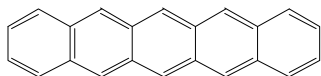


OPV Materials: Small Molecular Materials

LT-S901

Pentacene

Pentacene

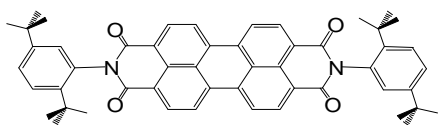


Formula : $C_{22}H_{14}$
Molecular Weight : 278.35 g/mole
CAS No. : 135-48-8
Thermal Gravimetric Analysis : 260°C (0.5% weight loss)
Absorption : 300nm (in CH_2Cl_2)
Photoluminescence : 509nm (in CH_2Cl_2)

LT-S902

PDCDT

N,N'-Bis(2,5-di-tert-butylphenyl)-3,4,9,10-perylene-tetracarboxylic acid diimide

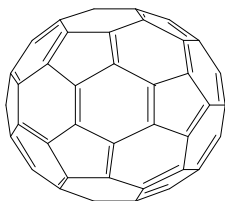


Formula : $C_{52}H_{50}N_2O_4$
Molecular Weight : 766.96 g/mole
CAS No. : 83054-80-2
Absorption : 524nm (in CH_2Cl_2)
Photoluminescence : 544, 574nm (in CH_2Cl_2)

LT-S903

C60

Fullerene-C60

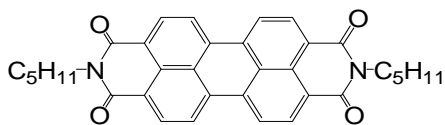


Formula : C_{60}
Molecular Weight : 720.64 g/mole
CAS No. : 99685-96-8
Thermal Gravimetric Analysis : 480°C (0.5% weight loss)

LT-S904

PenPTC

Perylene-3,4,9,10-tetracarboxylic acid N,N'-dipentylimide

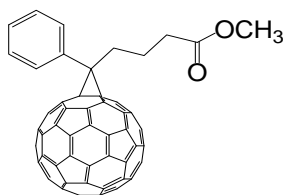


Formula : $C_{34}H_{30}N_2O_4$
Molecular Weight : 530.61 g/mole
CAS No. : 76372-75-3
Thermal Gravimetric Analysis : 380°C (0.5% weight loss)
Absorption : 523nm (in CH_2Cl_2)
Photoluminescence : 535, 573nm (in CH_2Cl_2)

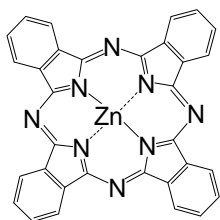
LT-S905

PC₆₁BM

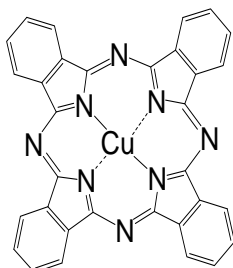
(6,6)-Phenyl-C61 butyric acid methyl ester



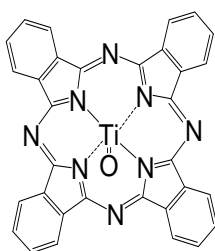
Formula : $C_{72}H_{14}O_2$
Molecular Weight : 910.88 g/mole
CAS No. : 160848-21-5
Thermal Gravimetric Analysis : 380°C (0.5% weight loss)
Absorption : 258, 328nm (in THF)

LT-S906**ZnPC****Zinc Phthalocyanine**

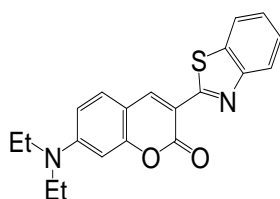
Formula : $C_{32}H_{16}N_8Zn$
 Molecular Weight : 577.91 g/mole
 CAS No. : 14320-04-8
 Thermal Gravimetric Analysis : 440°C (0.5% weight loss)
 Photoluminescence : 534nm (in CH_2Cl_2)

LT-E201**CuPC****Phthalocyanine, Copper complex**

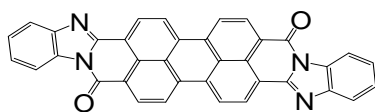
Formula : $C_{32}H_{16}N_8Cu$
 Molecular Weight : 576.07 g/mole
 CAS No. : 147-14-8
 Thermal Gravimetric Analysis : 460°C (0.5% weight loss)
 Absorption : 681nm (in CH_2Cl_2)
 Photoluminescence : 404nm (film)

LT-E206**TiOPC****Titanium oxide phthalocyanine**

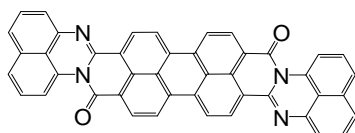
Formula : $C_{32}H_{16}N_8OTi$
 Molecular Weight : 576.39 g/mole
 CAS No. : 26201-32-1
 Photoluminescence : 392nm (film)

LT-E501**Coumarin 6****3-(2-Benzothiazolyl)-7-(diethylamino)coumarin**

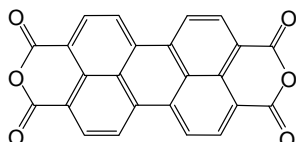
Formula : $C_{20}H_{18}N_2O_2S$
 Molecular Weight : 350.43 g/mole
 CAS No. : 38215-36-0
 Thermal Gravimetric Analysis : 280°C (0.5% weight loss)
 Absorption : 443nm (in THF)
 Photoluminescence : 494nm (in THF)

LT-S918**PTCBI****Bisbenzimidazo2,1-a:1',2'-b'anthra2,1,9-def:6,5,10-d'e'f'disoguinoline-6,10-dione**

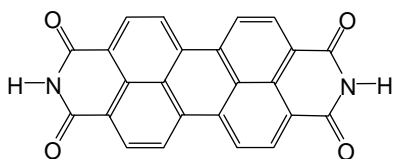
Formula : $C_{36}H_{16}N_4O_2$
 Molecular Weight : 536.54 g/mole
 Thermal Gravimetric Analysis : 450°C (0.5% weight loss)
 Photoluminescence : 397, 414nm (in CH_2Cl_2)

LT-S919**ADIDI****Antra[2",1",9"; 4,5,6,6",5",10"; 4',5',6']diisoquino
[2,1-a; 2',1'-a']diperimidine-12,25-dione**

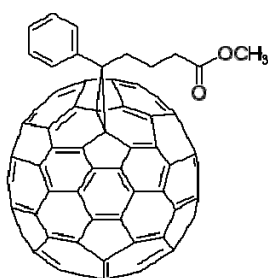
Formula	: C ₄₄ H ₂₀ N ₄ O ₂
Molecular Weight	: 636.66 g/mole
CAS No.	: 6859-32-1
Thermal Gravimetric Analysis	: 460°C (0.5% weight loss)
Photoluminescence	: 413nm (in CH ₂ Cl ₂)

LT-S920**PTCDA****Perylene-3,4,9,10-tetracarboxylic dianhydride**

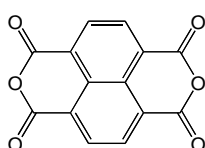
Formula	: C ₂₄ H ₈ O ₆
Molecular Weight	: 392.32 g/mole
CAS No.	: 128-69-8
Thermal Gravimetric Analysis	: 480°C (0.5% weight loss)
Photoluminescence	: 413nm (in CH ₂ Cl ₂)

LT-S921**PTCDI****Perylene-3,4,9,10-tetracarboxylic acid dimide**

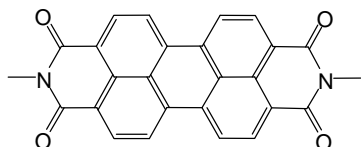
Formula	: C ₂₄ H ₁₀ N ₂ O ₄
Molecular Weight	: 390.35 g/mole
CAS No.	: 81-33-4
Thermal Gravimetric Analysis	: 510°C (0.5% weight loss)
Photoluminescence	: 394, 413nm (in CH ₂ Cl ₂)

LT-S923**PC₇₁BM****[6,6]-Phenyl C71 butyric acid methyl ester, mixture of isomers**

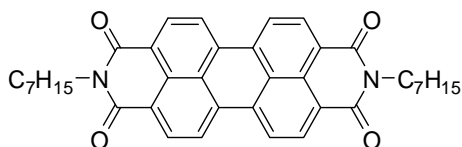
Formula	: C ₈₂ H ₁₄ O ₂
Molecular Weight	: 1030.93 g/mole
CAS No.	: 609771-63-3
Thermal Gravimetric Analysis	: 397°C (0.5% weight loss)
Absorption	: 372nm (in Toluene)

LT-S924**NTDA****1,4,5,8-Naphthalenetetracarboxylic dianhydride**

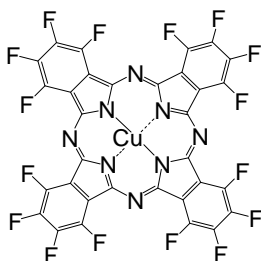
Formula	: C ₁₄ H ₄ O ₆
Molecular Weight	: 268.18 g/mole
Thermal Gravimetric Analysis	: 290°C (0.5% weight loss)
Absorption	: 347, 366nm (in CH ₂ Cl ₂)
Photoluminescence	: 394nm (in CH ₂ Cl ₂)

LT-S925**MePTC****Perylene-3,4,9,10-tetracarboxylic acid N,N'-dimethylimide**

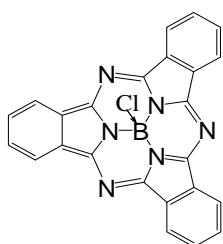
Formula : $C_{26}H_{14}N_2O_4$
 Molecular Weight : 419.40 g/mole
 CAS No. : 5521-31-3
 Thermal Gravimetric Analysis : 500°C (0.5% weight loss)
 Absorption : 522nm (in CH_2Cl_2)
 Photoluminescence : 532, 571nm (in CH_2Cl_2)

LT-S926**HepPTC****Perylene-3,4,9,10-tetracarboxylic acid N,N'-diheptylimide**

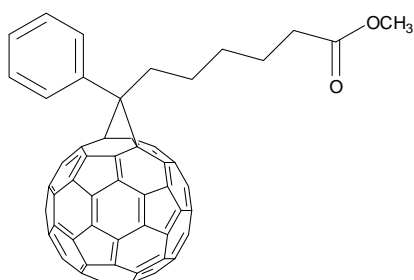
Formula : $C_{38}H_{38}N_2O_4$
 Molecular Weight : 586.72 g/mole
 CAS No. : 95689-91-1
 Thermal Gravimetric Analysis : 420°C (0.5% weight loss)
 Absorption : 524nm (in CH_2Cl_2)
 Photoluminescence : 537, 571nm (in CH_2Cl_2)
 Reference : *Chemical Physics Letters*, 383, 2004, 11-15.

LT-S928**F16CuPC****Copper(II) 1,2,3,4,8,9,10,11,15,16,17,18,22,23,24,25-hexadecafluoro-29H,31H-phthalocyanine**

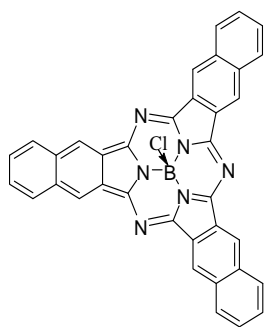
Formula : $C_{32}N_8F_{16}Cu$
 Molecular Weight : 863.92 g/mole
 CAS No. : 14916-87-1
 Thermal Gravimetric Analysis : 430°C (0.5% weight loss)
 Photoluminescence : 590nm (in THF)

LT-S943**SubPC****Boron subphthalocyanine chloride**

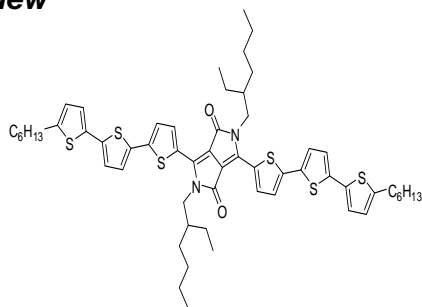
Formula : $C_{24}H_{12}BN_3Cl$
 Molecular Weight : 430.66 g/mole
 Thermal Gravimetric Analysis : 360°C (0.5% weight loss)
 Absorption : 565nm (in DMF)
 Photoluminescence : 577nm (in DMF)
 Reference : *J. Am. Chem. Soc.* 2006, 128, 8108-8109

LT-S946**PC₆₁HM****(6,6)-Phenyl-C61 methyl-hexanoate****New**

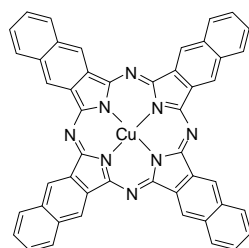
Formula : $C_{74}H_{18}O_2$
 Molecular Weight : 938.81 g/mole
 Thermal Gravimetric Analysis : 389°C (0.5% weight loss)
 Absorption : 328nm (in DMF)

LT-S947**SubNC****Boron sub-2,3-naphthalocyanine chloride****New**

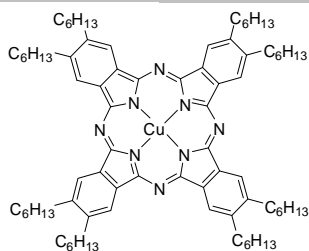
Formula : $C_{36}H_{18}BClN_6$
 Molecular Weight : 580.83 g/mole
 Thermal Gravimetric Analysis : 455°C (0.5% weight loss)
 Absorption : 658nm (in CH_2Cl_2)

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****New**

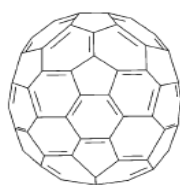
Formula : $C_{58}H_{72}N_2O_2S_6$
 Molecular Weight : 1021.59 g/mole
 Thermal Gravimetric Analysis : 327°C (0.5% weight loss)
 Absorption : 644nm (in CH_2Cl_2)

LT-S962**CuNC****Copper(II) Naphthalocyanine****New**

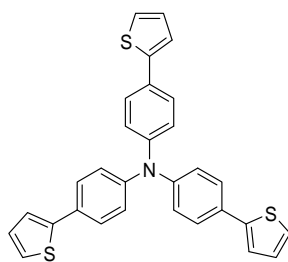
Formula : $C_{48}H_{24}CuN_8$
 Molecular Weight : 776.3 g/mole
 Thermal Gravimetric Analysis : 460°C (0.5% weight loss)
 Absorption : 681nm (in CH_2Cl_2)

LT-S963**CuPC-H6****Copper(II)-2,3,9,10,16,17,23,24-octa-n-hexyl-29H,31H-phthalocyanine****New**

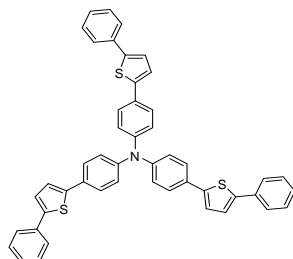
Formula : $C_{80}H_{112}CuN_8$
 Molecular Weight : 1249.34 g/mole
 Thermal Gravimetric Analysis : 427°C (0.5% weight loss)
 Absorption : 680 nm (in CH_2Cl_2)

LT-S967**C70****[5,6]-Fullerene-C70****New**

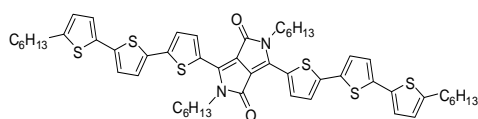
Formula : C_{70}
 Molecular Weight : 840.75 g/mole
 CAS No. : 115383-22-7
 Absorption : 344,382 nm (in CH_2Cl_2)

LT-S983**TTPA****Tris(4-(thiophen-2-yl)phenyl)amine****New**

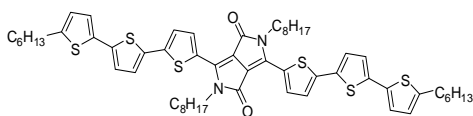
Formula : $C_{30}H_{21}NS_3$
 Molecular Weight : 491.69 g/mole
 Reference : *Appl. Phys. Lett.*, 94, 063304(2009)

LT-S984**TTPA****Tris(4-(5-phenylthiophen-2-yl)phenyl)amine****New**

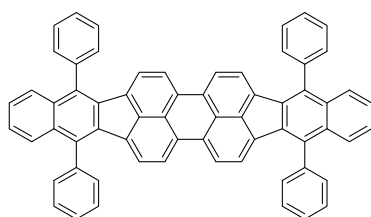
Formula : $C_{48}H_{33}NS_3$
 Molecular Weight : 719.98 g/mole
 Reference : *Appl. Phys. Lett.*, 94, 063304(2009)

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****New**

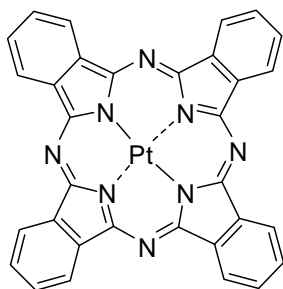
Formula : $C_{54}H_{64}N_2O_2S_6$
 Molecular Weight : 965.49 g/mole
 Thermal Gravimetric Analysis : 340°C (0.5% weight loss)
 Absorption : 644 nm (in CH_2Cl_2)

LT-986**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****New**

Formula : $C_{58}H_{72}N_2O_2S_6$
 Molecular Weight : 1021.59 g/mole
 Thermal Gravimetric Analysis : 305°C (0.5% weight loss)
 Absorption : 644 nm (in CH_2Cl_2)

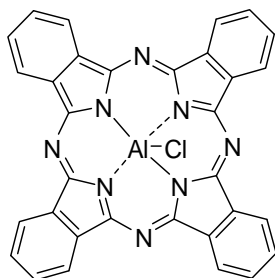
LT-N4003**DBP****Dibenzo[[f,f']-4,4',7,7'-tetraphenyl]diindeno[1,2,3-cd:1',2',3'-lm]perylene****New**

Formula : $C_{64}H_{36}$
 Molecular Weight : 804.97 g/mole

LT-N219C**PtPC****Phthalocyanine,Platium complex****New**Formula : $C_{32}H_{16}N_8Pt$

Molecular Weight : 707.6 g/mole

Thermal Gravimetric Analysis : 495°C (0.5% weight loss)

LT-S9025**AIPCCI****Aluminum phthalocyanine chloride****New**Formula : $C_{36}H_{16}AlClN_8$

Molecular Weight : 574.96 g/mole

CAS No. : 14154-42-8

Absorption : 680 nm (in CH_2Cl_2)