sub>H<sub>34</sub>NO<sub>7</sub>P

M.W. :575.59 g/mole



### LT-S9844 | **NEW**

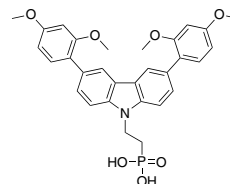
(2-(3,6-Bis(2,4-dimethoxyphenyl)-9H-carbazol-9-yl)ethyl)phosphonic acid

CAS No. :2986396-25-0

Grade :>98%

Formula :C<sub>30</sub>H<sub>30</sub>NO<sub>7</sub>P

M.W. :547.54 g/mole



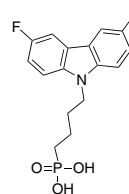
### LT-S9845 | F-4PACz **NEW**

(4-(3,6-Difluoro-9H-carbazol-9-yl)butyl)phosphonic acid

Grade :>99%

Formula :C<sub>16</sub>H<sub>16</sub>F<sub>2</sub>NO<sub>3</sub>P

M.W. :339.27 g/mole



### LT-S9851 | Cl-3PACz **NEW**

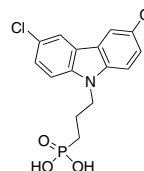
(4-(3,6-Dichloro-9H-carbazol-9-yl)propyl)phosphonic acid

CAS No. :

Grade :>99%

Formula :C<sub>15</sub>H<sub>14</sub>Cl<sub>2</sub>NO<sub>3</sub>P

M.W. :358.16 g/mole



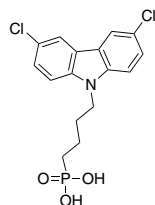
**LT-S9852** | Cl-4PACz **NEW**

(4-(3,6-Dichloro-9H-carbazol-9-yl)butyl)phosphonic acid

Grade : &gt; 99%

Formula : C<sub>16</sub>H<sub>16</sub>Cl<sub>2</sub>NO<sub>3</sub>P

M.W. : 372.18 g/mole

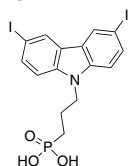
**LT-S9855** | I-3PACz **NEW**

(4-(3,6-Diiodo-9H-carbazol-9-yl)propyl)phosphonic acid

Grade : &gt; 99%

Formula : C<sub>15</sub>H<sub>14</sub>I<sub>2</sub>NO<sub>3</sub>P

M.W. : 541.06 g/mole

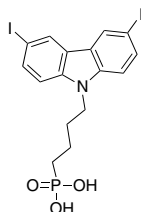
**LT-S9856** | I-4PACz **NEW**

(4-(3,6-Diiodo-9H-carbazol-9-yl)butyl)phosphonic acid

Grade : &gt; 99%

Formula : C<sub>16</sub>H<sub>16</sub>I<sub>2</sub>NO<sub>3</sub>P

M.W. : 555.09 g/mole

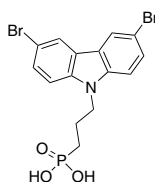
**LT-S9857** | Br-3PACz **NEW**

(4-(3,6-Dibromo-9H-carbazol-9-yl)propyl)phosphonic acid

Grade : &gt; 99%

Formula : C<sub>15</sub>H<sub>14</sub>Br<sub>2</sub>NO<sub>3</sub>P

M.W. : 447.06 g/mole

**LT-S9859** | Br-4PADBC **NEW**

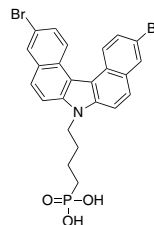
(4-(3,11-Dibromo-7H-dibenzo[c,g]carbazol-7-yl)butyl)phosphonic acid

CAS No. : 3023557-25-4

Grade : &gt; 98%

Formula : C<sub>24</sub>H<sub>20</sub>Br<sub>2</sub>NO<sub>3</sub>P

M.W. : 561.2 g/mole

**LT-S9860** | CbzBF **NEW**

(4-(5H-benzofuro[3,2-c]carbazol-5-yl)butyl)phosphonic acid

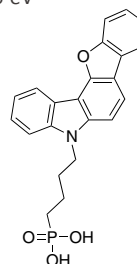
Grade : &gt; 98%

Formula : C<sub>22</sub>H<sub>20</sub>NO<sub>4</sub>P

M.W. : 393.37 g/mole

HOMO : -5.5 eV

LUMO : -1.15 eV

**LT-S9861** | CbzBT **NEW**

(4-(5H-benzo[4,5]thieno[3,2-c]carbazol-5-yl)butyl)phosphonic acid

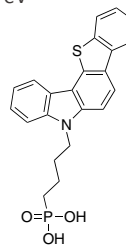
Grade : &gt; 98%

Formula : C<sub>22</sub>H<sub>20</sub>NO<sub>3</sub>PS

M.W. : 409.44 g/mole

HOMO : -5.54 eV

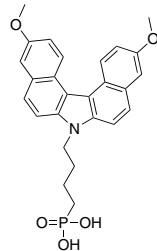
LUMO : -1.17 eV



### LT-S9862 | MeO-4PADBC **NEW**

(4-(3,11-Dimethoxy-7H-dibenzo[c,g]carbazol-7-yl)butyl) phosphonic acid

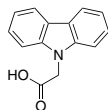
Grade : >98%  
 Formula :  $C_{26}H_{26}NO_5P$   
 M.W. : 463.46 g/mole  
 HOMO : -4.91 eV  
 LUMO : -1.15 eV



### LT-S9863 | 9CAA **NEW**

2-(9H-Carbazol-9-yl)acetic acid

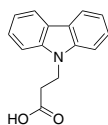
CAS No : 524-80-1  
 Grade : >98%  
 Formula :  $C_{14}H_{11}NO_2$   
 M.W. : 225.24 g/mole



### LT-S9864 | 9CPA **NEW**

3-(9H-Carbazol-9-yl)propanoic acid

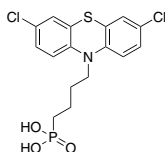
CAS No : 6622-54-4  
 Grade : >98%  
 Formula :  $C_{15}H_{13}NO_2$   
 M.W. : 239.27 g/mole



### LT-S9867 | TDPA-CI **NEW**

(4-(3,7-Dichloro-10H-phenothiazin-10-yl)butyl)phosphonic acid

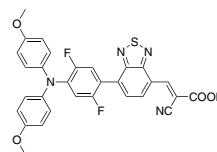
Grade : >98%  
 Formula :  $C_{16}H_{16}Cl_2NO_3PS$   
 M.W. : 404.25 g/mole  
 HOMO : -5.42 eV  
 LUMO : -2.3 eV



### LT-S9870 | 2FMPA-BT-CA **NEW**

(E)-3-(7-(4-(Bis(4-methoxyphenyl)amino)-2,5-difluorophenyl)benzo[c][1,2,5]thiadiazol-4-yl)-2-cyanoacrylic acid

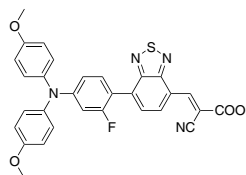
Grade : >98%  
 Formula :  $C_{30}H_{20}F_2N_4O_4S$   
 M.W. : 570.57 g/mole  
 HOMO : -5.37 eV  
 LUMO : -3.41 eV



### LT-S9871 | FMMPA-BT-CA **NEW**

(E)-3-(7-(4-(Bis(4-methoxyphenyl)amino)-2-fluorophenyl)benzo[c][1,2,5]thiadiazol-4-yl)-2-cyanoacrylic acid

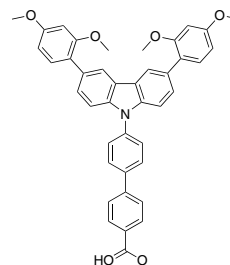
Grade : >98%  
 Formula :  $C_{30}H_{21}FN_4O_4S$   
 M.W. : 552.58 g/mole  
 HOMO : -5.45 eV  
 LUMO : -3.52 eV



### LT-S9872 | EADR04 **NEW**

4'-(3,6-Bis(2,4-dimethoxyphenyl)-9H-carbazol-9-yl)-[1,1'-biphenyl]-4-carboxylic acid

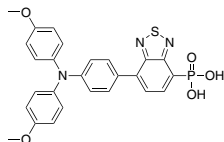
Grade : >98%  
 Formula :  $C_{41}H_{33}NO_6$   
 M.W. : 635.7 g/mole  
 HOMO : -5.06 eV  
 LUMO : -1.74 eV



**LT-S9873** | PPAOMe **NEW**

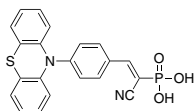
(7-(4-(Bis(4-methoxyphenyl)amino)phenyl)benzo[c][1,2,5]thiadiazol-4-yl)phosphonic acid

Grade :> 98%  
 Formula :C<sub>26</sub>H<sub>22</sub>N<sub>3</sub>O<sub>5</sub>P  
 M.W. :519.51 g/mole  
 HOMO :-5.02 eV  
 LUMO :-2.86 eV

**LT-S9874** | PTZ-CPA **NEW**

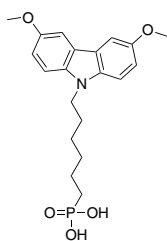
(E)-(2-(4-(10H-phenothiazin-10-yl)phenyl)-1-cyanovinyl)phosphonic acid

Grade :> 98%  
 Formula :C<sub>21</sub>H<sub>15</sub>N<sub>2</sub>O<sub>3</sub>P  
 M.W. :406.39 g/mole  
 HOMO :-5.5 eV  
 LUMO :-2.43 eV

**LT-S9875** | MeO-6PACz **NEW**

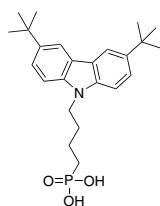
(6-(3,6-Dimethoxy-9H-carbazol-9-yl)hexyl)phosphonic acid

Grade :> 99%  
 Formula :C<sub>20</sub>H<sub>26</sub>NO<sub>3</sub>P  
 M.W. :391.4 g/mole

**LT-S9876** | tBu-4PACz **NEW**

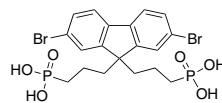
(4-(3,6-Di-tert-butyl-9H-carbazol-9-yl)butyl)phosphonic acid

Grade :> 99%  
 Formula :C<sub>24</sub>H<sub>34</sub>NO<sub>3</sub>P  
 M.W. :415.51 g/mole

**LT-S9889** **NEW**

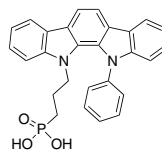
((2,7-dibromo-9H-fluorene-9,9-diyl)bis(propane-3,1-diyl))diphosphonic acid

Grade :> 98%  
 Formula :C<sub>19</sub>H<sub>22</sub>Br<sub>2</sub>O<sub>6</sub>P<sub>2</sub>  
 M.W. :568.13 g/mole

**LT-S9896** **NEW**

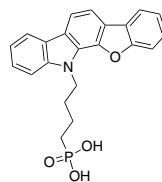
(3-(12-Phenylindolo[2,3-a]carbazol-11(12H-yl)propyl)phosphonic acid

Grade :> 98%  
 Formula :C<sub>27</sub>H<sub>23</sub>N<sub>2</sub>O<sub>3</sub>P  
 M.W. :454.46 g/mole

**LT-S9897** **NEW**

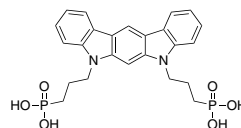
(4-(12H-benzofuro[2,3-a]carbazol-12-yl)butyl)phosphonic acid

Grade :> 98%  
 Formula :C<sub>22</sub>H<sub>20</sub>NO<sub>4</sub>P  
 M.W. :393.37 g/mole

**LT-S9898** | IDCz-3 **NEW**

(Indolo[2,3-b]carbazole-5,7-diylbis(propane-3,1-diyl))diphosphonic acid

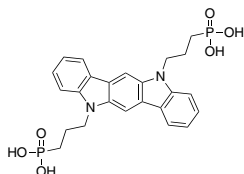
Grade :> 98%  
 Formula :C<sub>24</sub>H<sub>26</sub>N<sub>2</sub>O<sub>6</sub>P<sub>2</sub>  
 M.W. :500.42 g/mole  
 HOMO :-5.26 eV  
 LUMO :-2.03 eV



**LT-S9899** | 3-BPIC(i) **NEW**

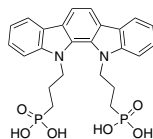
(Indolo[3,2-b]carbazole-5,11-diylbis(propane-3,1-diyl)) diphosphonic acid

Grade : >98%  
Formula :  $C_{24}H_{26}N_2O_6P_2$   
M.W. : 500.42 g/mole  
HOMO : -5.07 eV  
LUMO : -2.94 eV

**LT-S9900** | 3-BPIC **NEW**

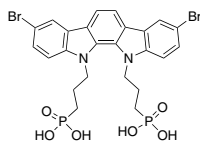
(Indolo[2,3-a]carbazole-11,12-diylbis(propane-3,1-diyl)) diphosphonic acid

Grade : >98%  
Formula :  $C_{24}H_{26}N_2O_6P_2$   
M.W. : 500.42 g/mole  
HOMO : -5.25 eV  
LUMO : -0.96 eV

**LT-S9901** | 3-BPIC-Br **NEW**

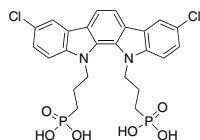
((3,8-Dibromoindolo[2,3-a]carbazole-11,12-diyl)bis(propane-3,1-diyl))diphosphonic acid

Grade : >98%  
Formula :  $C_{24}H_{24}Br_2N_2O_6P_2$   
M.W. : 658.21 g/mole

**LT-S9902** | 3-BPIC-Cl **NEW**

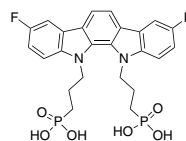
((3,8-Dichloroindolo[2,3-a]carbazole-11,12-diyl)bis(propane-3,1-diyl))diphosphonic acid

Grade : >98%  
Formula :  $C_{24}H_{24}Cl_2N_2O_6P_2$   
M.W. : 569.31 g/mole

**LT-S9903** | 3-BPIC-F **NEW**

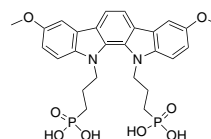
((3,8-Difluoroindolo[2,3-a]carbazole-11,12-diyl)bis(propane-3,1-diyl))diphosphonic acid

Grade : >98%  
Formula :  $C_{24}H_{24}F_2N_2O_6P_2$   
M.W. : 536.4 g/mole  
HOMO : -5.39 eV  
LUMO : -1.16 eV

**LT-S9904** | 3-BPIC-OMe **NEW**

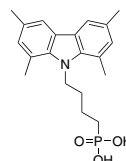
((3,8-Dimethoxyindolo[2,3-a]carbazole-11,12-diyl)bis(propane-3,1-diyl))diphosphonic acid

Grade : >98%  
Formula :  $C_{26}H_{30}N_2O_8P_2$   
M.W. : 560.47 g/mole

**LT-S9905** | **NEW**

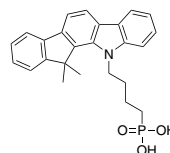
(4-(1,3,6,8-Tetramethyl-9H-carbazol-9-yl)butyl)phosphonic acid

Grade : >98%  
Formula :  $C_{26}H_{26}NO_3P$   
M.W. : 359.4 g/mole

**LT-S9906** | **NEW**

(4-(12,12-Dimethylindeno[2,1-a]carbazol-11(12H)-yl)butyl) phosphonic acid

Grade : >98%  
Formula :  $C_{25}H_{26}NO_3P$   
M.W. : 419.45 g/mole



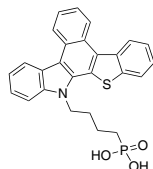


### LT-S9907

**NEW**

(4-(14H-benzo[c]benzo[4,5]thieno[2,3-a]carbazol-14-yl)butyl) phosphonic acid

Grade : >98%  
Formula :  $C_{26}H_{22}NO_3PS$   
M.W. : 459.5 g/mole

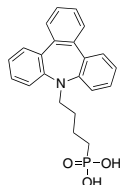


### LT-S9908

**NEW**

(4-(9H-tribenzo[b,d,f]azepin-9-yl)butyl)phosphonic acid

Grade : >98%  
Formula :  $C_{22}H_{22}NO_3P$   
M.W. : 379.39 g/mole



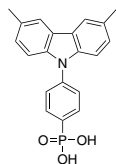
### LT-S9909

Me-PhpACz

**NEW**

(4-(3,6-Dimethyl-9H-carbazol-9-yl)phenyl)phosphonic acid

Grade : >98%  
Formula :  $C_{20}H_{18}NO_3P$   
M.W. : 351.34 g/mole



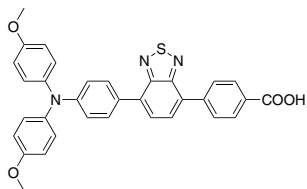
### LT-S9937

TBT-BA

**NEW**

4-(7-(4-(Bis(4-methoxyphenyl)amino)phenyl)benzo[c][1,2,5]thiadiazol-4-yl)benzoic acid

Grade : >98%  
Formula :  $C_{33}H_{25}N_3O_4S$   
M.W. : 559.63 g/mole  
UV : 466 nm (in THF)  
HOMO : -5.19 eV  
LUMO : -2.92 eV

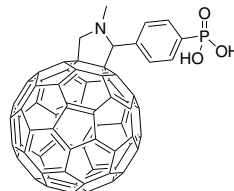


### LT-S9966

C60-PA, CPPA, C60-C6-PA **NEW**

4-(1',5'-Dihydro-1'-methyl-2'-H-[5,6]fullereno-C<sub>60</sub>-1h-[1,9-c]pyrrol-2'-yl)phenylphosphonic acid

Formula :  $C_{69}H_{11}NO_3P$   
M.W. : 932.8 g/mole



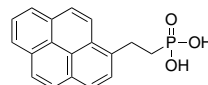
### LT-S9998

Py3

**NEW**

(2-(Pyren-1-yl)ethyl)phosphonic acid

Grade : >98%  
Formula :  $C_{18}H_{15}O_3P$   
M.W. : 310.28 g/mole



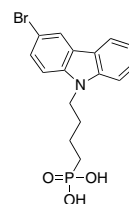
### LT-S9999

BrCz

**NEW**

(4-(3-Bromo-9H-carbazol-9-yl)butyl)phosphonic acid

Grade : >98%  
Formula :  $C_{16}H_{17}BrNO_3P$   
M.W. : 382.19 g/mole  
HOMO : -5.57 eV  
LUMO : -2.24 eV



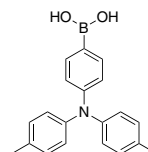
### B1361

MTPA-BA

**NEW**

(4-(Di-p-tolylamino)phenyl)boronic acid

CAS No : 654067-65-9  
Grade : >97%  
Formula :  $C_{20}H_{20}BNO_2$   
M.W. : 317.2 g/mole



### LT-MOF0111 | NA

**NEW**

4,4',4''-nitriolotribenzoic acid

CAS No :118996-38-6

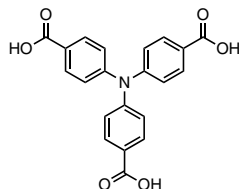
Grade :>98%

Formula :C<sub>21</sub>H<sub>15</sub>NO<sub>6</sub>

M.W. :377.35 g/mole

Boiling Point :690.0±50.0 °C at 760 mmHg

Density :1.5±0.1 g/cm<sup>3</sup>



### LT-N168 | PTAA

Poly[bis(4-phenyl)(2,4,6-trimethylphenyl)amine]

CAS No. :1333317-99-9

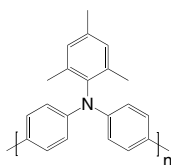
Grade :Mw =20,000~100,000 (GPC)

Formula :(C<sub>21</sub>H<sub>19</sub>N)<sub>n</sub>

UV :388 nm (in CH<sub>2</sub>Cl<sub>2</sub>)

PL :424 nm (in CH<sub>2</sub>Cl<sub>2</sub>)

Solvent :Soluble in CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene



### LT-N1021 | 1F-PTAA

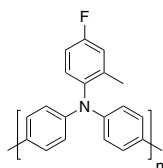
Poly[bis(4-phenyl)(4-fluoro-2-methylphenyl)amine]

Grade :Mw > 10,000

Formula :(C<sub>19</sub>H<sub>14</sub>FN)<sub>n</sub>

HOMO :-5.52 eV

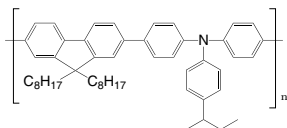
LUMO :-2.55 eV



## LT-N148 | TFB

Poly[(9,9-dioctylfluorenyl-2,7-diyl)-co-(4,4'-(N-(4-sec-butylphenyl) diphenylamine)]

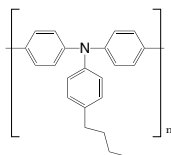
CAS No. : 220797-16-0  
 Grade : Mw >30,000 (GPC)  
 Formula : (C<sub>51</sub>H<sub>61</sub>N)<sub>n</sub>  
 UV : 389 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 PL : 443 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 Solubility : Soluble in CH<sub>2</sub>Cl<sub>2</sub>, Toluene, CHCl<sub>3</sub>



## LT-N149 | Poly-TPD

Poly[N,N'-bis(4-butylphenyl)-N,N'-bis(phenyl)-benzidine]

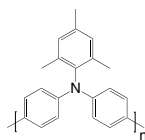
CAS No. : 472960-35-3  
 Grade : Mw = 20,000~200,000 (GPC)  
 Formula : (C<sub>22</sub>H<sub>21</sub>N)<sub>n</sub>  
 UV : 371, 388 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 PL : 424 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene



## LT-N168 | PTAA

Poly[bis(4-phenyl)(2,4,6-trimethylphenyl)amine]

CAS No. : 1333317-99-9  
 Grade : Mw = 20,000~100,000 (GPC)  
 Formula : (C<sub>21</sub>H<sub>19</sub>N)<sub>n</sub>  
 UV : 388 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 PL : 424 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene

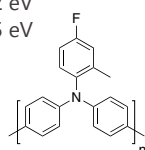


## LT-N1021 | 1F-PTAA

NEW

Poly[bis(4-phenyl)(4-fluoro-2-methylphenyl)amine]

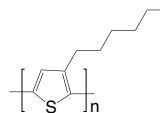
Grade : Mw >10,000  
 Formula : (C<sub>19</sub>H<sub>14</sub>FN)<sub>n</sub>  
 HOMO : -5.52 eV  
 LUMO : -2.55 eV



## LT-S909 | P3HT

Poly(3-hexylthiophene-2,5-diyl)

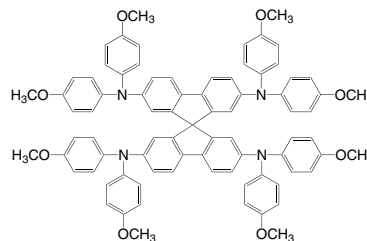
CAS No. : 110134-47-9 / 104934-50-1  
 Grade : Mw >45,000 (GPC)  
 Electronic Grade : Regio Regular >93%  
 Formula : (C<sub>10</sub>H<sub>14</sub>S)<sub>n</sub>  
 UV : 445 nm (in THF)  
 PL : 564 nm (in THF)  
 Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene



## LT-S922 | Spiro-MeOTAD / Spiro-OMeTAD

2,2',7,7'-Tetrakis(N,N-di-p-methoxyphenylamino)-9,9'-spirobifluorene

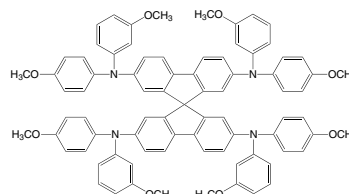
CAS No. : 207739-72-8  
 Grade : >99.5%  
 Formula : C<sub>81</sub>H<sub>68</sub>N<sub>4</sub>O<sub>8</sub>  
 M.W. : 1225.43 g/mole  
 UV : 306, 385 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 PL : 429 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 TGA : >360°C (0.5% weight loss)



## LT-S9145 | p,m-Spiro-MeOTAD

N<sup>2</sup>,N<sup>2</sup>,N<sup>7</sup>,N<sup>7</sup>-Tetrakis(3-methoxyphenyl)-N<sup>2</sup>,N<sup>2</sup>,N<sup>7</sup>,N<sup>7</sup>-tetrakis(4-methoxyphenyl)-9,9'-spirobifluorene]-2,2',7,7'-tetraamine

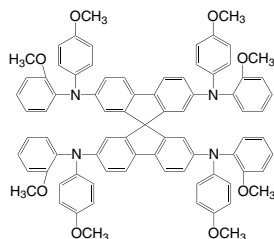
CAS No. : 1573202-44-4  
 Grade : >99% (HPLC)  
 Formula : C<sub>81</sub>H<sub>68</sub>N<sub>4</sub>O<sub>8</sub>  
 UV : 308, 378 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 PL : 414 nm (in CH<sub>2</sub>Cl<sub>2</sub>)



**LT-S9146** | p,o-Spiro-MeOTAD

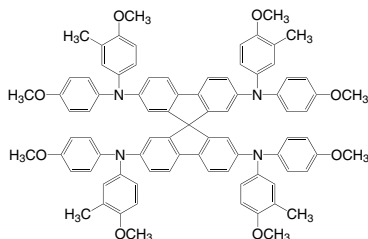
*N*<sup>2</sup>,*N*<sup>2</sup>,*N*<sup>7</sup>,*N*<sup>7</sup>-Tetrakis(2-methoxyphenyl)-*N*<sup>2</sup>,*N*<sup>2</sup>,*N*<sup>7</sup>,*N*<sup>7</sup>-tetrakis(4-methoxyphenyl)-9,9'-spirobifluorene]-2,2',7,7'-tetraamine

CAS No. : 1628961-22-7  
 Grade : >98.5% (HPLC)  
 Formula : C<sub>81</sub>H<sub>68</sub>N<sub>4</sub>O<sub>8</sub>  
 UV : 316, 375 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 PL : 418 nm (in CH<sub>2</sub>Cl<sub>2</sub>)

**LT-S9170** | Spiro-MeOTAD-HTM1

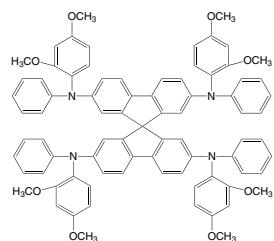
2,2',7,7'-Tetrakis(4,4'-dimethoxy-3-methyl)diphenylamino)-9,9'-spirobifluorene

CAS No. : 1573202-31-9  
 Grade : >99% (HPLC)  
 Formula : C<sub>85</sub>H<sub>76</sub>N<sub>4</sub>O<sub>8</sub>  
 UV : 306, 385 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 PL : 429 nm (in CH<sub>2</sub>Cl<sub>2</sub>)

**LT-S9437** | 2,4-spiro-OMeTAD

*N*<sup>2</sup>,*N*<sup>2</sup>,*N*<sup>7</sup>,*N*<sup>7</sup>-Tetrakis(2,4-dimethoxyphenyl)-*N*<sup>2</sup>,*N*<sup>2</sup>,*N*<sup>7</sup>,*N*<sup>7</sup>-tetraphenyl-9,9'-spirobifluorene]-2,2',7,7'-tetraamine

CAS No. : 2102348-92-3  
 Grade : >99% (HPLC)  
 Formula : C<sub>81</sub>H<sub>68</sub>N<sub>4</sub>O<sub>8</sub>  
 HOMO : -5.24 eV  
 LUMO : -2.08 eV

**LT-PS001** | PEDOT: PSS

Poly(3,4-ethylenedioxythiophene)-poly(styrenesulfonate)

## Specification

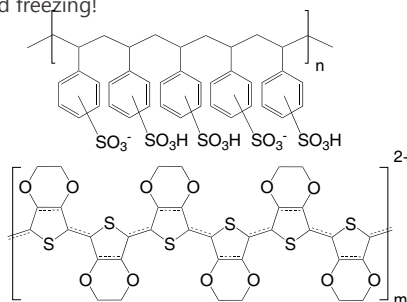
CAS No. : 155090-83-8  
 Description : Aqueous dispersion, blue liquid.  
 Sodium : Max. 400 ppm  
 Sulfate : Max. 40 ppm  
 Solid content: 1.3 - 1.7 wt%  
 PSD d50 : 80 nm  
 PSD d90 : 100 nm  
 Resistivity : 500-5000 Ωcm  
 Viscosity : 5-12 mPas

## Technical Data (guide values, not a specification)

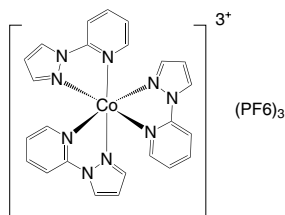
Form : liquid  
 Odour : odourless  
 Colour : dark blue  
 PEDOT:PSS ratio: 1:6 (by weight)  
 PEDOT work function: approx 5.2 eV  
 pH : 1.2 - 2.2 at 20°C  
 Boiling Point : approx 100°C

## Storage:

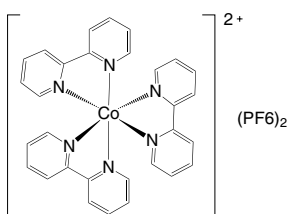
The product is sensitive to frost and should therefore not be stored at temperatures below 5°C.  
 Avoid freezing!



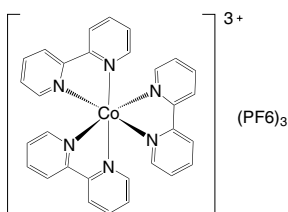
## Redox Couple Electrolytes

**LT-S9135** | FK102 Co(III) PF<sub>6</sub> SaltTris(1-(pyridin-2-yl)-1H-pyrazol)cobalt(III)  
tris(hexafluorophosphate)CAS No. : 1346416-70-3  
Grade : >99% (NMR)  
Formula : C<sub>24</sub>H<sub>21</sub>CoF<sub>18</sub>N<sub>9</sub>P<sub>3</sub>  
M.W. : 929.31 g/mole**LT-S9183** | Co(II)(bpy)<sub>3</sub>(PF<sub>6</sub>)<sub>2</sub>

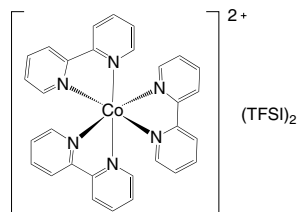
Tris-(2,2'-bipyridine)cobalt(II) bis(hexafluorophosphate)

CAS No. : 79151-78-3  
Grade : >99% (NMR)  
Formula : C<sub>30</sub>H<sub>24</sub>CoF<sub>12</sub>N<sub>6</sub>P<sub>2</sub>  
M.W. : 817.41 g/mole**LT-S9184** | Co(III) (bpy)<sub>3</sub>(PF<sub>6</sub>)<sub>3</sub>

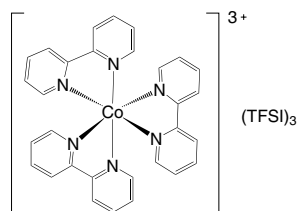
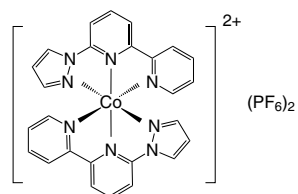
Tris-(2,2'-bipyridine)cobalt(III) tris(hexafluorophosphate)

CAS No. : 28277-53-4  
Grade : >99% (NMR)  
Formula : C<sub>30</sub>H<sub>24</sub>CoF<sub>18</sub>N<sub>6</sub>P<sub>3</sub>  
M.W. : 962.38 g/mole**LT-S9185** | Co(II)(bpy)<sub>3</sub>(TFSI)<sub>2</sub>

Tris-(2,2'-bipyridine)cobalt(II) bis(trifluoromethanesulfonimide)

CAS No. : 1353745-90-0  
Grade : >99% (NMR)  
Formula : C<sub>34</sub>H<sub>24</sub>CoF<sub>12</sub>N<sub>8</sub>O<sub>8</sub>S<sub>4</sub>  
M.W. : 1087.78 g/mole**LT-S9186** | Co(III)(bpy)<sub>3</sub>(TFSI)<sub>3</sub>

Tris-(2,2'-bipyridine)cobalt(III) tris(trifluoromethanesulfonimide)

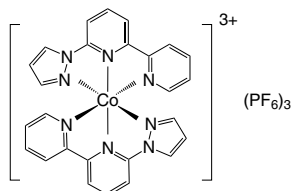
CAS No. : 1353745-91-1  
Grade : >99% (NMR)  
Formula : C<sub>36</sub>H<sub>24</sub>CoF<sub>18</sub>N<sub>8</sub>O<sub>12</sub>S<sub>6</sub>  
M.W. : 1367.92 g/mole**LT-S9187** | Co(II)(bpy-pz)<sub>2</sub>(PF<sub>6</sub>)<sub>2</sub>Bis(6-(1H-pyrazol-1-yl)-2,2'-bipyridine)cobalt(II)  
bis(hexafluorophosphate), mixture of stereoisomersCAS No. : 312322-08-0  
Grade : >99% (NMR)  
Formula : C<sub>26</sub>H<sub>20</sub>CoF<sub>12</sub>N<sub>8</sub>P<sub>2</sub>  
M.W. : 793.35 g/mole

## Redox Couple Electrolytes

**LT-S9188** | Co(III)(bpy-pz)<sub>2</sub>(PF<sub>6</sub>)<sub>3</sub>

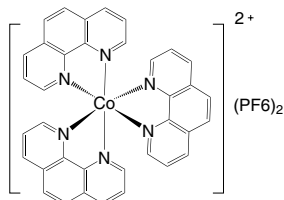
Bis(6-(1H-pyrazol-1-yl)-2,2'-bipyridine)cobalt(III) tris(hexafluorophosphate), mixture of stereoisomers

CAS No. : 1346417-60-4  
 Grade : >99% (NMR)  
 Formula : C<sub>26</sub>H<sub>20</sub>CoF<sub>18</sub>N<sub>8</sub>P<sub>3</sub>  
 M.W. : 938.32 g/mole

**LT-S9191** | Co(II)(phen)<sub>3</sub>(PF<sub>6</sub>)<sub>2</sub>

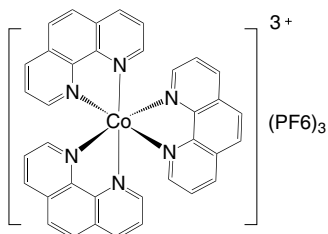
Tris(1,10-phenanthroline)cobalt(II) bis(hexafluorophosphate)

CAS No. : 31876-74-1  
 Grade : >99% (NMR)  
 Formula : C<sub>36</sub>H<sub>24</sub>CoF<sub>12</sub>N<sub>6</sub>P<sub>2</sub>  
 M.W. : 889.48 g/mole

**LT-S9192** | Co(III)(phen)<sub>3</sub>(PF<sub>6</sub>)<sub>3</sub>

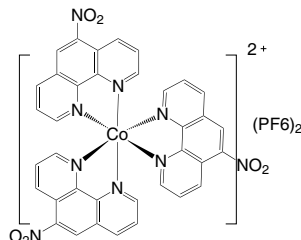
Tris(1,10-phenanthroline)cobalt(III) tris(hexafluorophosphate)

CAS No. : 28277-59-0  
 Grade : >99% (NMR)  
 Formula : C<sub>36</sub>H<sub>24</sub>CoF<sub>18</sub>N<sub>6</sub>P<sub>3</sub>  
 M.W. : 1034.44 g/mole

**LT-S9193** | Co(II)(NO<sub>2</sub>-phen)<sub>3</sub>(PF<sub>6</sub>)<sub>2</sub>

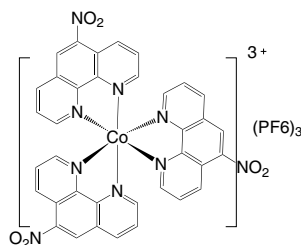
Tris(5-nitro-1,10-phenanthroline)cobalt(II) bis(hexafluorophosphate)

Grade : >99% (NMR)  
 Formula : C<sub>36</sub>H<sub>21</sub>CoF<sub>12</sub>N<sub>9</sub>O<sub>6</sub>P<sub>2</sub>  
 M.W. : 1024.47 g/mole

**LT-S9194** | Co(III)(NO<sub>2</sub>-phen)<sub>3</sub>(PF<sub>6</sub>)<sub>3</sub>

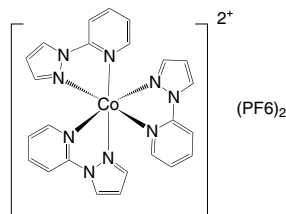
Tris(5-nitro-1,10-phenanthroline)cobalt(III) tris(hexafluorophosphate)

Grade : >99% (NMR)  
 Formula : C<sub>36</sub>H<sub>21</sub>CoF<sub>18</sub>N<sub>9</sub>O<sub>6</sub>P<sub>3</sub>  
 M.W. : 1169.43 g/mole

**LT-S9195** | FK102 Co(II) PF<sub>6</sub> salt

Tris(1-(pyridin-2-yl)-1H-pyrazol)cobalt(II) bis(hexafluorophosphate)

CAS No. : 1392221-69-0  
 Grade : >99% (NMR)  
 Formula : C<sub>24</sub>H<sub>21</sub>CoF<sub>12</sub>N<sub>9</sub>P<sub>2</sub>  
 M.W. : 784.35 g/mole

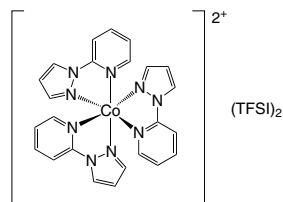


## Redox Couple Electrolytes

### LT-S9406 | FK 102 Co(II) TFSI Salt

Tris(1-(pyridin-2-yl)-1*H*-pyrazol)cobalt(II)  
bis(trifluoromethanesulfonimide)

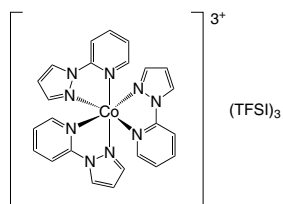
Grade : >99% (NMR)  
Formula :  $C_{28}H_{21}CoN_{11}O_8S_4F_{12}$   
M.W. : 1054.72 g/mole



### LT-S9407 | FK 102 Co(III) TFSI Salt

Tris(1-(pyridin-2-yl)-1*H*-pyrazol)cobalt(III)  
tris(trifluoromethanesulfonimide)

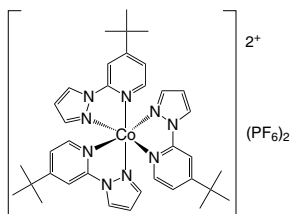
Grade : >99% (NMR)  
Formula :  $C_{30}H_{21}CoN_{12}O_{12}S_6F_{18}$   
M.W. : 1334.87 g/mole



### LT-S9408 | FK 209 Co(II) PF6 salt

Tris[4-(tert-butyl)-2-(1*H*-pyrazol-1-yl)pyridine]cobalt(II)  
bis(hexafluorophosphate)

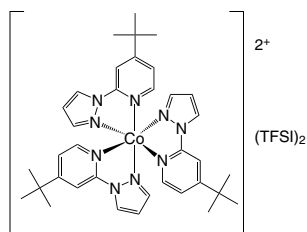
Grade : >99% (NMR)  
Formula :  $C_{36}H_{45}CoN_9P_2F_{12}$   
M.W. : 952.68 g/mole



### LT-S9409 | FK 209 Co(II) TFSI salt

Tris[4-(tert-butyl)-2-(1*H*-pyrazol-1-yl)pyridine]cobalt(II)  
bis(trifluoromethanesulfonimide)

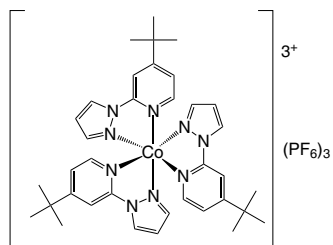
Grade : >99% (NMR)  
Formula :  $C_{40}H_{45}CoN_{11}O_8S_4F_{12}$   
M.W. : 1223.02 g/mole



### LT-S9410 | FK 209 Co(III) PF6 salt

Tris[4-(tert-butyl)-2-(1*H*-pyrazol-1-yl)pyridine]cobalt(III)  
tris(hexafluorophosphate)

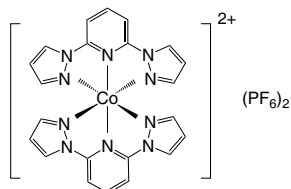
Grade : >99% (NMR)  
Formula :  $C_{36}H_{45}CoN_9P_3F_{18}$   
M.W. : 1097.64 g/mole



### LT-S9412 | FK 269 Co(II) PF6 salt

Bis[2,6-di(1*H*-pyrazol-1-yl)pyridine]cobalt(II)  
bis(hexafluorophosphate)

Grade : >99% (NMR)  
Formula :  $C_{22}H_{18}CoN_{10}P_2F_{12}$   
M.W. : 771.31 g/mole

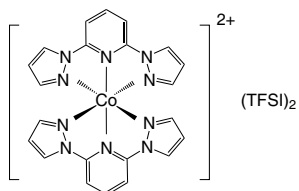


## Redox Couple Electrolytes

**LT-S9413** | FK 269 Co(II) TFSI salt

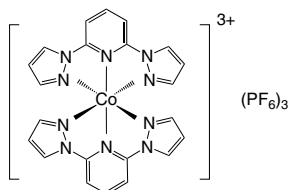
Bis[2,6-di(1*H*-pyrazol-1-yl)pyridine]cobalt(II)  
bis(trifluoromethanesulfonimide)

Grade : >99% (NMR)  
Formula :  $C_{26}H_{18}CoN_{12}O_8S_4F_{12}$   
M.W. : 1041.67 g/mole

**LT-S9414** | FK 269 Co(III) PF6 salt

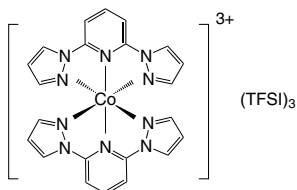
Bis[2,6-di(1*H*-pyrazol-1-yl)pyridine]cobalt(III)  
tris(hexafluorophosphate)

Grade : >99% (NMR)  
Formula :  $C_{22}H_{18}CoN_{10}P_3F_{18}$   
M.W. : 916.27 g/mole

**LT-S9415** | FK 269 Co(III) TFSI salt

Bis[2,6-di(1*H*-pyrazol-1-yl)pyridine]cobalt(III)  
tris(trifluoromethanesulfonimide)

Grade : >99% (NMR)  
Formula :  $C_{28}H_{18}CoN_{13}O_{12}S_6F_{18}$   
M.W. : 1321.83 g/mole



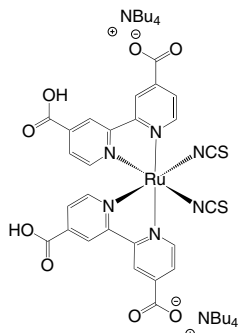


## Dye-sensitized

## LT-S945 | N719

Di-tetrabutylammonium *cis*-bis(isothiocyanato)bis(2,2'-bipyridyl-4,4'-dicarboxylato)ruthenium(II)

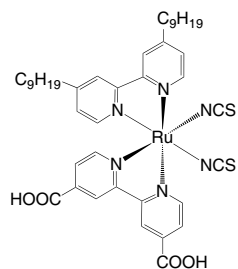
CAS No. : 207347-46-4  
 Grade : >98% (HPLC)  
 Formula :  $C_{50}H_{86}N_8O_8RuS_2$   
 M.W. : 1188.55 g/mole  
 UV : 313, 534 nm (in EtOH)



## LT-S964 | Z-907

*cis*-Bis(isothiocyanato)(2,2'-bipyridyl-4,4'-dicarboxylato)(4,4'-di-nonyl-2'-bipyridyl)ruthenium(II)

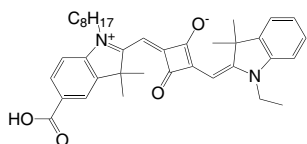
CAS No. : 502693-09-6  
 Grade : >98% (HPLC)  
 Formula :  $C_{42}H_{52}N_6O_4RuS_2$   
 M.W. : 870.10 g/mole  
 UV : 295, 531 nm (in EtOH)



## LT-S9037 | SQ01

(*E*)-4-((5-Carboxy-3,3-dimethyl-1-octyl-3*H*-indolium-2-yl)-methylene)-2-((*E*)-(1-ethyl-3,3-dimethylindolin-2-ylidene)-methyl)-3-oxocyclobut-1-enolate

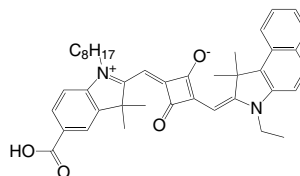
CAS No. : 951248-19-4  
 Grade : >99% (HPLC)  
 Formula :  $C_{37}H_{44}N_2O_4$   
 M.W. : 580.67 g/mole  
 UV : 637 nm (in DMF)  
 TGA : >220 °C (0.5% weight loss)



## LT-S9038 | SQ02

(*E*)-4-((5-Carboxy-3,3-dimethyl-1-octyl-3*H*-indolium-2-yl)-methylene)-2-((*E*)-(3-ethyl-1,1-dimethyl-1*H*-benzo[e]indol-2(3*H*)-ylidene)methyl)-3-oxocyclobut-1-enolate

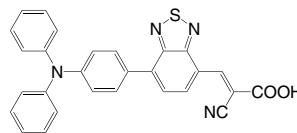
CAS No. : 1240041-84-2  
 Grade : >99% (HPLC)  
 Formula :  $C_{41}H_{46}N_2O_4$   
 M.W. : 630.81 g/mole  
 UV : 662 nm (in DMF)  
 TGA : >250 °C (0.5% weight loss)



## LT-S9068 | RL-1

2-Cyano-3-(7-(4-(diphenylamino)phenyl)-benzo[c][1,2,5]-thiadiazol-4-yl)acrylic acid

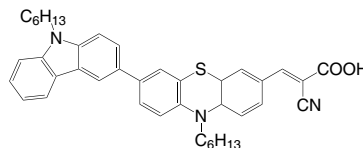
CAS No. : 1415134-59-6  
 Grade : >99% (NMR)  
 Formula :  $C_{28}H_{18}N_4O_2S$   
 M.W. : 474.53 g/mole  
 UV : 324, 486 nm (in THF)  
 TGA : >240 °C (0.5% weight loss)



## LT-S9120 | PTCbCA

(*E*)-2-Cyano-3-(10-hexyl-7-(9-hexyl-9*H*-carbazol-3-yl)-10*H*-phenothiazin-3-yl)acrylic acid

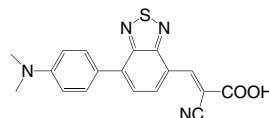
CAS No. : 1347758-70-6  
 Grade : >99% (NMR)  
 Formula :  $C_{40}H_{41}N_3O_2S$   
 M.W. : 627.84 g/mole



## LT-S9121 | CDMA-PBTCA

2-Cyano-3-(7-(4-(dimethylamino)phenyl)-benzo[c][1,2,5]-thiadiazol-4-yl)acrylic acid

Grade : >99% (NMR)  
 Formula :  $C_{18}H_{14}N_4O_2S$   
 M.W. : 350.39 g/mole

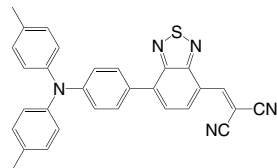


## Dye-sensitized

## LT-S9122 | DTDCPB

2-((7-(4-(Di-p-tolylamino)phenyl)benzo[c][1,2,5]thiadiazol-4-yl)methylene)malononitrile

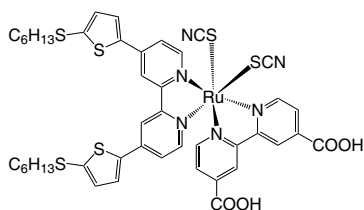
CAS No. : 1393343-58-2  
 Grade : >99%  
 Formula :  $C_{30}H_{21}N_5S$   
 M.W. : 483.59 g/mole  
 UV : 306, 568 nm (in  $CH_2Cl_2$ )



## LT-S9416 | C106 Dye

cis-Bis(isothiocyanato)(2,2'-bipyridyl-4,4'-dicarboxylato)-(4,4'-bis(5-(hexylthio)thiophen-2-yl)-2,2'-bipyridyl)-ruthenium(II)

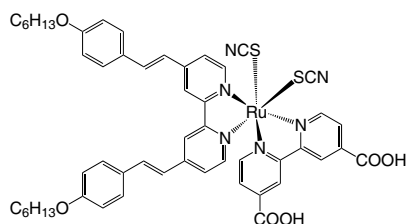
CAS No. : 1152310-69-4  
 Formula :  $C_{44}H_{44}N_6O_4RuS_6$   
 M.W. : 1014.32 g/mole



## LT-S9417 | K19 Dye

cis-Bis(thiocyanato)(2,2'-bipyridyl-4,4'-dicarboxylic acid)-(4,4'-bis(phexyloxystyryl)-2,2'-bipyridine)ruthenium(II)

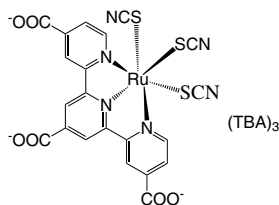
CAS No. : 847665-45-6  
 Formula :  $C_{52}H_{52}N_6O_6RuS_2$   
 M.W. : 1022.21 g/mole



## LT-S9418 | N749 Black Dye

Tris(tetrabutylammonium)-tris(isothiocyanato)(2,2':6',6''-terpyridyl-4,4',4''-tricarboxylato)ruthenium(II)

CAS No. : 359415-47-7  
 Formula :  $C_{69}H_{117}N_9O_6RuS_3$   
 M.W. : 1364.98 g/mole



## LT-S9877 | ISQ

**NEW**

1,3-Bis[(3,3-dimethylindolin-2-ylidene) methyl] squaraine

Grade : Sublimed >98%  
 Formula :  $C_{26}H_{24}N_2O_2$   
 M.W. : 396.48 g/mole  
 HOMO : -5.3 eV  
 LUMO : -3.5 eV

