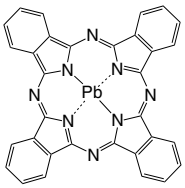
Small Molecular / Oligomer

LT-D2004 PbPC

Lead(II) phthalocyanine

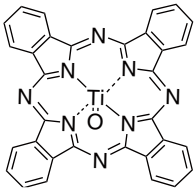
CAS No. : 15187-16-3
Grade : Sublimed,>99%
Formula : $C_{32}H_{16}N_8Pb$
M.W. : 719.74 g/mole
UV : 698 nm (in DMF)



LT-E206 TiOPC

Titanium oxide phthalocyanine

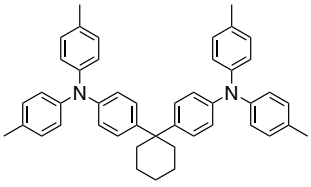
CAS No. : 26201-32-1
Grade : Sublimed product
Formula : $C_{32}H_{16}N_8OTi$
M.W. : 576.39 g/mole
UV : 349, 692 nm
PL : 392 (in film)
TGA : > 440°C (0.5% weight loss)



LT-N137 TAPC

Di-[4-(*N*,*N*-di-*p*-tolyl-amino)-phenyl]cyclohexane

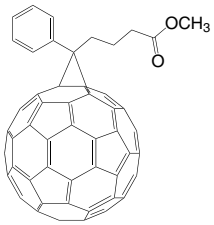
CAS No. : 58473-78-2
Grade : Sublimed, > 99.5% (HPLC)
Formula : $C_{46}H_{46}N_2$
M.W. : 626.87 g/mole
UV : 305 nm (in THF)
PL : 414 nm (in THF)
TGA : > 290 °C (0.5% weight loss)
Solvent : Toluene, Chloroform



LT-S905 PCBM

(6,6)-Phenyl C61 butyric acid methyl ester

CAS No. : 160848-22-6
Grade : > 99.5% (HPLC)
Formula : $C_{72}H_{14}O_2$
M.W. : 910.88 g/mole
UV : 258, 328 nm (in THF)



LT-S906 ZnPC

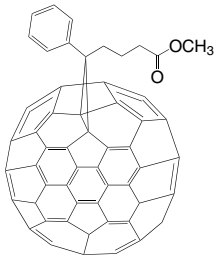
Zinc phthalocyanine

CAS No. : 14320-04-8
Grade : Sublimed, > 99%
Formula : $C_{32}H_{16}N_8Zn$
M.W. : 577.92 g/mole
PL : 534 nm (in CH_2Cl_2)

LT-S923 $PC_{71}BM$

(6,6)-Phenyl C71 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)



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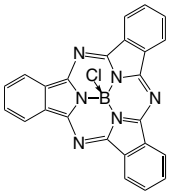
Small Molecular / Oligomer

LT-S943 SubPC

Boron subphthalocyanine chloride

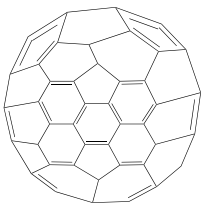
CAS No. : 36530-06-0
Grade : Sublimed, > 99%
Formula : $C_{24}H_{12}BN_6Cl$
M.W. : 430.66 g/mole
UV : 565 nm (in DMF)
PL : 577 nm (in DMF)



LT-S967 C_{70}

(5,6)-Fullerene-C70

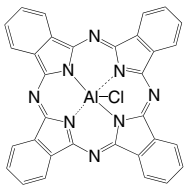
CAS No. : 115383-22-7
Grade : > 99% (HPLC)
Formula : C_{70}
M.W. : 840.75 g/mole
UV : 344, 382 nm (in CH_2Cl_2)
TGA : > 450°C (0.5% weight loss)



LT-S9025 AlPCCl

Aluminum phthalocyanine chloride

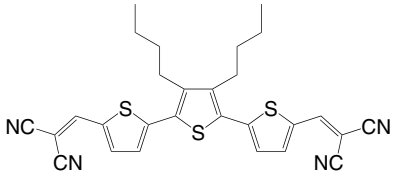
CAS No. : 14154-42-8
Grade : Sublimed product
Formula : $C_{32}H_{16}AlClN_8$
M.W. : 574.97 g/mole
UV : 675 nm (in DMF)



LT-S9125 DCV3T

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

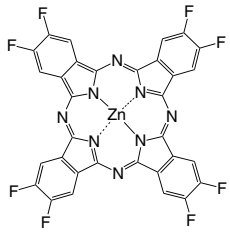
CAS No. : 908588-68-1
Grade : > 99% (HPLC)
Formula : $C_{28}H_{24}N_4S_3$
M.W. : 512.71 g/mole
UV : 498 nm(in CH_2Cl_2)



LT-S9172 F_8ZnPc

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

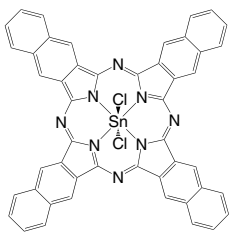
CAS No. : 676519-80-5
Grade : Sublimed, > 99%
Formula : $C_{32}H_8F_8N_8Zn$
M.W. : 721.86 g/mole
UV : 338, 656 nm (in DMF)
TGA : > 300°C (0.5% weight loss)



LT-S9180 $SnNCCl_2$

Tin(IV) 2,3-naphthalocyanine dichloride

CAS No. : 26857-61-4
Grade : Sublimed product
Formula : $C_{48}H_{24}Cl_2N_8Sn$
M.W. : 902.37 g/mole
TGA : > 300°C (0.5% weight loss)



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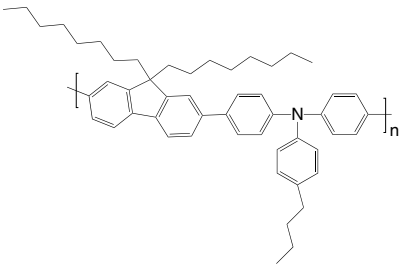
Polymers

LT-N174

Poly[(9,9-dioctylfluorenyl-2,7-diyl)-*co*-(4,4′-(*N*-(*p*-butylphenyl)) diphenylamine)]

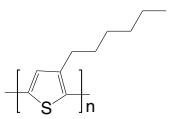
CAS No. : 223569-31-1
Grade : M_W > 30,000 (GPC)
Formula : $(C_{51}H_{61}N)_n$
UV : 385 nm (in THF)
PL : 434 nm (in THF)
Solubility : Soluble in $CHCl_3$, Chlorobenzene, Dichlorobenzene



LT-S909 P3HT

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

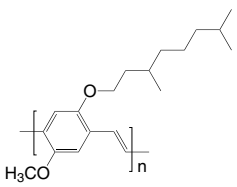
CAS No. : 104934-50-1
Grade : M_W > 45,000 (GPC); Electronic Grade: Regio Regular > 93%
Formula : $(C_{10}H_{14}S)_n$
UV : 445 nm (in THF)
PL : 564 nm (in THF)
Solubility : Soluble in $CHCl_3$, Chlorobenzene, Dichlorobenzene



LT-S932 MDMO-PPV

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

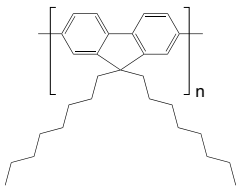
CAS No. : 177716-59-5
Grade : M_W > 100,000 (GPC)
Formula : $(C_{19}H_{28}O_2)_n$
UV : 485 nm (in CH_2Cl_2)
PL : 555 nm (in CH_2Cl_2)
Solubility : Soluble in THF, $CHCl_3$, Chlorobenzene, Dichlorobenzene



LT-S933 PFO

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

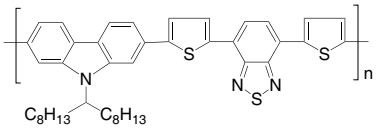
CAS No. : 123864-00-6
Grade : M_W = 50,000 ~ 150,000 (GPC)
Formula : $(C_{29}H_{40})_n$
UV : 376 nm (in THF)
PL : 426 nm (in THF)
Solubility : Soluble in THF, $CHCl_3$, Chlorobenzene, Dichlorobenzene



LT-S948 PCDTBT

Poly[*N*-9′-heptadecanyl-2,7-carbazole-*alt*-5,5-(4′,7′-di-2-thienyl-2′,1′,3′-benzothiadiazole)]

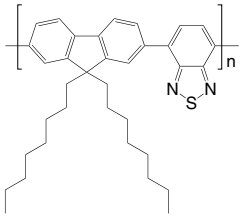
CAS No. : 958261-50-2
Grade : M_W = 20,000 ~ 100,000 (GPC)
Formula : $(C_{43}H_{47}N_3S_3)_n$
UV : 390, 554 nm (in THF)
PL : 639 nm (in THF)
Solubility : > 5 mg/mL in $CHCl_3$



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 : M_W > 20,000 (GPC)
Formula : $(C_{35}H_{42}N_2S)_n$
UV : 453 nm (in THF)
PL : 534 nm (in THF)
Solubility : Soluble in THF, $CHCl_3$, Chlorobenzene, Dichlorobenzene



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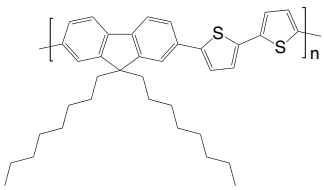
Polymers

LT-S979 F8T2

Poly[(9,9-di-*n*-octylfluorenyl-2,7-diyl)-*alt*-2,2′-bithiophene-5,5′-diyl)]

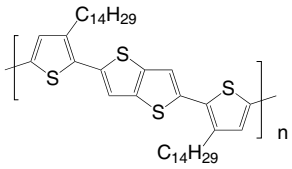
CAS No. : 210347-56-1
Grade : M_W > 20,000 (GPC)
Formula : $(C_{37}H_{44}S_2)_n$
UV : 454 nm (in THF)
PL : 500 nm (in THF)
Solubility : Soluble in $CHCl_3$, Chlorobenzene, Dichlorobenzene



LT-S982 PBTTT-C_{14}

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

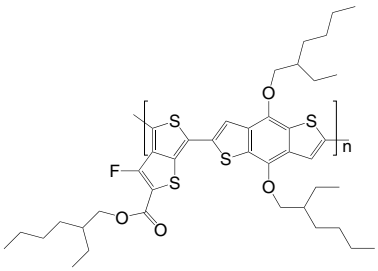
CAS No. : 888491-19-8
Grade : M_W > 40,000 (GPC)
Formula : $(C_{42}H_{62}S_4)_n$
UV : 466 nm (in THF)
PL : 557 nm (in THF)
Solubility : > 5 mg/mL in $CHCl_3$



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}

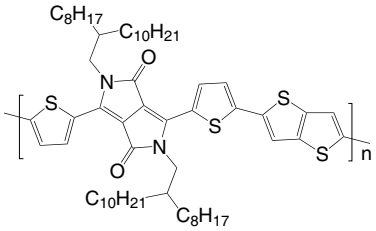
CAS No. : 1266549-31-8
Grade : M_W > 20,000 (GPC)
Formula : $(C_{41}H_{53}FO_4S_4)_n$
UV : 670 nm (in CH_2Cl_2)
Solubility : Soluble in $CHCl_3$, Chlorobenzene, Dichlorobenzene



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}

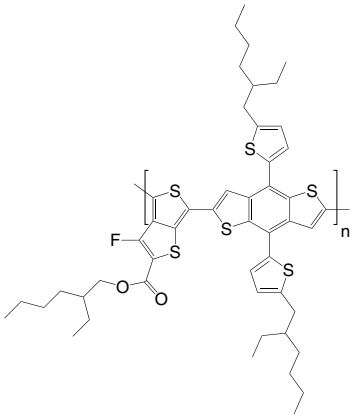
CAS No. : 1260685-65-1
Grade : M_W > 30,000 (GPC)
Formula : $(C_{60}H_{88}N_2O_2S_4)_n$
UV : 810 nm (in $CHCl_3$)
Solubility : Soluble in $CHCl_3$, Chlorobenzene, Dichlorobenzene



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 : M_W = 10,000~100,000 (GPC)
Formula : $(C_{49}H_{57}FO_2S_6)_n$
UV : 695 nm (in $CHCl_3$)
Solubility : >5 mg/mL in $CHCl_3$



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LT-PS001 PEDOT: PSS

Poly(3,4-ethylenedioxythiophene)-poly(styrenesulfonate)

Specification

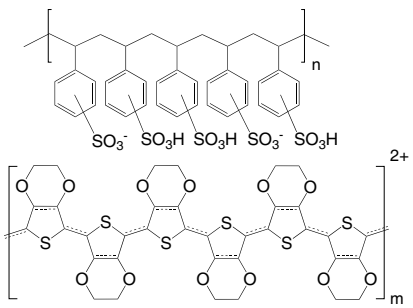
Description : Aqueous dispersion, blue liquid.
Sodium : Max. 400 ppm
Sulfate : Max. 40 ppm
Solid content: 1.3 - 1.7 wt%
PSD d50 : 80 nm
PSD d90 : 100 nm
Resistivity : 500-5000 Ωcm
Viscosity : 5-12 mPas

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!



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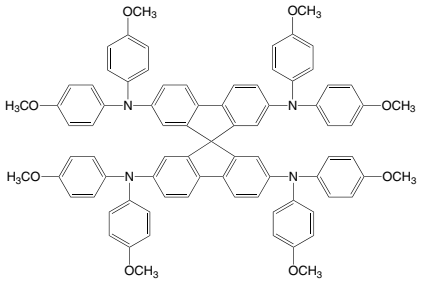
Perovskite-based Photodiodes

LT-S922 Spiro-MeOTAD

2,2′,7,7′-Tetrakis(*N*,*N*-di-*p*-methoxyphenylamino)-9,9′-spirobifluorene

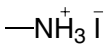
CAS No. : 207739-72-8
Grade : > 99.5% (HPLC)
Formula : $C_{81}H_{68}N_4O_8$
M.W. : 1225.43 g/mole
UV : 306, 385 nm (in CH_2Cl_2)
PL : 429 nm (in CH_2Cl_2)
TGA : > 360 °C (0.5% weight loss)



LT-S9126 MAI

Methylammonium iodide

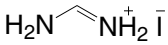
CAS No. : 14965-49-2
Grade : >99.5% , recrystallized 4 times
Formula : CH_6IN
M.W. : 158.97 g/mole



LT-S9136 FAI

Formamidinium iodide

CAS No. : 879643-71-7
Grade : >99.5% , recrystallized 4 times
Formula : CH_5IN_2
M.W. : 171.97 g/mole



LT-S9147 PbI2

Lead(II) iodide

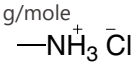
CAS No. : 10101-63-0
Grade : 99.999% (trace metals basis)
Formula : PbI_2
M.W. : 461.01 g/mole

PbI_2

LT-S9151 Methylammonium chloride

Methylammonium chloride

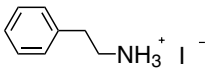
CAS No. : 593-51-1
Grade : > 99.5% , recrystallized 4 times
Formula : CH_6ClN
M.W. : 67.52 g/mole



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



Head Office: 31F-5, No. 99, Sec. 1, Xintai 5th Rd., Xizhi Dist., New Taipei City 22175, Taiwan. TEL: +886-2-2697-5600, FAX: +886-2-2697-5601.
Factory: 2F, No. 17, R&D Road II, Science-Based Industrial Park, Hsin-Chu 30076, Taiwan. TEL: +886-3-666-3188, FAX: +886-3-666-9288.
Email: sales@lumtec.com.tw, Web: www.lumtec.com.tw