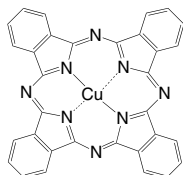


## LT-E201 | CuPC

Copper(II) phthalocyanine

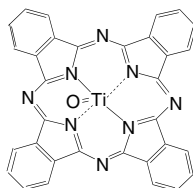
CAS No.	: 147-14-8
Grade	: Sublimed >99%
Formula	: $C_{32}H_{16}CuN_8$
M.W.	: 576.08 g/mole
UV	: 345, 631 nm (in $CH_2Cl_2$ )
PL	: 404 nm (film)
TGA	: >430 °C (0.5% weight loss)



## LT-E206 | TiOPC

Titanium oxide phthalocyanine

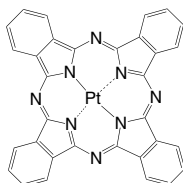
CAS No.	: 26201-32-1
Grade	: Sublimed >99%
Formula	: $C_{32}H_{16}N_8OTi$
M.W.	: 576.39 g/mole
UV	: 349,692 nm (in $CH_2Cl_2$ )
PL	: 392 nm (film)
TGA	: >440 °C (0.5% weight loss)



## LT-N219 | PtPC

Phthalocyanine platinum

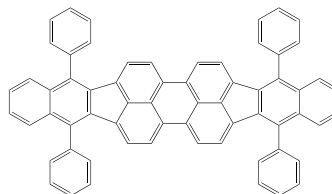
CAS No.	: 14075-08-2
Grade	: Sublimed >99% (TGA)
Formula	: $C_{32}H_{16}N_8Pt$
M.W.	: 707.6 g/mole
UV	: 228, 270 nm (in $CH_2Cl_2$ )
PL	: 372.5 nm (in $CH_2Cl_2$ )
TGA	: >460 °C (0.5% weight loss)



## LT-N4003 | DBP

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

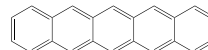
CAS No.	: 175606-05-0
Grade	: Sublimed >99% (HPLC)
Formula	: $C_{64}H_{36}$
M.W.	: 804.97 g/mole
UV	: 333 nm (in THF)
PL	: 610 nm (in THF)
TGA	: >350 °C (0.5% weight loss)



## LT-S901 | Pentacene

Pentacene

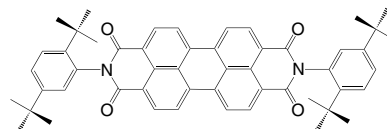
CAS No.	: 135-48-8
Grade	: Sublimed >99%
Formula	: $C_{22}H_{14}$
M.W.	: 278.35 g/mole
UV	: 300 nm (in $CH_2Cl_2$ )
PL	: 509 nm (in $CH_2Cl_2$ )
TGA	: >240 °C (0.5% weight loss)



## 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	: $C_{52}H_{50}N_2O_4$
M.W.	: 766.96 g/mole
UV	: 524 nm (in $CH_2Cl_2$ )
PL	: 544, 574 nm (in $CH_2Cl_2$ )
TGA	: >350 °C (0.5% weight loss)



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

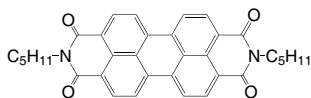
CAS No. : 99685-96-8  
 Grade : >99.5% (HPLC)  
 Formula : C<sub>60</sub>  
 M.W. : 720.64 g/mole  
 UV : 251 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 TGA : >450 °C (0.5% weight loss)



## LT-S904 | PenPTC

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

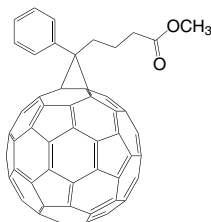
CAS No. : 76372-75-3  
 Grade : Sublimed >99%  
 Formula : C<sub>34</sub>H<sub>30</sub>N<sub>2</sub>O<sub>4</sub>  
 M.W. : 530.61 g/mole  
 UV : 523 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 PL : 535, 573 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 TGA : >350 °C (0.5% weight loss)



## LT-S905 | PCBM

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

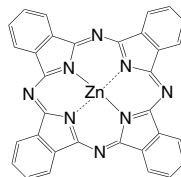
CAS No. : 160848-22-6  
 Grade : >99.5% (HPLC)  
 Formula : C<sub>72</sub>H<sub>14</sub>O<sub>2</sub>  
 M.W. : 910.88 g/mole  
 UV : 258, 328 nm (in THF)  
 TGA : >350 °C (0.5% weight loss)



## LT-S906 | ZnPC

Zinc phthalocyanine

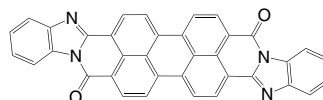
CAS No. : 14320-04-8  
 Grade : Sublimed >99%  
 Formula : C<sub>32</sub>H<sub>16</sub>N<sub>8</sub>Zn  
 M.W. : 577.92 g/mole  
 PL : 534 nm (in CH<sub>2</sub>Cl<sub>2</sub>)



## 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

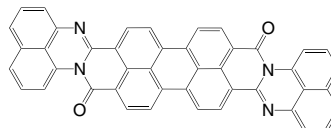
CAS No. : 79534-91-1  
 Grade : Sublimed >99%  
 Formula : C<sub>36</sub>H<sub>16</sub>N<sub>4</sub>O<sub>2</sub>  
 M.W. : 536.54 g/mole  
 PL : 414 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 TGA : >420 °C (0.5% weight loss)



## LT-S919 | ADIDI

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

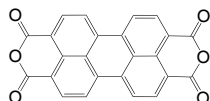
CAS No. : 6859-32-1  
 Grade : Sublimed >99%  
 Formula : C<sub>44</sub>H<sub>20</sub>N<sub>4</sub>O<sub>2</sub>  
 M.W. : 636.66 g/mole  
 PL : 413 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 TGA : >430 °C (0.5% weight loss)



## LT-S920 | PTCDA

3,4,9,10-Perylenetetracarboxylic dianhydride

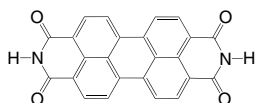
CAS No. : 128-69-8  
 Grade : Sublimed >99%  
 Formula :  $C_{24}H_8O_6$   
 M.W. : 392.32 g/mole  
 PL : 413 nm (in  $CH_2Cl_2$ )  
 TGA : >450 °C (0.5% weight loss)



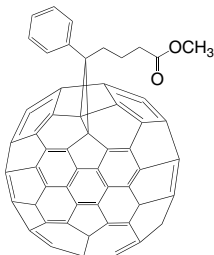
## LT-S921 | PTCDI

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

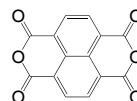
CAS No. : 609771-63-3  
 Grade : >99% (HPLC)  
 Formula :  $C_{82}H_{14}O_2$   
 M.W. : 1030.93 g/mole  
 UV : 372 nm (in Toluene)  
 TGA : >360 °C (0.5% weight loss)



## LT-S924 | NTDA

1,4,5,8-Naphthalenetetracarboxylic dianhydride

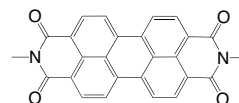
CAS No. : 81-30-1  
 Grade : Sublimed >99%  
 Formula :  $C_{14}H_4O_6$   
 M.W. : 268.18 g/mole  
 UV : 366 nm (in  $CH_2Cl_2$ )  
 PL : 394 nm (in  $CH_2Cl_2$ )



## LT-S925 | MePTC

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

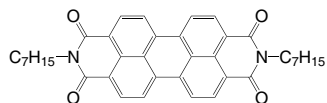
CAS No. : 5521-31-3  
 Grade : Sublimed product  
 Formula :  $C_{26}H_{14}N_2O_4$   
 M.W. : 418.4 g/mole  
 UV : 522 nm (in  $CH_2Cl_2$ )  
 PL : 571 nm (in  $CH_2Cl_2$ )  
 TGA : >440 °C (0.5% weight loss)



## LT-S926 | HepPTC

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

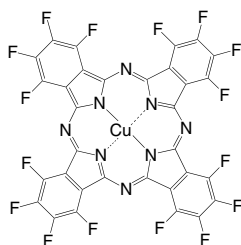
CAS No. : 95689-91-1  
 Grade : Sublimed >99%  
 Formula :  $C_{38}H_{38}N_2O_4$   
 M.W. : 586.72 g/mole  
 UV : 524 nm (in  $CH_2Cl_2$ )  
 PL : 537, 571 nm (in  $CH_2Cl_2$ )  
 TGA : >390 °C (0.5% weight loss)



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

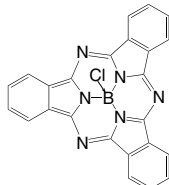
CAS No.	: 14916-87-1
Grade	: Sublimed product
Formula	: C <sub>32</sub> CuF <sub>16</sub> N <sub>8</sub>
M.W.	: 863.93 g/mole
UV	: 690 nm (in THF)
TGA	: >400 °C (0.5% weight loss)



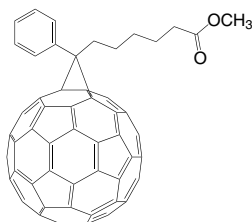
## LT-S943 | SubPC

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

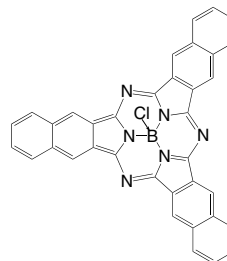
CAS No.	: 1242279-48-6
Grade	: >99% (HPLC)
Formula	: C <sub>74</sub> H <sub>18</sub> O <sub>2</sub>
M.W.	: 938.93 g/mole
UV	: 328 nm (in CH <sub>2</sub> Cl <sub>2</sub> )
TGA	: >350 °C (0.5% weight loss)



## LT-S947 | SubNC

Boron sub-2,3-naphthalocyanine chloride

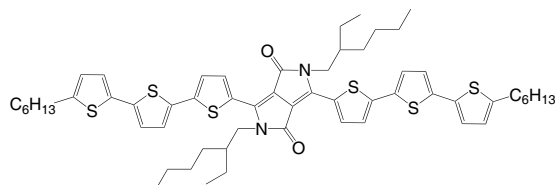
CAS No.	: 142710-56-3
Grade	: Sublimed >99%
Formula	: C <sub>36</sub> H <sub>18</sub> BClN <sub>6</sub>
M.W.	: 580.83 g/mole
UV	: 658 nm (in CH <sub>2</sub> Cl <sub>2</sub> )
TGA	: >370 °C (0.5% weight loss)



## 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

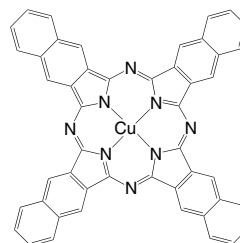
CAS No.	: 1093468-95-1
Grade	: >98% (NMR)
Formula	: C <sub>58</sub> H <sub>72</sub> N <sub>2</sub> O <sub>2</sub> S <sub>6</sub>
M.W.	: 1021.59 g/mole
UV	: 644 nm (in CH <sub>2</sub> Cl <sub>2</sub> )
TGA	: >370 °C (0.5% weight loss)



## LT-S962 | CuNC

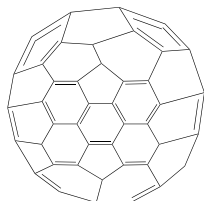
Copper(II) 2,3-naphthalocyanine

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>

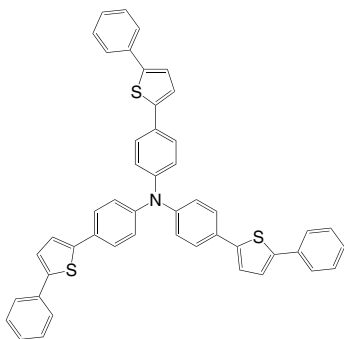
CAS No.	: 115383-22-7
Grade	: >99% (HPLC)
Formula	: C <sub>70</sub>
M.W.	: 840.75 g/mole
UV	: 344, 382 nm (in CH <sub>2</sub> Cl <sub>2</sub> )
TGA	: >450 °C (0.5% weight loss)



## LT-S984 | TPTPA

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

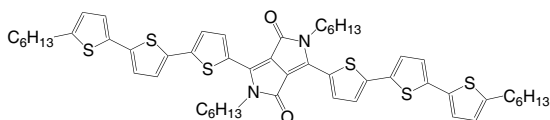
CAS No.	: 803727-09-5
Grade	: Sublimed >99% (HPLC)
Formula	: C <sub>48</sub> H <sub>33</sub> NS <sub>3</sub>
M.W.	: 719.98 g/mole
UV	: 416 nm (in CH <sub>2</sub> Cl <sub>2</sub> )
TGA	: >270 °C (0.5% weight loss)



## LT-S985 | SMDPPP

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

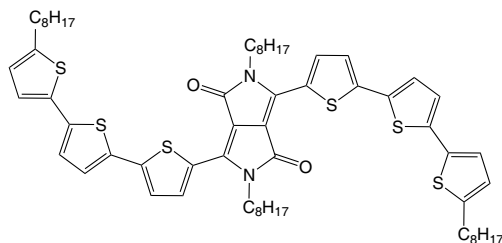
CAS No.	: 1077629-69-6
Grade	: >98% (NMR)
Formula	: C <sub>54</sub> H <sub>64</sub> N <sub>2</sub> O <sub>2</sub> S <sub>6</sub>
M.W.	: 965.49 g/mole
UV	: 644 nm (in CH <sub>2</sub> Cl <sub>2</sub> )
TGA	: >310 °C (0.5% weight loss)



## 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

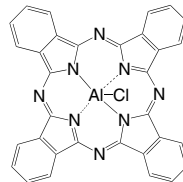
CAS No.	: 1435933-95-1
Grade	: >98% (NMR)
Formula	: C <sub>58</sub> H <sub>72</sub> N <sub>2</sub> O <sub>2</sub> S <sub>6</sub>
M.W.	: 1021.59 g/mole
UV	: 644 nm (in CH <sub>2</sub> Cl <sub>2</sub> )
TGA	: >280 °C (0.5% weight loss)



## LT-S9025 | AIPCCI

Aluminum phthalocyanine chloride

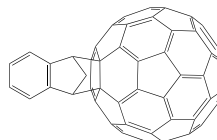
CAS No.	: 14154-42-8
Grade	: Sublimed >99%
Formula	: C <sub>32</sub> H <sub>16</sub> AlClN <sub>8</sub>
M.W.	: 574.97 g/mole
UV	: 675 nm (in DMF)



## LT-S9029 | ICMA

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

CAS No.	: 172885-96-0
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

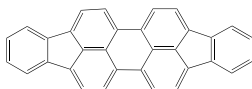
CAS No.	: 1207461-57-1
Grade	: >99% (HPLC)
Formula	: C <sub>78</sub> H <sub>16</sub>
M.W.	: 952.26 g/mole
UV	: 318 nm (in CH <sub>2</sub> Cl <sub>2</sub> )
TGA	: >200 °C (0.5% weight loss)



## LT-S9036 | DIP

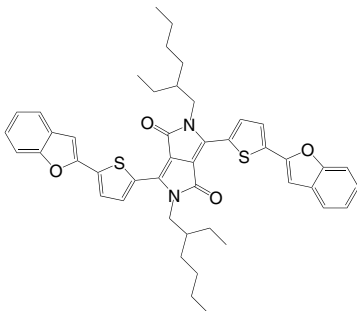
Diindeno[1,2,3-cd:1',2',3'-lm]perylene

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

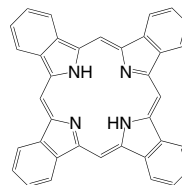
CAS No.	: 1241836-03-2
Grade	: >99% (NMR)
Formula	: C <sub>46</sub> H <sub>48</sub> N <sub>2</sub> O <sub>4</sub> S <sub>2</sub>
M.W.	: 757.01 g/mole
UV	: 584, 629 nm (in CH <sub>2</sub> Cl <sub>2</sub> )
TGA	: >330 °C (0.5% weight loss)



## LT-S9044 | BP

Tetrabenzoporphine

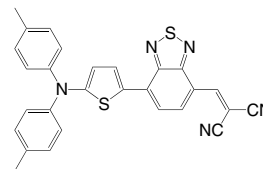
CAS No.	: 52952-31-5
Grade	: Sublimed product
Formula	: C <sub>36</sub> H <sub>22</sub> N <sub>4</sub>
M.W.	: 510.59 g/mole
TGA	: >200 °C (0.5% weight loss)



## LT-S9046 | DTDCTB

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

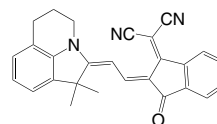
CAS No.	: 1335150-09-8
Grade	: >99% (HPLC)
Formula	: C <sub>28</sub> H <sub>19</sub> N <sub>5</sub> S <sub>2</sub>
M.W.	: 489.61 g/mole
UV	: 398, 622 nm (in CH <sub>2</sub> Cl <sub>2</sub> )
TGA	: >280 °C (0.5% weight loss)



## 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

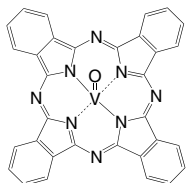
CAS No.	: 1207961-82-7
Grade	: >99% (HPLC)
Formula	: C <sub>27</sub> H <sub>21</sub> N <sub>3</sub> O
M.W.	: 403.48 g/mole
UV	: 481, 577 nm (in CH <sub>2</sub> Cl <sub>2</sub> )
TGA	: >280 °C (0.5% weight loss)



**LT-S9053** | VOPC

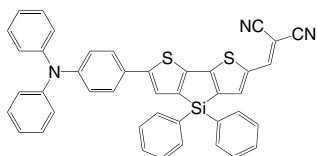
Oxyvanadium phthalocyanine

CAS No. : 13930-88-6  
 Grade : Sublimed product  
 Formula :  $C_{32}H_{16}N_8O$   
 M.W. : 579.47 g/mole  
 UV : 338, 684 nm (in  $CH_2Cl_2$ )

**LT-S9056** | TPDCDTS

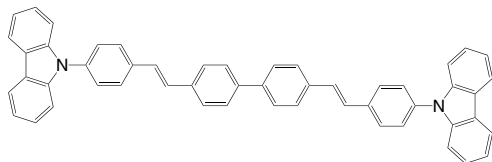
2-(6-(4-(Diphenylamino)phenyl)-4,4'-diphenyl-dithieno[3,2-b:2',3'-d']silol-2-yl)-methylene-malononitrile

CAS No. : 1321562-79-1  
 Grade : >99% (HPLC)  
 Formula :  $C_{42}H_{27}N_3S_2Si$   
 M.W. : 665.90 g/mole  
 TGA : >250 °C (0.5% weight loss)

**LT-S9058** | BSB4

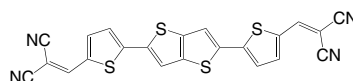
4,4'-Bis(4-(9H-carbazol-9-yl)styryl)biphenyl

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)

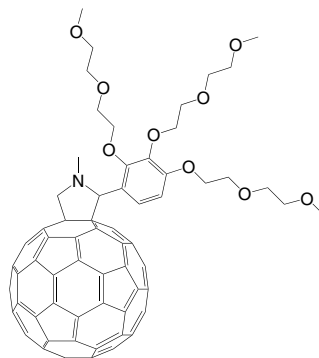
**LT-S9061** | FT2TDMN

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)

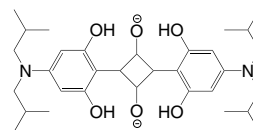
**LT-S9071** | PrC<sub>60</sub>MA*C*<sub>60</sub>*N,N,N*-trimethyl-1-(2,3,4-tris(2-(2-methoxyethoxy)ethoxy)phenyl)methanaminium monoadduct

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

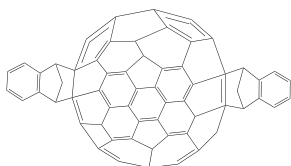
2,4-Bis(4-(diisobutylamino)-2,6-dihydroxyphenyl)cyclobutane-1,3-bis(olate)

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)

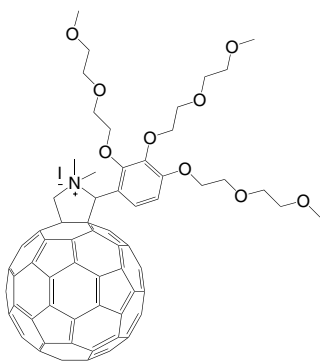


**LT-S9078** | IC<sub>70</sub>BAIndene-C<sub>70</sub> bisadduct, mixture of isomers

CAS No.	: 1563175-93-8
Grade	: >99% (HPLC)
Formula	: C <sub>88</sub> H <sub>16</sub>
M.W.	: 1073.04 g/mole
UV	: 290 nm (in CH <sub>2</sub> Cl <sub>2</sub> )
TGA	: >180 °C (0.5% weight loss)

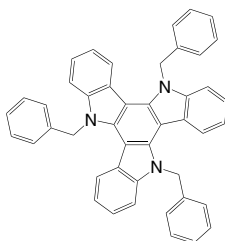
**LT-S9079** | PrC<sub>60</sub>MA Iodide saltC<sub>60</sub>N,N,N-Trimethyl-1-(2,3,4-tris(2-(2-methoxyethoxy)ethoxy)phenyl)dimethanaminium monoadduct iodide salt

CAS No.	: 1373957-23-3
Grade	: >99% (HPLC)
Formula	: C <sub>85</sub> H <sub>44</sub> INO <sub>9</sub>
M.W.	: 1386.23 g/mole

**LT-S9084** | TBDI

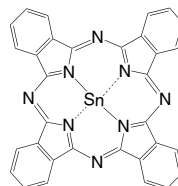
5,10,15-Tribenzyl-10,15-dihydro-5H-diindolo[3,2-a:3',2'-c]carbazole

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

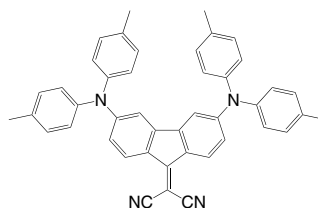
Tin(II) phthalocyanine

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
UV	: 693 nm (in CHCl <sub>3</sub> )
TGA	: >440 °C (0.5% weight loss)

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

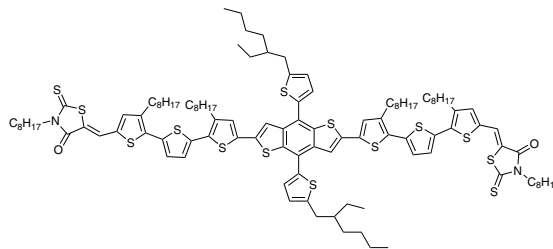
2-(3,6-Bis(di-p-tylamino)-9H-fluorene-9-ylidene)malononitrile

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> )

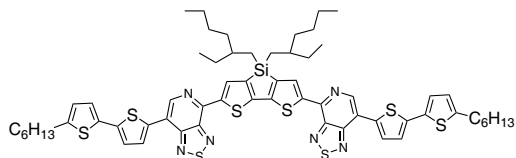




**LT-S9124** | DTS (PTTh2)

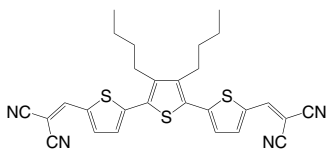
5,5'-Bis(4-(7-hexylthiophen-2-yl)thiophen-2-yl)-[1,2,5]thiadiazolo[3,4-c]pyridine-3,3'-di-2-ethylhexylsilylene-2,2'-bithiophene

CAS No. : 1351374-94-1  
 Grade : >99% (NMR)  
 Formula :  $C_{62}H_{72}N_6S_8Si$   
 M.W. : 1185.88 g/mole  
 UV : 366, 645 nm (in  $CH_2Cl_2$ )

**LT-S9125** | DCV3T

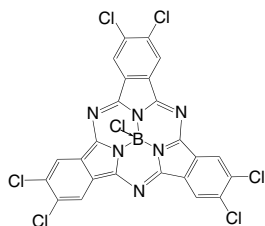
3',4'-Dibutyl-5,5'-bis(dicyanovinyl)-2,2':5',2''-terthiophene

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-S9149** |  $Cl_6$ SubPC

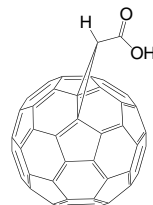
2,3,9,10,16,17-Hexachlorinated boron subphthalocyanine chloride

CAS No. : 309963-65-3  
 Grade : Sublimed >99%  
 Formula :  $C_{24}H_6BCl_7N_6$   
 M.W. : 637.33 g/mole  
 UV : 578 nm (in  $CH_2Cl_2$ )  
 TGA : >300 °C (0.5% weight loss)

**LT-S9157** |  $C_{70}$ -COOH

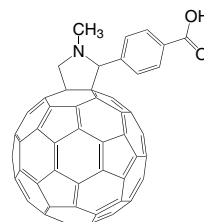
3'H-Cyclopropa[8,25][5,6]fullerene- $C_{70}$ -3'-carboxylic acid

CAS No. : 180777-24-6  
 Grade : >99%  
 Formula :  $C_{72}H_2O_2$   
 M.W. : 898.79 g/mole  
 UV : 353, 370, 406 nm (in  $CH_2Cl_2$ )

**LT-S9161** |  $C_{60}$ -COOH-SAM

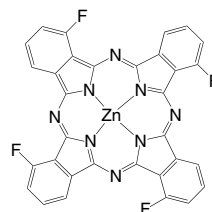
4-(1',5'-Dihydro-1'-methyl-2'H-[5,6]fullereno- $C_{60}$ -1h-[1,9-c]-pyrrol-2'-yl)benzoic acid

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-S9171** |  $F_4ZnPC$ 

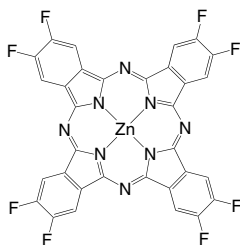
Zinc(II)-1,8,15,22-tetrafluoro-29H,31H-phthalocyanine, mixture of isomers

CAS No. : 1120355-28-3  
 Grade : Sublimed >99%  
 Formula :  $C_{32}H_{12}F_4N_8Zn$   
 M.W. : 649.89 g/mole  
 UV : 681 nm (in  $CHCl_3$ )  
 TGA : >250 °C (0.5% weight loss)



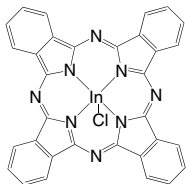
**LT-S9172** |  $F_8ZnPC$ Zinc(II)-2,3,9,10,16,17,23,24-octafluoro-29*H*,31*H*-phthalocyanine

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)

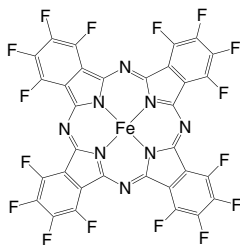
**LT-S9176** |  $InClPC$ 

Indium(III) phthalocyanine chloride

CAS No. : 19631-19-7  
 Grade : Sublimed >99%  
 Formula :  $C_{32}H_{16}ClInN_8$   
 M.W. : 662.79 g/mole  
 UV : 358, 683 nm (in  $CHCl_3$ )  
 TGA : >300 °C (0.5% weight loss)

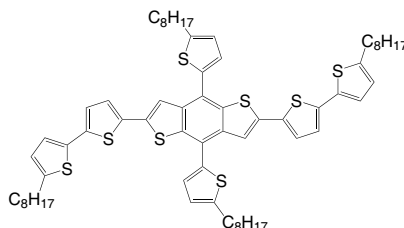
**LT-S9177** |  $F_{16}FePC$ Iron(II) 1,2,3,4,8,9,10,11,15,16,17,18,22,23,24,25-hexadecafluoro-29*H*,31*H*-phthalocyanine

CAS No. : 23844-93-1  
 Grade : Sublimed >99%  
 Formula :  $C_{32}F_{16}FeN_8$   
 M.W. : 856.22 g/mole  
 UV : 333, 627 nm (in Acetone)  
 TGA : >300 °C (0.5% weight loss)

**LT-S9179** |  $BDT2TH$ 

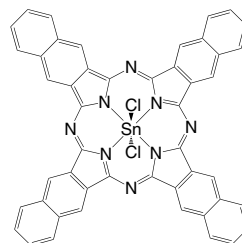
2,6-Bis([5'-octyl[2,2'-bithiophene])][4,8-bis(5-octyl-2-thienyl)benzo[1,2-b:4,5-b']dithiophene]

Grade : >99% (NMR)  
 Formula :  $C_{66}H_{82}S_8$   
 M.W. : 1131.88 g/mole  
 UV : 249, 359, 442 nm (in  $CHCl_3$ )

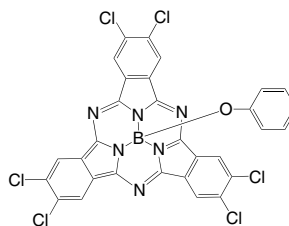
**LT-S9180** |  $SnNCCl_2$ 

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)

**LT-S9181** |  $PhO-BSubPC$ [2,3,9,10,16,17-Hexachloro-7,12:14,19-diimino-21,5-nitrilo-5*H*-tribenzo[*c,h,m*][1,6,11]triazacyclopentadecinato(2-)-*N22,N23,N24*]phenoxy-Boron

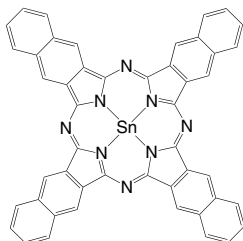
CAS No. : 1309390-01-9  
 Grade : >99% (HPLC)  
 Formula :  $C_{30}H_{11}BCl_6N_6O$   
 M.W. : 694.98 g/mole  
 UV : 267, 318, 569 nm (in  $CHCl_3$ )



## LT-S9182 | SnNC

Tin(II) 2,3-naphthalocyanine

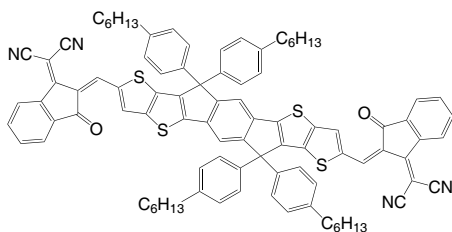
CAS No. : 110479-58-8  
 Grade : Sublimed product  
 Formula :  $C_{48}H_{24}N_8Sn$   
 M.W. : 831.47 g/mole  
 TGA : >300 °C (0.5% weight loss)



## 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

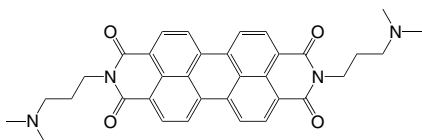
CAS No. : 1664293-06-4  
 Grade : >98% (HPLC)  
 Formula :  $C_{94}H_{82}N_4O_2S_4$   
 M.W. : 1427.94 g/mole



## 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(2H,9H)-tetraone

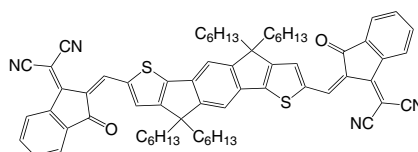
CAS No. : 117901-97-0  
 Formula :  $C_{34}H_{32}N_4O_4$   
 M.W. : 560.64 g/mole



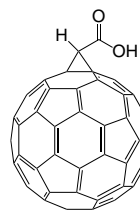
## LT-S9279 | IDIC

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

CAS No. : 1883441-92-6  
 Grade : >98% (HPLC)  
 Formula :  $C_{66}H_{66}N_4O_2S_2$   
 M.W. : 1011.39 g/mole  
 UV : 664 nm (in  $CH_2Cl_2$ )

LT-S9281 | C<sub>60</sub>-COOH3'H-Cyclopropa[1,9][5,6]fullerene-C<sub>60</sub>-1h-3'-carboxylic acid

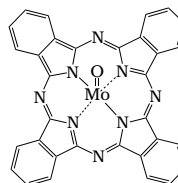
CAS No. : 155116-19-1  
 Grade : >99%  
 Formula :  $C_{62}H_2O_2$   
 M.W. : 778.68 g/mole



## LT-S9283 | MoOPC

Oxo-phthalocyaninato-molybdenum(IV)

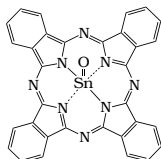
CAS No. : 15746-68-6  
 Grade : Sublimed >99%  
 Formula :  $C_{32}H_{16}MoN_8O$   
 M.W. : 624.46 g/mole



### LT-S9284 | SnOPC

Oxo-phthalocyaninato-tin(IV)

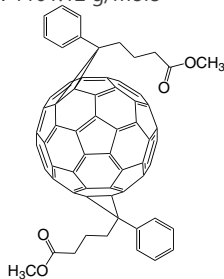
CAS No. : 57156-42-0  
 Grade : Sublimed >99%  
 Formula :  $C_{32}H_{16}N_8OSn$   
 M.W. : 647.23 g/mole



### 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

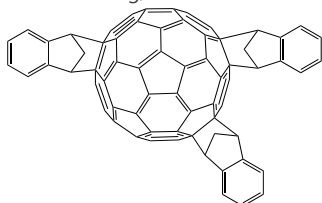
CAS No. : 1258559-89-5  
 Grade : >99.5%  
 Formula :  $C_{84}H_{28}O_4$   
 M.W. : 1101.12 g/mole



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

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

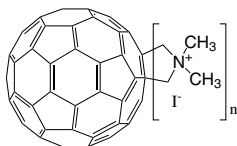
CAS No. : 1363385-54-9  
 Grade : >96%  
 Formula :  $C_{87}H_{24}$   
 M.W. : 1069.12 g/mole



### LT-S9424 |

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

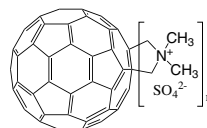
Grade : >99%  
 Formula :  $C_{60}(C_4H_{10}NI)_n$



### LT-S9425 |

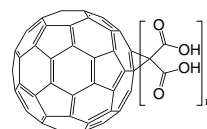
C<sub>60</sub>-n-(N,N-dimethylpyrrolidinium sulfate)

Grade : >99%  
 Formula :  $C_{60}(C_4H_{10}NSO_4)_n$



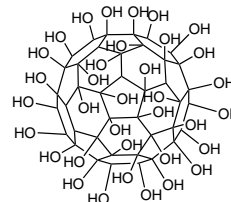
### LT-S9426 | C<sub>60</sub><sup>-</sup> (malonic acid)<sub>n</sub>

Grade : >99%  
 Formula :  $C_{60}(C_3H_2O_4)_n$



### LT-S9427 | Fullerol C<sub>60</sub>(OH)<sub>n</sub>

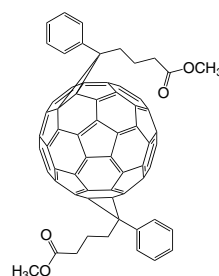
Grade : >99.5%  
 Formula :  $C_{60}(OH)_n$



### LT-S9428 | Bis-PC<sub>72</sub>BM

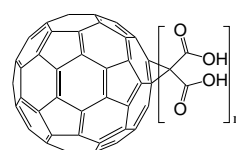
3'H,3''H-Dicyclopropa[8,25:53,54][5,6]-fullerene-C<sub>70</sub>-D5h(6)-3',3''-dibutanoic acid,3',3''-diphenyl-,3',3''-dimethyl ester

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><sup>-</sup> (malonic acid)<sub>n</sub>

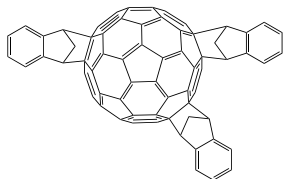
Grade : >99%  
 Formula :  $C_{70}(C_3H_2O_4)_n$



### LT-S9431 | IC<sub>70</sub>TA

Indene C70 Tris Adduct

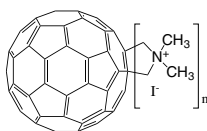
Grade : >96%  
Formula : C<sub>97</sub>H<sub>24</sub>



### LT-S9432

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

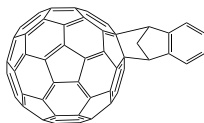
Grade : >99%  
Formula : C<sub>70</sub> (C<sub>4</sub>H<sub>10</sub>NI)<sub>n</sub>



### LT-S9433 | IC<sub>70</sub>MA

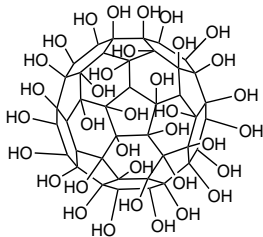
1',4'-Dihydro-1,4-methanonaphtho[2',3':8,25]fullerene-C<sub>70</sub>-D<sub>5</sub>h(6)

CAS No. : 1287237-10-8  
Grade : >98%  
Formula : C<sub>79</sub>H<sub>8</sub>  
M.W. : 956.91 g/mole



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

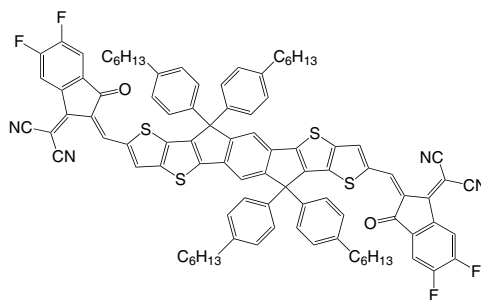
Grade : >99.5%  
Formula : C<sub>70</sub> (OH)<sub>n</sub>



### 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[methyldiylne(5,6-difluoro-3-oxo-1H-indene-2,1(3H)-diylidene)]]bis[propanedinitrile]

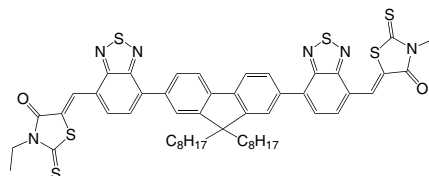
CAS No. : 2097998-59-7  
Grade : >98% (HPLC)  
Formula : C<sub>94</sub>H<sub>78</sub>F<sub>4</sub>N<sub>4</sub>O<sub>2</sub>S<sub>4</sub>  
M.W. : 1499.9 g/mole



### LT-S9466 | FBR

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

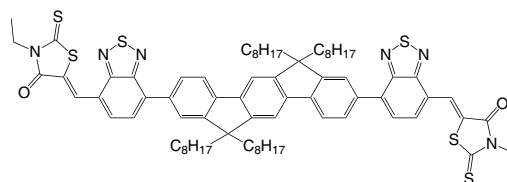
CAS No. : 1644381-95-2  
Grade : >98%  
Formula : C<sub>53</sub>H<sub>56</sub>N<sub>6</sub>O<sub>2</sub>S<sub>6</sub>  
M.W. : 1001.44 g/mole



### 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)

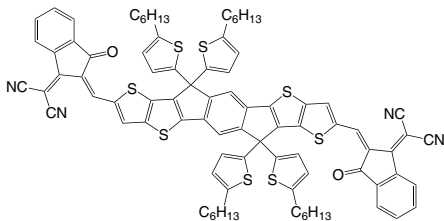
CAS No. : 2088628-64-0  
Grade : >98%  
Formula : C<sub>76</sub>H<sub>92</sub>N<sub>6</sub>O<sub>2</sub>S<sub>6</sub>  
M.W. : 1313.97 g/mole



## LT-S9471 | ITIC-Th

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

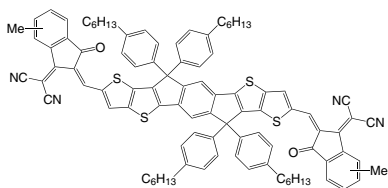
CAS No. : 1889344-13-1  
Grade : >98%  
Formula :  $C_{86}H_{74}N_4O_2S_8$   
M.W. : 1452.05 g/mole



## LT-S9473 | ITIC-M

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

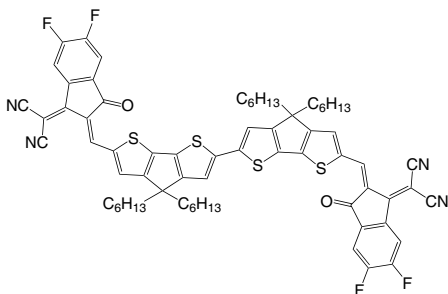
CAS No. : 2047352-80-5, 2047352-83-8, 2047352-86-1  
Grade : >98%  
Formula :  $C_{96}H_{86}N_4O_2S_4$   
M.W. : 1455.99 g/mole



## 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(methanylylidene))bis(5,6-difluoro-3-oxo-2,3-dihydro-1H-indene-2,1-diylidene))dimalononitrile

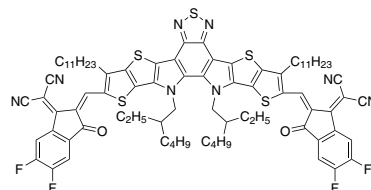
Grade : >98% (HPLC)  
Formula :  $C_{68}H_{62}F_4N_4O_2S_4$   
M.W. : 1171.50 g/mole



## LT-S9476 | Y6 (BTPPT-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(methanylylidene))-bis(5,6-difluoro-3-oxo-2,3-dihydro-1H-indene-2,1-diylidene))dimalononitrile

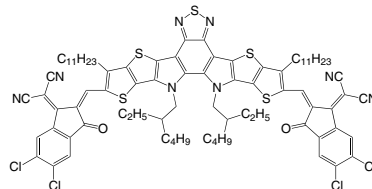
CAS No. : 2304444-49-1  
Grade : >99% (NMR)  
Formula :  $C_{82}H_{86}F_4N_8O_2S_5$   
M.W. : 1451.93 g/mole  
UV : 731, 821 nm (in  $CHCl_3$ )



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

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-dichloro-3-oxo-2,3-dihydro-1H-indene-2,1-diylidene))dimalononitrile

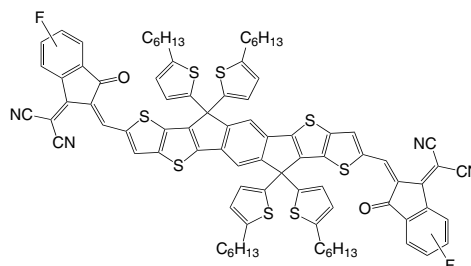
CAS NO : 2447642-40-0  
Grade : >99% (NMR)  
Formula :  $C_{82}H_{86}Cl_4N_8O_2S_5$   
M.W. : 1517.75 g/mole  
UV : 746, 839 nm (in  $CHCl_3$ )



## LT-S9492 | ITIC-Th1

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

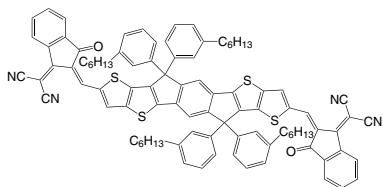
Grade : >99% (NMR)  
Formula :  $C_{86}H_{72}F_2N_4O_2S_8$   
M.W. : 1488.03 g/mole  
UV : 677 nm (in  $CH_2Cl_2$ )



## 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

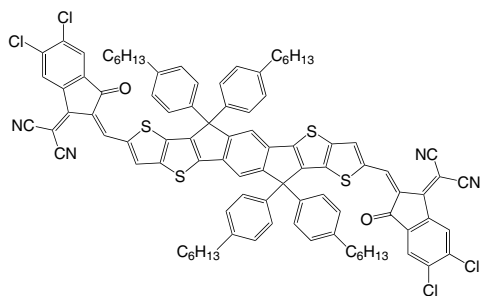
Grade : >99% (NMR)  
Formula :  $C_{94}H_{82}N_4O_2S_4$   
M.W. : 1427.94 g/mole



## 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

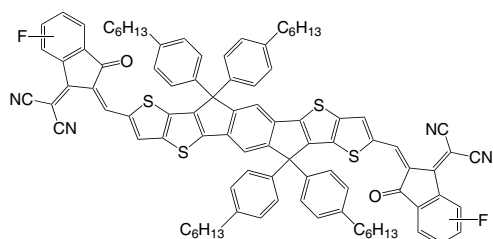
CAS No. : 2253663-81-7  
Grade : >99% (NMR)  
Formula :  $C_{94}H_{78}Cl_4N_4O_2S_4$   
M.W. : 1565.72 g/mole



## 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

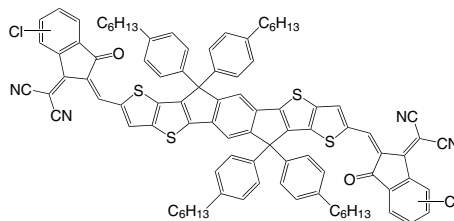
Grade : >99% (NMR)  
Formula :  $C_{96}H_{88}F_2N_4O_2S_4$   
M.W. : 1496.01 g/mole  
UV : 685, 721 nm (in  $CHCl_3$ )



## 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

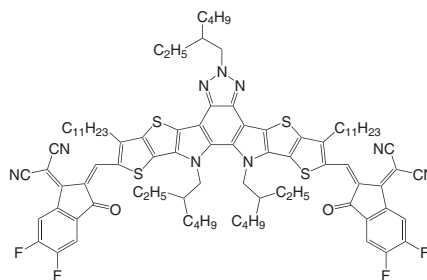
Grade : >99% (NMR)  
Formula :  $C_{94}H_{80}Cl_2N_4O_2S_4$   
M.W. : 1496.83 g/mole  
UV : 690, 735 nm (in  $CHCl_3$ )



## LT-S9505 | Y11

2,2'-((2Z,2'Z)-((12,13-Bis(2-ethylhexyl)-3,9-diundecyl-12,13-dihydro-2-(2-ethylhexyl)-[1,2,3]triazolo[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

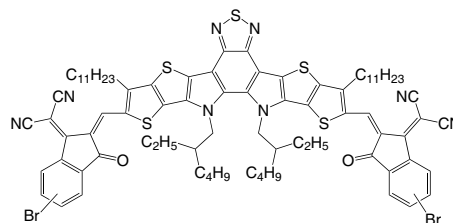
Grade : >99% (NMR)  
Formula :  $C_{90}H_{103}F_4N_9O_2S_4$   
M.W. : 1547.09 g/mole  
UV : 850 nm (film)



## 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

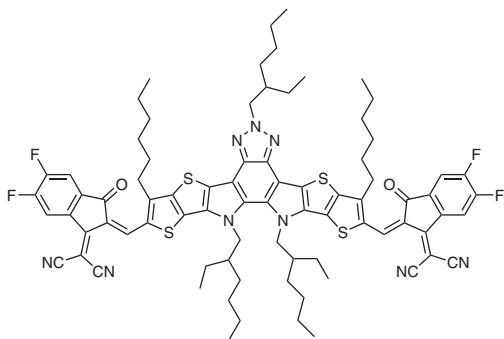
CAS No. : 2414381-17-0  
Grade : >99% (NMR)  
Formula :  $C_{82}H_{88}Br_2N_8O_2S_5$   
M.W. : 1537.76 g/mole  
UV : 817 nm (film)



## 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-diyI)-bis(methanylylidene))bis-(5,6-difloro-3-oxo-2,3-dihydro-1H-indene-2,1-diyIidene))dimalononitrile

Grade : >99% (NMR)  
 Formula : C<sub>80</sub>H<sub>83</sub>F<sub>4</sub>N<sub>8</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

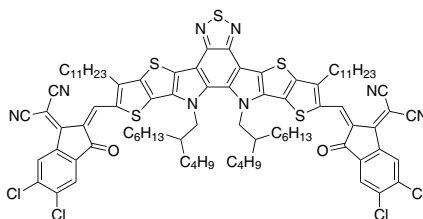
CAS No. : 1020180-01-1  
 Grade : >99% (NMR)  
 Formula : C<sub>40</sub>H<sub>46</sub>N<sub>6</sub>O<sub>4</sub>  
 M.W. : 674.83 g/mole  
 Hole Mobility : 7.1 cm<sup>2</sup> / (Vs)



## 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-diyI)bis(methanylylidene))bis(5,6-dichloro-3-oxo-2,3-dihydro-1H-indene-2,1-diyIidene))dimalononitrile

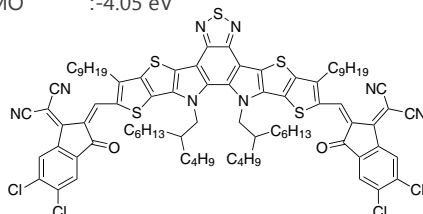
CAS No. : 2447642-41-1  
 Grade : >99% (NMR)  
 Formula : C<sub>90</sub>H<sub>102</sub>Cl<sub>4</sub>N<sub>8</sub>O<sub>2</sub>S<sub>5</sub>  
 M.W. : 1629.96 g/mole  
 HOMO : -5.63 eV  
 LUMO : -4.04 eV



## 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-diyI)bis(methanylylidene))bis(5,6-dichloro-3-oxo-2,3-dihydro-1H-indene-2,1-diyIidene))dimalononitrile

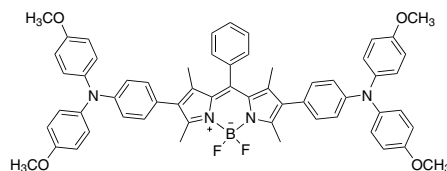
CAS No. : 2598965-39-8  
 Grade : >99% (NMR)  
 Formula : C<sub>86</sub>H<sub>94</sub>Cl<sub>4</sub>N<sub>8</sub>O<sub>2</sub>S<sub>5</sub>  
 M.W. : 1573.89 g/mole  
 UV : 543 nm  
 HOMO : -5.64 eV  
 LUMO : -4.05 eV



## 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]diazaborinin-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  
 HOMO : -5.14 eV  
 LUMO : -3.34 eV

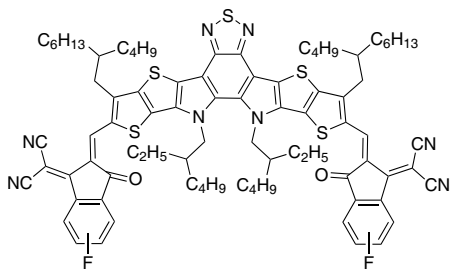




## LT-S9581 | L8-BO-F

2,2'-((2Z,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-diyl)bis(methanylylidene))bis(5/6-fluoro-3-oxo-2,3-dihydro-1H-indene-2,1-diylidene))dimalononitrile

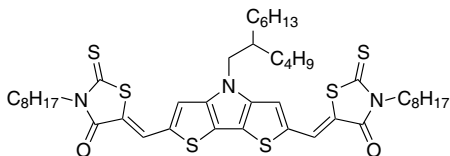
Grade : >99% (NMR)  
 Formula :  $C_{84}H_{92}F_2N_8O_2S_5$   
 M.W. : 1444.00 g/mole  
 HOMO : -5.59 eV  
 LUMO : -3.85 eV



## LT-S9582 | DR8

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

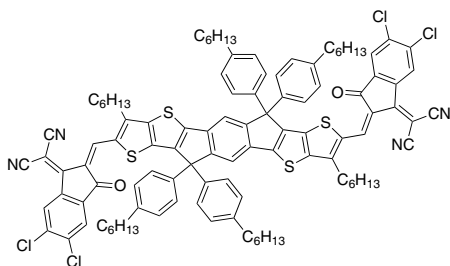
Formula :  $C_{44}H_{63}N_3O_2S_6$   
 M.W. : 858.38 g/mole  
 UV : 584 nm (in  $CHCl_3$ )  
 HOMO : -5.67 eV  
 LUMO : -3.50 eV



## 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-diyl]]bis(methanylylidene)[5,6-chloro-3-oxo-1H-indene-2,1(3H)-diylidene]]bispropanedinitrile

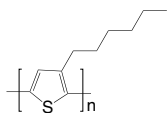
Formula :  $C_{106}H_{102}Cl_4N_4O_2S_4$   
 M.W. : 1734.04 g/mole  
 UV : 718 nm (in  $CHCl_3$ )  
 HOMO : -5.79 eV  
 LUMO : -4.03 eV



## LT-S909 | P3HT

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

CAS No.	: 110134-47-9
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-S911 | PT

Poly(thiophene-2,5-diyl)

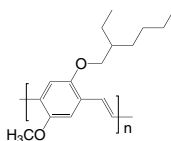
CAS No.	: 25233-34-5
Formula	: $(C_4H_2S)_n$
UV	: 427 nm (in $CH_2Cl_2$ )
PL	: 510 nm (in $CH_2Cl_2$ )



## LT-S931 | MEH-PPV

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

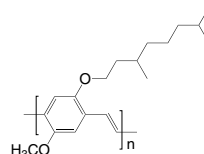
CAS No.	: 138184-36-8
Grade	: Mw >100,000 (GPC)
Formula	: $(C_{17}H_{24}O_2)_n$
UV	: 501 nm (in $CH_2Cl_2$ )
PL	: 502 nm (in $CH_2Cl_2$ )
Solubility	: Soluble in THF, $CHCl_3$ , Chlorobenzene, Dichlorobenzene



## LT-S932 | DDMO-PPV

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

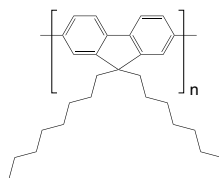
CAS No.	: 177716-59-5
Grade	: Mw >100,000 (GPC)
Formula	: $(C_{19}H_{28}O_2)_n$
UV	: 485 nm (in $CH_2Cl_2$ )
PL	: 555 nm (in $CH_2Cl_2$ )
Solubility	: Soluble in THF, $CHCl_3$ , Chlorobenzene, Dichlorobenzene



## LT-S933 | PFO

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

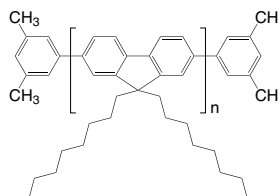
CAS No.	: 123864-00-6
Grade	: Mw =50,000~150,000 (GPC)
Formula	: $(C_{29}H_{40})_n$
UV	: 376 nm (in THF)
PL	: 426 nm (in THF)
Solubility	: Soluble in THF, $CHCl_3$ , Chlorobenzene, Dichlorobenzene



## LT-S934 | PFO-DMP

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

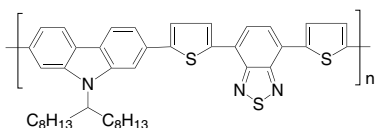
CAS No.	: 874816-14-5
Grade	: Mw =50,000~150,000 (GPC)
Formula	: $C_{16}H_{18} (C_{29}H_{40})_n$
UV	: 368 nm (in THF)
PL	: 421 nm (in THF)
Solubility	: Soluble in THF, $CHCl_3$ , Chlorobenzene, Dichlorobenzene



## LT-S948 | PCDTBT

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

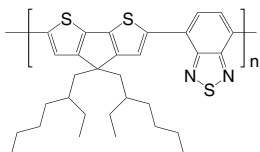
CAS No. : 958261-50-2  
 Grade : Mw = 20,000~100,000 (GPC)  
 Formula : (C<sub>43</sub>H<sub>47</sub>N<sub>3</sub>S<sub>3</sub>)<sub>n</sub>  
 UV : 390, 554 nm (in THF)  
 PL : 639 nm (in THF)  
 Solubility : >5 mg/mL in CHCl<sub>3</sub>



## LT-S949 | PCPDTBT

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

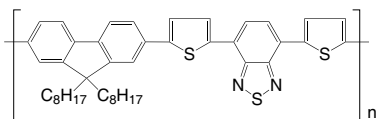
CAS No. : 920515-34-0  
 Grade : Mw = 7,000~20,000 (GPC)  
 Formula : (C<sub>31</sub>H<sub>38</sub>N<sub>2</sub>S<sub>3</sub>)<sub>n</sub>  
 UV : 695 nm (in THF)  
 PL : 564 nm (in THF)  
 Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene



## LT-S950 | PFOBT / PFODBT

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

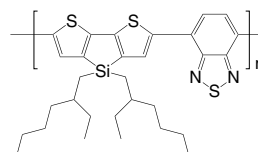
CAS No. : 782469-77-6  
 Grade : Mw = 10,000~50,000 (GPC)  
 Formula : (C<sub>43</sub>H<sub>46</sub>N<sub>2</sub>S<sub>3</sub>)<sub>n</sub>  
 UV : 523 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 PL : 630 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene



## 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)]

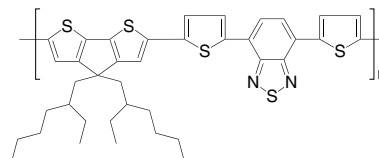
CAS No. : 1089687-02-4  
 Grade : Mw = 10,000~30,000 (GPC)  
 Formula : (C<sub>30</sub>H<sub>38</sub>N<sub>2</sub>S<sub>3</sub>Si)<sub>n</sub>  
 UV : 652 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene



## 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]

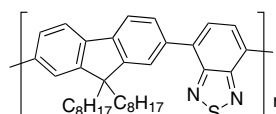
CAS No. : 1035681-83-4  
 Grade : Mw = 8,000~20,000 (GPC)  
 Formula : (C<sub>39</sub>H<sub>42</sub>N<sub>2</sub>S<sub>5</sub>)<sub>n</sub>  
 UV : 615 nm (in CHCl<sub>3</sub>)  
 PL : 749 nm (in CHCl<sub>3</sub>)  
 Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene



## LT-S957 | F8BT

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

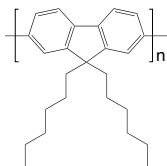
CAS No. : 210347-52-7  
 Grade : Mw > 20,000 (GPC)  
 Formula : (C<sub>35</sub>H<sub>42</sub>N<sub>2</sub>S)<sub>n</sub>  
 UV : 453 nm (in THF)  
 PL : 534 nm (in THF)  
 Solubility : Soluble in THF, CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene



## LT-S958 | PHF

Poly[9,9-dihexylfluorenyl-2,7-diyl]

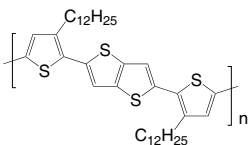
CAS No.	: 201807-75-2
Grade	: Mw = 30,000~100,000 (GPC)
Formula	: (C <sub>25</sub> H <sub>32</sub> ) <sub>n</sub>
UV	: 389 nm (in THF)
PL	: 418 nm (in THF)
Solubility	: Soluble in THF, CHCl <sub>3</sub> , Chlorobenzene, Dichlorobenzene



## LT-S981 | PBTTC-12

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

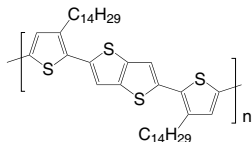
CAS No.	: 888491-18-7
Grade	: Mw = 10,000~100,000 (GPC)
Formula	: (C <sub>38</sub> H <sub>54</sub> S <sub>4</sub> ) <sub>n</sub>
UV	: 460 nm (in THF)
PL	: 557 nm (in THF)
Solubility	: >5 mg/mL in CHCl <sub>3</sub>



## LT-S982 | PBTTC-14

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

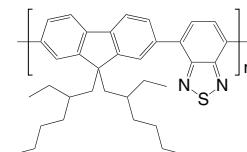
CAS No.	: 888491-19-8
Grade	: Mw = 10,000~100,000 (GPC)
Formula	: (C <sub>42</sub> H <sub>62</sub> S <sub>4</sub> ) <sub>n</sub>
UV	: 466 nm (in THF)
PL	: 557 nm (in THF)
Solubility	: >5 mg/mL in CHCl <sub>3</sub>



## LT-S9003 | F2EHBT

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

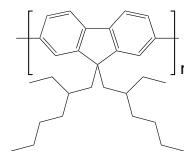
CAS No.	: 1379051-13-4
Grade	: Mw = 10,000~50,000 (GPC)
Formula	: (C <sub>35</sub> H <sub>42</sub> N <sub>2</sub> S) <sub>n</sub>
UV	: 453 nm (in THF)
PL	: 645 nm (in THF)
Solubility	: Soluble in CHCl <sub>3</sub> , Chlorobenzene, Dichlorobenzene



## LT-S9004 | PF2EH

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

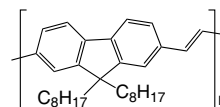
CAS No.	: 188201-16-3
Grade	: Mw > 20,000 (GPC)
Formula	: (C <sub>29</sub> H <sub>40</sub> ) <sub>n</sub>
UV	: 389 nm (in THF)
PL	: 418 nm (in THF)
Solubility	: Soluble in THF, CHCl <sub>3</sub> , Chlorobenzene, Dichlorobenzene



## LT-S9006

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

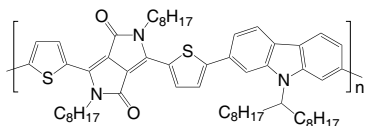
CAS No.	: 360068-36-6
Grade	: Mw > 20,000 (GPC)
Formula	: (C <sub>31</sub> H <sub>42</sub> ) <sub>n</sub>
UV	: 455 nm (in CH <sub>2</sub> Cl <sub>2</sub> )
Solubility	: Soluble in CHCl <sub>3</sub> , Chlorobenzene, Dichlorobenzene



## LT-S9032 | PCBTDPD

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

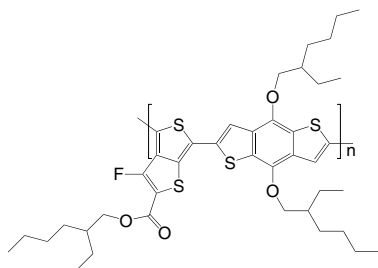
CAS No.	: 1147374-60-4
Grade	: Mw > 10,000 (GPC)
Formula	: (C <sub>59</sub> H <sub>81</sub> N <sub>3</sub> O <sub>2</sub> S <sub>2</sub> ) <sub>n</sub>
UV	: 647 nm (in CH <sub>2</sub> Cl <sub>2</sub> )
Solubility	: Soluble in CHCl <sub>3</sub> , Chlorobenzene, Dichlorobenzene



## 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]

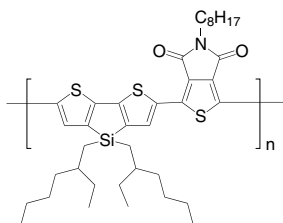
CAS No.	: 1266549-31-8
Grade	: Mw > 20,000 (GPC)
Formula	: (C <sub>41</sub> H <sub>53</sub> FO <sub>4</sub> S <sub>4</sub> ) <sub>n</sub>
UV	: 670 nm (in CH <sub>2</sub> Cl <sub>2</sub> )
Solubility	: Soluble in CHCl <sub>3</sub> , Chlorobenzene, Dichlorobenzene



## LT-S9066 | PDTSTPD

Poly[2,6-(4,4'-bis(ethylhexyl)dithiopheno[3,2-*b*:2',3'-*d*]silole)-*alt*-(1,3-(5-octyl-4*H*-thieno[3,4-*c*]pyrrole-4,6(5*H*)-dione))]

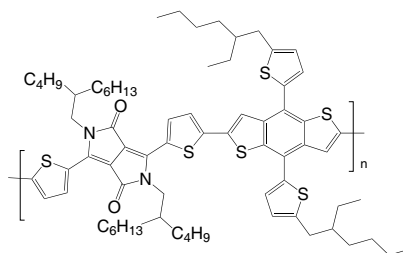
CAS No.	: 1279109-93-1
Grade	: Mw = 7,000~30,000 (GPC)
Formula	: (C <sub>38</sub> H <sub>53</sub> NO <sub>2</sub> S <sub>3</sub> Si) <sub>n</sub>
UV	: 614, 670 nm (film)
Solubility	: Soluble in CHCl <sub>3</sub> , Chlorobenzene, Dichlorobenzene



## LT-S9081 | PBDTT-DPP

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

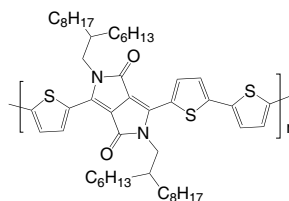
CAS No.	: 1380582-98-8
Grade	: Mw > 50,000 (GPC)
Formula	: (C <sub>72</sub> H <sub>94</sub> N <sub>2</sub> O <sub>2</sub> S <sub>6</sub> ) <sub>n</sub>
Solubility	: Soluble in CHCl <sub>3</sub> , Chlorobenzene, Dichlorobenzene



## LT-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]

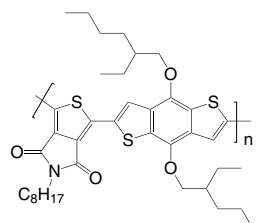
CAS No.	: 1198291-01-8
Grade	: Mw > 30,000 (GPC)
Formula	: (C <sub>50</sub> H <sub>72</sub> N <sub>2</sub> O <sub>2</sub> S <sub>3</sub> ) <sub>n</sub>
UV	: 830 nm (in CHCl <sub>3</sub> )
Solubility	: Soluble in CHCl <sub>3</sub> , Chlorobenzene, Dichlorobenzene



## 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))]

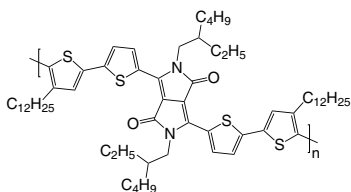
CAS No.	: 1223479-75-1
Grade	: Mw > 30,000 (GPC)
Formula	: (C <sub>40</sub> H <sub>53</sub> NO <sub>4</sub> S <sub>3</sub> ) <sub>n</sub>
UV	: 610 nm (in CHCl <sub>3</sub> )
Solubility	: Soluble in CHCl <sub>3</sub> , Chlorobenzene, Dichlorobenzene



## LT-S9112 | pBBTDPP2

Poly[3,6-bis(4'-dodecyl[2,2'-bithiophen]-5-yl)-2,5-bis(2-ethylhexyl)-2,5-dihydropyrrolo[3,4-c]pyrrole-1,4-dione]

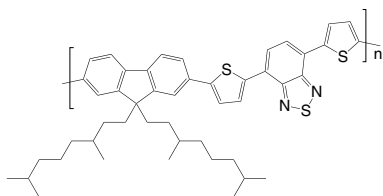
CAS No. : 1002094-22-5  
 Grade : Mw > 30,000 (GPC)  
 Formula : (C<sub>62</sub>H<sub>90</sub>N<sub>2</sub>O<sub>2</sub>S<sub>4</sub>)<sub>n</sub>  
 UV : 650 nm (in CHCl<sub>3</sub>)  
 Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene



## LT-S9113 | BisDMO-PFDTBT

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

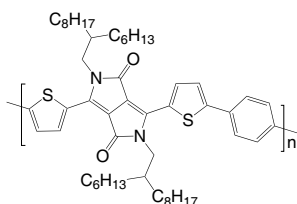
CAS No. : 1204005-82-2  
 Grade : Mw > 10,000 (GPC)  
 Formula : (C<sub>47</sub>H<sub>54</sub>N<sub>2</sub>S<sub>3</sub>)<sub>n</sub>  
 UV : 560 nm (in CHCl<sub>3</sub>)  
 Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene



## 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]

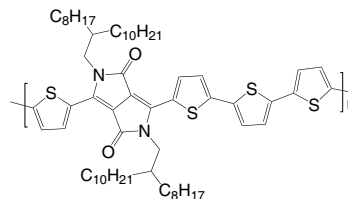
CAS No. : 1255939-39-9  
 Grade : Mw > 20,000 (GPC)  
 Formula : (C<sub>52</sub>H<sub>74</sub>N<sub>2</sub>O<sub>2</sub>S<sub>2</sub>)<sub>n</sub>  
 UV : 628 nm (in CHCl<sub>3</sub>)  
 Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene



## 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]

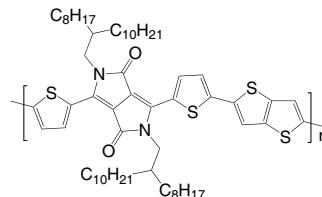
CAS No. : 1267540-03-3  
 Grade : Mw > 30,000 (GPC)  
 Formula : (C<sub>62</sub>H<sub>90</sub>N<sub>2</sub>O<sub>2</sub>S<sub>4</sub>)<sub>n</sub>  
 UV : 810 nm (in CHCl<sub>3</sub>)  
 Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene



## 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]

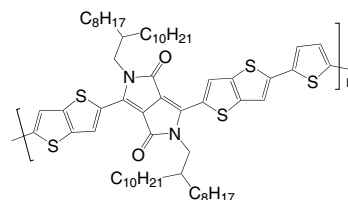
CAS No. : 1260685-65-1  
 Grade : Mw > 30,000 (GPC)  
 Formula : (C<sub>60</sub>H<sub>88</sub>N<sub>2</sub>O<sub>2</sub>S<sub>4</sub>)<sub>n</sub>  
 UV : 810 nm (in CHCl<sub>3</sub>)  
 Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene



## 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]

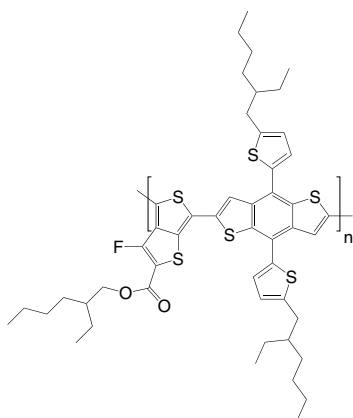
CAS No. : 1270977-98-4  
 Grade : Mw > 30,000 (GPC)  
 Formula : (C<sub>62</sub>H<sub>88</sub>N<sub>2</sub>O<sub>2</sub>S<sub>3</sub>)<sub>n</sub>  
 UV : 812 nm (in CHCl<sub>3</sub>)  
 Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene



**LT-S9139** | PTB7-Th

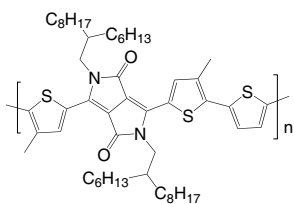
Poly[4,8-bis[5-(2-ethylhexyl)thiophen-2-yl]benzo[1,2-b:4,5-b']-dithiophene-2,6-diyl-*alt*-3-fluoro-2-[(2-ethylhexyl)carbonyl]-thieno[3,4-*b*]thiophene-4,6-diyl]

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

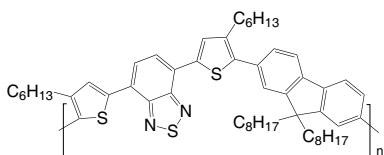
Poly[[2,5-bis(2-hexyldecyl)-2,3,5,6-tetrahydro-3,6-dioxopyrrolo[3,4-*c*]pyrrole-1,4-diyl]-*alt*-[3',3''-dimethyl-2,2':5',2''-terthiophene]-5,5''-diyl]

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** | F8TBT

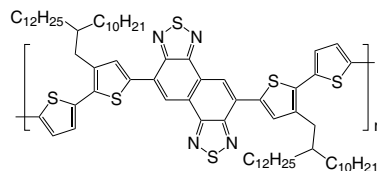
4-(5-(9,9-Dioctyl-9H-fluoren-2-yl)-4-hexylthiophen-2-yl)-7-(4-hexylthiophen-2-yl)benzo[*c*][1,2,5]thiadiazole

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

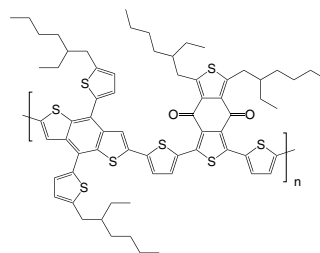
Poly[naphtho[1,2-*c*:5,6-*c'*]bis[1,2,5]thiadiazole-5,10-diyl[3,3''-bis(2-decyltetradecyl)[2,2':5',2'':5'',2'''-quaterthiophene]-5,5'''-diyl]]

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

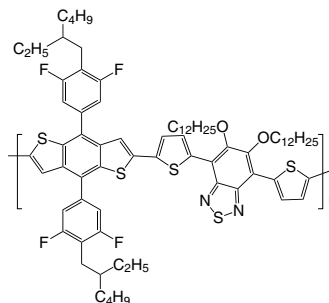
Poly[[4,8-bis[5-(2-ethylhexyl)-2-thienyl]-2-thienyl]benzo[1,2-*b*:4,5-*b'*]dithiophene-2,6-diyl]-2,5-thiophenediyl[5,7-bis(2-ethylhexyl)-4,8-dioxo-4H,8H-benzo[1,2-*c*:4,5-*c'*]dithiophene-1,3-diyl]]

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-S9278** | PTFBDT-BZS

Poly[[5,6-bis(dodecyloxy)-2,1,3-benzothiadiazole-4,7-diyl]-2,5-thiophenediyl[4,8-bis[4-(2-ethylhexyl)-3,5-difluorophenyl]benzo[1,2-*b*:4,5-*b'*]dithiophene-2,6-diyl]-2,5-thiophenediyl]

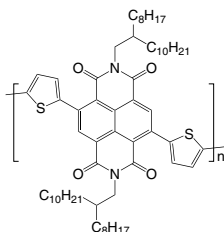
CAS No. : 1840869-86-4  
 Grade : Mw >20,000 (GPC)  
 Formula : (C<sub>76</sub>H<sub>94</sub>F<sub>4</sub>N<sub>2</sub>O<sub>2</sub>S<sub>5</sub>)<sub>n</sub>  
 UV : 414, 542 nm (in DCB)



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

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

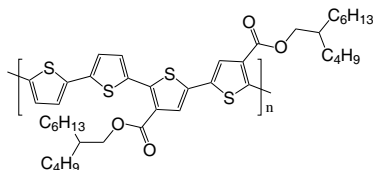
CAS No. : 1100243-40-0  
 Grade : Mw > 10,000 (GPC)  
 Formula : (C<sub>62</sub>H<sub>88</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>)<sub>n</sub>



## LT-S9288 | PDCBT

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

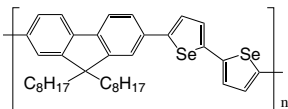
CAS No. : 1609536-17-5  
 Grade : Mw > 10,000 (GPC)  
 Formula : (C<sub>42</sub>H<sub>56</sub>O<sub>4</sub>S<sub>4</sub>)<sub>n</sub>  
 UV : 551 nm (film)



## LT-S9420 | F8Se2

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

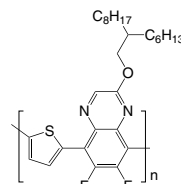
CAS No. : 898233-56-2  
 Formula : (C<sub>37</sub>H<sub>44</sub>Se<sub>2</sub>)<sub>n</sub>



## LT-S9435 | PTQ10

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

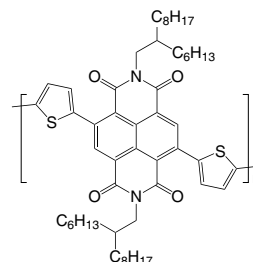
CAS No. : 2270233-86-6  
 Grade : Mw > 10,000 (GPC)  
 Formula : (C<sub>28</sub>H<sub>36</sub>F<sub>2</sub>N<sub>2</sub>O<sub>2</sub>)<sub>n</sub>  
 UV : A strong Absorption from 450 to 620 nm (in CHCl<sub>3</sub> and film)



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

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

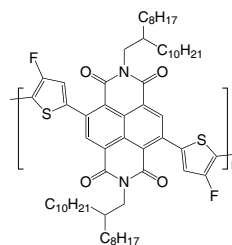
CAS No. : 1459168-70-7  
 Grade : Mw > 10,000 (GPC)  
 Formula : (C<sub>54</sub>H<sub>72</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>)<sub>n</sub>



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

Poly[[1,2,3,6,7,8-hexahydro-2,7-bis(2-octyldodecyl)-1,3,6,8-tetraoxobenz[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

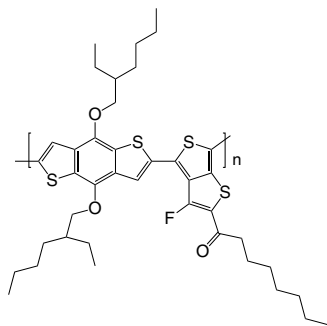




## LT-S9452 | PBDDTTT-CF

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]]

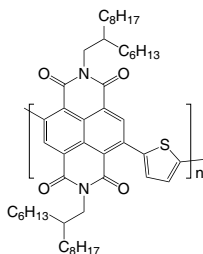
CAS No. : 1379592-65-0  
Grade : Mw > 50,000 (GPC)  
Formula : (C<sub>40</sub>H<sub>51</sub>FO<sub>3</sub>S<sub>4</sub>)<sub>n</sub>



## 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}

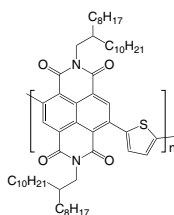
CAS No. : 1675973-74-6  
Grade : Mw > 10,000 (GPC)  
Formula : (C<sub>50</sub>H<sub>70</sub>N<sub>2</sub>O<sub>4</sub>S)<sub>n</sub>  
Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene



## 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]

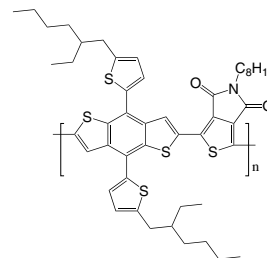
CAS No. : 1236111-76-4  
Grade : Mw > 10,000 (GPC)  
Formula : (C<sub>58</sub>H<sub>86</sub>N<sub>2</sub>O<sub>4</sub>S)<sub>n</sub>  
Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene



## 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]]

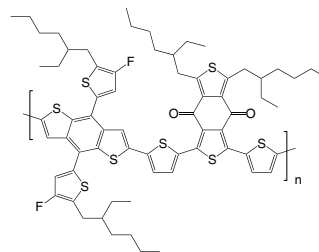
CAS No. : 1426534-44-2  
Grade : Mw = 50,000-150,000 (GPC)  
Formula : (C<sub>48</sub>H<sub>57</sub>NO<sub>2</sub>S<sub>5</sub>)<sub>n</sub>  
UV : 557, 614 nm (film)



## LT-S9457 | PBDB-T-F

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]

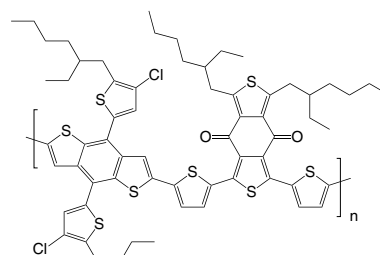
CAS No. : 1802013-83-7  
Grade : Mw = 10000~100000 (GPC)  
Formula : (C<sub>68</sub>H<sub>76</sub>F<sub>2</sub>O<sub>2</sub>S<sub>8</sub>)<sub>n</sub>  
UV : 614 nm (in CHCl<sub>3</sub>)



## 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]

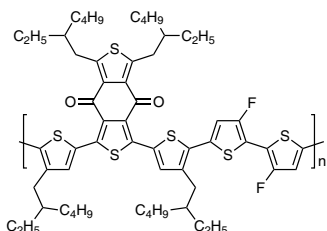
CAS No. : 2239295-71-5  
Grade : Mw > 10,000 (GPC)  
Formula : (C<sub>68</sub>H<sub>76</sub>Cl<sub>2</sub>O<sub>2</sub>S<sub>8</sub>)<sub>n</sub>  
PCE : 14%



## 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]]

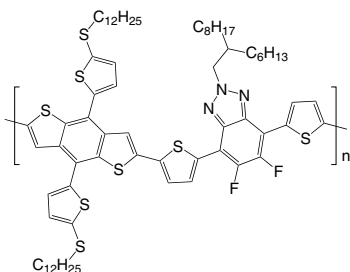
CAS No. : 1890205-85-2  
 Grade : Mw > 10,000 (GPC)  
 Formula :  $(C_{58}H_{72}F_2O_2S_6)_n$   
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene, Dichlorobenzene



## 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]

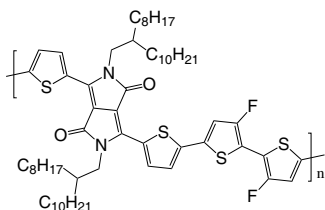
CAS No. : 1887136-03-9  
 Grade : Mw = 50,000-150,000 (GPC)  
 Formula :  $(C_{72}H_{93}F_2N_3S_6)_n$   
 PCE : 11.77%



## 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)]

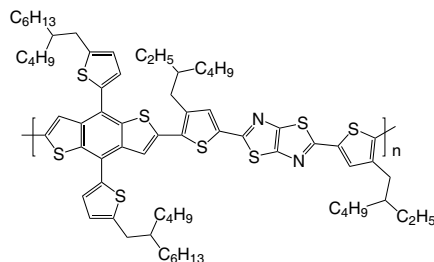
CAS No. : 1926166-46-2  
 Grade : Mw = 20,000~200,000 (GPC)  
 Formula :  $(C_{70}H_{104}F_2N_2O_2S_4)_n$



## 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]]

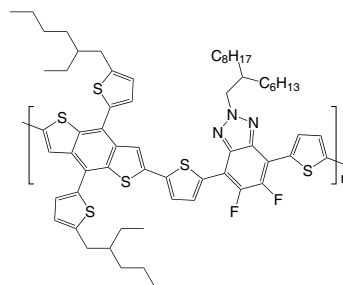
CAS No. : 2091841-68-6  
 Grade : Mw = 10,000-50,000 (GPC)  
 Formula :  $(C_{70}H_{92}N_2S_8)_n$



## 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]

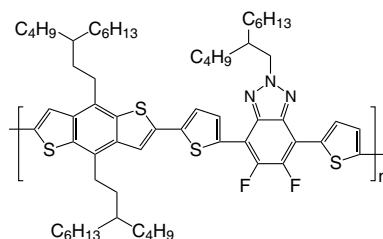
CAS No. : 1887136-01-7  
 Grade : Mw > 10,000 (GPC)  
 Formula :  $(C_{64}H_{77}F_2N_3S_6)_n$   
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene, Dichlorobenzene



## LT-S9497 | FTAZ

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

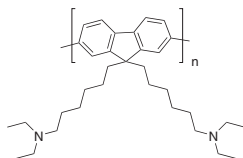
Grade : Mw > 10,000 (GPC)  
 Formula :  $(C_{62}H_{85}F_2N_3S_4)_n$   
 PCE : 12.1% (with ITIC-Th1)



## LT-S9506 | PFN100

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

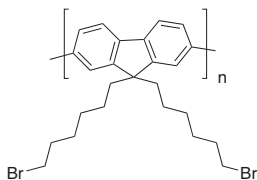
CAS No. : 1305335-08-3  
 Grade : Mw = 30,000~100,000 (GPC)  
 Formula :  $(C_{33}H_{50}N_2)_n$   
 HOMO : -5.54 eV  
 LUMO : -3.58 eV  
 Mobility :  $8.14 \times 10^{-4} \text{ cm}^2/\text{Vs}$



## LT-S9509

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

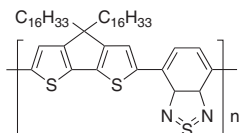
Grade : Mw 30,000~100,000  
 Formula :  $(C_{25}H_{30}Br_2)_n$



## 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)]

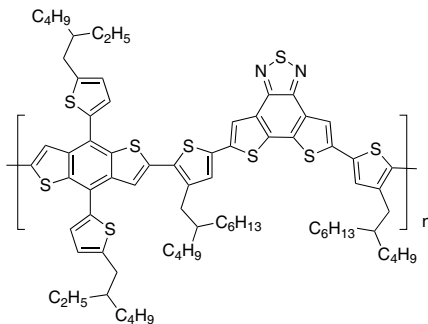
CAS No. : 1079041-67-0  
 Grade : Mw > 10000  
 Formula :  $(C_{47}H_{70}N_2S_3)_n$



## 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)]

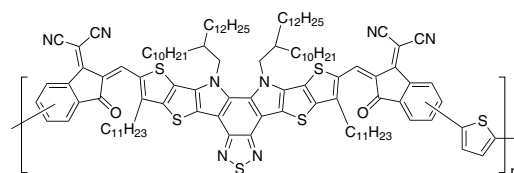
Grade : Mw > 30000  
 Formula :  $(C_{76}H_{94}N_2S_9)_n$   
 UV : 580 nm (in  $CHCl_3$ )  
 HOMO : -5.28 eV  
 LUMO : -3.32 eV



## 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]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]

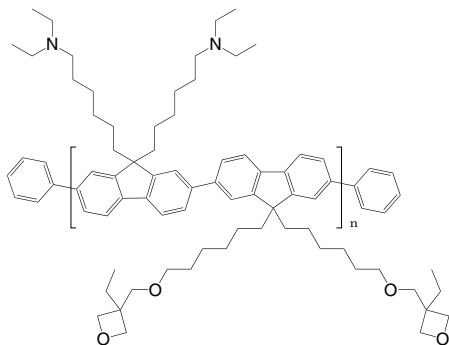
CAS No. : 2411023-04-4  
 Grade : Mw > 10000  
 Formula :  $(C_{118}H_{154}N_8O_2S_6)_n$   
 UV : 765 nm (in  $CHCl_3$ )  
 HOMO : -5.61 eV  
 LUMO : -3.80 eV



### LT-N177 | PFN-OX

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

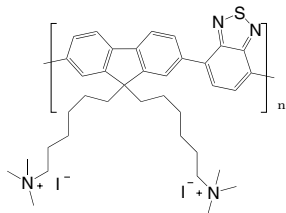
CAS No. : 1345045-27-3  
 Formula :  $(C_{70}H_{102}N_2O_4)_n C_{12}H_{10}$   
 UV :  $378 \pm 10$  nm (in THF)  
 Solubility : Soluble in THF,  $CHCl_3$



### LT-N181 | PFNIBT

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

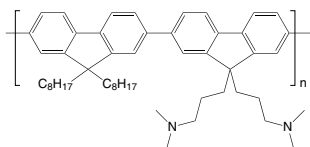
Grade : Mw > 10,000 (GPC)  
 Formula :  $(C_{35}H_{42}N_4)_n$   
 UV : 317, 448 nm (in DMSO)  
 Solubility : Soluble in DMSO



### LT-N4027 | PFN-DOF

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

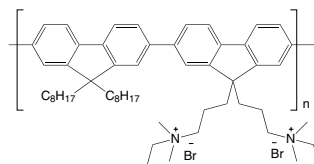
CAS No. : 673474-75-4  
 Grade : Mw > 10,000 (GPC)  
 Formula :  $(C_{52}H_{70}N_2)_n$   
 UV : 378 nm (in  $CH_2Cl_2$ )  
 PL : 414 nm (in  $CH_2Cl_2$ )  
 Solubility : Soluble in  $CH_2Cl_2$ ,  $CHCl_3$ , Toluene



### 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

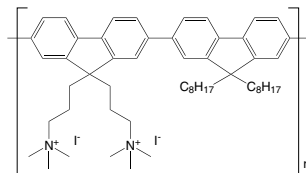
CAS No. : 889672-99-5  
 Grade : Mw > 10,000 (GPC)  
 Formula :  $(C_{56}H_{80}N_2Br_2)_n$   
 UV : 375 nm (in MeOH)  
 PL : 440 nm (in MeOH)  
 Solubility : Soluble in MeOH



### LT-N8006 | PFN-diiodine salt

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

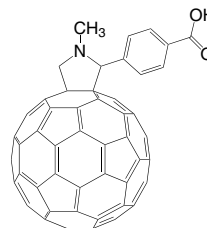
CAS No. : 1687752-60-8  
 Grade : Mw = 10,000~100,000 (GPC)  
 Formula :  $(C_{56}H_{80}N_2I_2)_n$



### LT-S9161 | C60-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

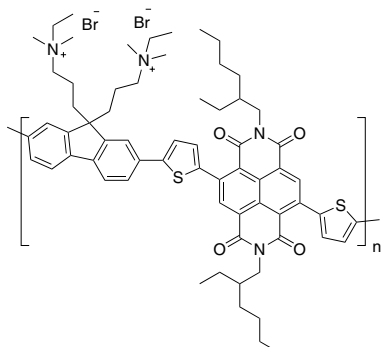
CAS No. : 631918-72-4  
 Grade : >99%  
 Formula :  $C_{70}H_{11}NO_2$   
 M.W. : 897.84 g/mole  
 UV : 345 nm (in  $CH_2Cl_2$ )



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

Poly[[2,7-bis(2-ethylhexyl)-1,2,3,6,7,8-hexahydro-1,3,6,8-tetraoxobenzo[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]

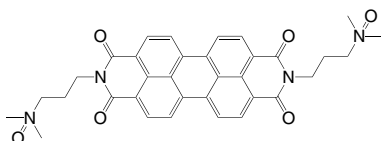
CAS No. : 2169941-79-9  
 Grade : Mw > 10,000 (GPC)  
 Formula : (C<sub>65</sub>H<sub>80</sub>Br<sub>2</sub>N<sub>4</sub>O<sub>4</sub>S<sub>2</sub>)<sub>n</sub>  
 UV : 380, 580 nm (in Methanol)



### 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

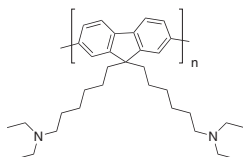
CAS No. : 1558023-86-1  
 Grade : >97%  
 Formula : C<sub>34</sub>H<sub>32</sub>N<sub>4</sub>O<sub>6</sub>  
 M.W. : 592.64 g/mole  
 HOMO : -6.21 eV  
 LUMO : -3.63 eV



### LT-S9506 | PFN100

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

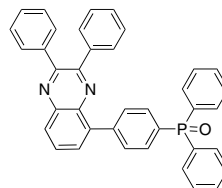
CAS No. : 1305335-08-3  
 Grade : Mw = 30,000~100,000 (GPC)  
 Formula : (C<sub>33</sub>H<sub>50</sub>N<sub>2</sub>)<sub>n</sub>  
 HOMO : -5.54 eV  
 LUMO : -3.58 eV  
 Mobility : 8.14x10<sup>-4</sup> cm<sup>2</sup>/Vs



### LT-S9562 | QxTPPO1

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

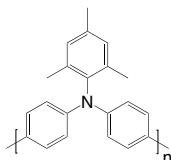
Grade : Sublimed >99%  
 Formula : C<sub>38</sub>H<sub>27</sub>N<sub>2</sub>OP  
 M.W. : 558.61 g/mole  
 UV : 265 nm (IPA)  
 HOMO : -6.22 eV  
 LUMO : -3.01 eV



### LT-N168 | PTAA

Poly[bis(4-phenyl)(2,4,6-trimethylphenyl)amine]

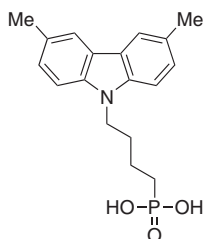
CAS No. : 1333317-99-9  
 Grade : Mw = 20,000~100,000 (GPC)  
 Formula :  $(C_{21}H_{19}N)_n$   
 UV : 371, 388 nm (in  $CH_2Cl_2$ )  
 PL : 424 nm (in  $CH_2Cl_2$ )  
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene, Dichlorobenzene



### LT-S9557 | Me-4PACz

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

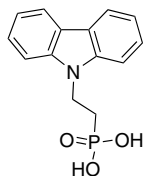
Grade : >99%  
 Formula :  $C_{18}H_{22}NO_3P$   
 M.W. : 331.35 g/mole  
 HOMO : -5.74 eV  
 LUMO : -2.49 eV



### LT-S9566 | 2PACz

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

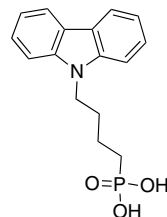
CAS No. : 20999-38-6  
 Grade : >99%  
 Formula :  $C_{14}H_{14}NO_3P$   
 M.W. : 275.24 g/mole



### LT-S9567 | 4PACz

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

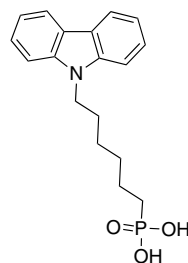
CAS No. : 20999-36-4  
 Grade : >99%  
 Formula :  $C_{16}H_{18}NO_3P$   
 M.W. : 303.29 g/mole



### LT-S9568 | 6PACz

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

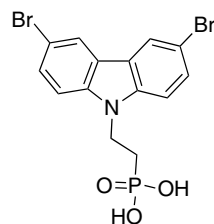
Grade : >98%  
 Formula :  $C_{18}H_{22}NO_3P$   
 M.W. : 331.35 g/mole



### LT-S9569 | Br-2PACz

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

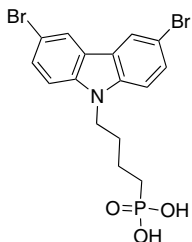
Grade : >98%  
 Formula :  $C_{14}H_{12}Br_2NO_3P$   
 M.W. : 433.03 g/mole  
 HOMO : -6.01 eV  
 LUMO : -2.64 eV



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

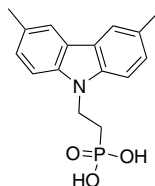
(4-(3,6-Dibromo-9H-carbazol-9-yl)butyl)phosphonic acid

Grade : >98%  
 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

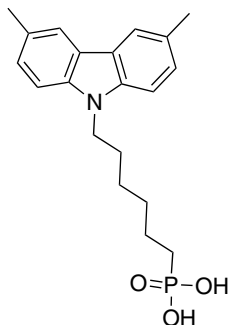
(2-(3,6-Dimethyl-9H-carbazol-9-yl)ethyl)phosphonic acid

Grade : >98%  
 Formula : C<sub>16</sub>H<sub>18</sub>NO<sub>3</sub>P  
 M.W. : 303.29 g/mole

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

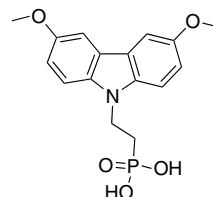
(6-(3,6-Dimethyl-9H-carbazol-9-yl)hexyl)phosphonic acid

Grade : >98%  
 Formula : C<sub>20</sub>H<sub>26</sub>NO<sub>3</sub>P  
 M.W. : 359.4 g/mole

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

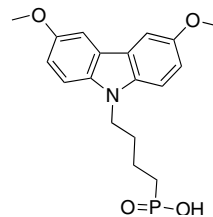
(2-(3,6-Dimethoxy-9H-carbazol-9-yl)ethyl)phosphonic acid

CAS No. : 2377770-18-6  
 Grade : >98%  
 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

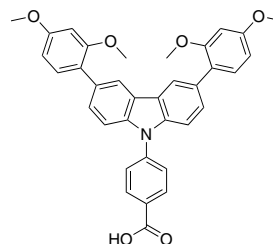
(4-(3,6-Dimethoxy-9H-carbazol-9-yl)butyl)phosphonic acid

Grade : >98%  
 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

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

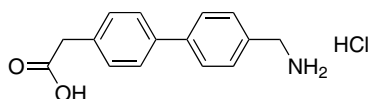
**NEW**

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

Grade : >99%

Formula :  $C_{15}H_{16}ClNO_2$

M.W. : 277.75 g/mole



LT-S9648

3PACz

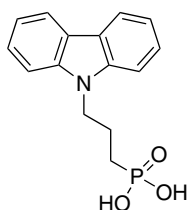
**NEW**

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

Grade : >99%

Formula :  $C_{15}H_{16}NO_3P$

M.W. : 289.27 g/mole



LT-S9649

Br-2EPT

**NEW**

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

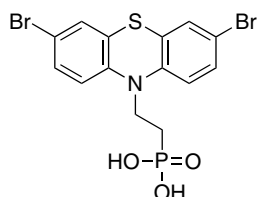
Grade : >99%

Formula :  $C_{14}H_{12}BrNO_3PS$

M.W. : 465.10 g/mole

HOMO : -5.47 eV

LUMO : -2.12 eV



LT-S9650

LS1

**NEW**

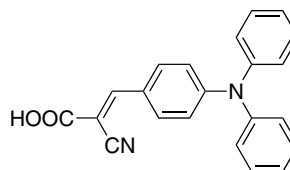
2-Cyano-3-[4-(N-phenylanilino)phenyl]prop-2-enoic acid

Case No. : 30388-31-9

Grade : >99%

Formula :  $C_{22}H_{16}N_2O_2$

M.W. : 340.37 g/mole



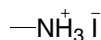


## Perovskite Precursor

## LT-S9126 | MAI

## Methylammonium iodide

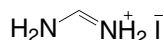
CAS No. : 14965-49-2  
 Grade : >99.5% , recrystallized 4 times  
 Formula : CH<sub>6</sub>IN  
 M.W. : 158.97 g/mole



## LT-S9136 | FAI

## Formamidinium iodide

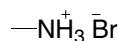
CAS No. : 879643-71-7  
 Grade : >99.5% , recrystallized 4 times  
 Formula : CH<sub>5</sub>IN<sub>2</sub>  
 M.W. : 171.97 g/mole



## LT-S9137 | MABr

## Methylammonium bromide

CAS No. : 6876-37-5  
 Grade : >99.5% , recrystallized 4 times  
 Formula : CH<sub>6</sub>BrN  
 M.W. : 111.97 g/mole

LT-S9147 | Pbl<sub>2</sub>

## Lead(II) iodide

CAS No. : 10101-63-0  
 Grade : 99.999% (trace metals basis)  
 Formula : Pbl<sub>2</sub>  
 M.W. : 461.01 g/mole

LT-S9148 | PbCl<sub>2</sub>

## Lead(II) chloride

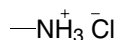
CAS No. : 7758-95-4  
 Grade : 99.999% (trace metals basis)  
 Formula : PbCl<sub>2</sub>  
 M.W. : 278.11 g/mole



## LT-S9151 | MACl

## Methylammonium chloride

CAS No. : 593-51-1  
 Grade : >99.5% , recrystallized 4 times  
 Formula : CH<sub>6</sub>ClN  
 M.W. : 67.52 g/mole

LT-S9152 | PbBr<sub>2</sub>

## Lead(II) bromide

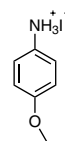
CAS No. : 10031-22-8  
 Grade : 99.999% trace metals basis  
 Formula : PbBr<sub>2</sub>  
 M.W. : 367.01 g/mole



## LT-S9206 |

## 4-Methoxyphenylammonium iodide

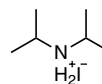
Grade : >99.5% , recrystallized 4 times  
 Formula : C<sub>7</sub>H<sub>10</sub>INO  
 M.W. : 251.06 g/mole



## LT-S9207 |

## Diisopropylammonium iodide

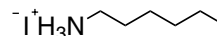
Grade : >99.5% , recrystallized 4 times  
 Formula : C<sub>6</sub>H<sub>16</sub>IN  
 M.W. : 229.1 g/mole



## LT-S9208 |

## Hexylammonium iodide

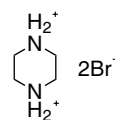
Grade : >99.5% , recrystallized 4 times  
 Formula : C<sub>6</sub>H<sub>16</sub>IN+  
 M.W. : 229.1 g/mole



## LT-S9217 |

## Piperazine-1,4-dium bromide

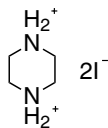
CAS No. : 59813-05-7  
 Grade : >99.5% , recrystallized 4 times  
 Formula : C<sub>4</sub>H<sub>12</sub>Br<sub>2</sub>N<sub>2</sub>  
 M.W. : 247.96 g/mole



## LT-S9218

## Piperazine-1,4-dium iodide

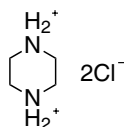
CAS No. : 58464-47-4  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_4H_{12}N_2$   
 M.W. : 341.96 g/mole



## LT-S9219

## Piperazine-1,4-dium chloride

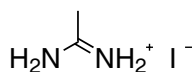
CAS No. : 142-64-3  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_4H_{12}Cl_2N_2$   
 M.W. : 159.06 g/mole



## LT-S9220

## Acetamidinium iodide

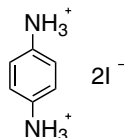
CAS No. : 1452099-14-7  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_2H_7IN_2$   
 M.W. : 185.99 g/mole



## LT-S9224

## 1,4-Benzene diammonium iodide

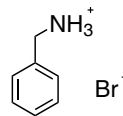
CAS No. : 116469-02-4  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_6H_{10}I_2N_2$   
 M.W. : 363.97 g/mole



## LT-S9225

## Benzylammonium bromide

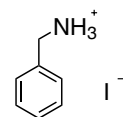
CAS No. : 37488-40-7  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_7H_{10}BrN$   
 M.W. : 188.06 g/mole



## LT-S9226

## Benzylammonium iodide

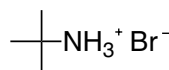
Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_7H_{10}IN$   
 M.W. : 235.07 g/mole



## LT-S9227

## t-Butylammonium bromide

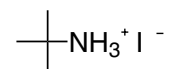
CAS No. : 60469-70-7  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_4H_{12}BrN$   
 M.W. : 154.05 g/mole



## LT-S9228

## t-Butylammonium iodide

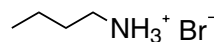
CAS No. : 39557-45-4  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_4H_{12}IN$   
 M.W. : 201.05 g/mole



## 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

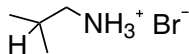


## Perovskite Precursor

## LT-S9230

## iso-Butylammonium bromide

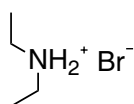
Grade : >99.5%, recrystallized 4 times  
 Formula :  $C_4H_{12}BrN$   
 M.W. : 154.05 g/mole



## LT-S9231

## Diethylammonium bromide

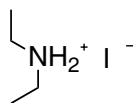
CAS No. : 6274-12-0  
 Grade : >99.5%, recrystallized 4 times  
 Formula :  $C_4H_{12}BrN$   
 M.W. : 154.05 g/mole



## LT-S9232

## Diethylammonium iodide

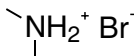
CAS No. : 19833-78-4  
 Grade : >99.5%, recrystallized 4 times  
 Formula :  $C_4H_{12}IN$   
 M.W. : 201.05 g/mole



## LT-S9233

## Dimethylammonium bromide

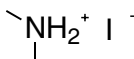
CAS No. : 6912-12-5  
 Grade : >99.5%, recrystallized 4 times  
 Formula :  $C_2H_8BrN$   
 M.W. : 126 g/mole



## LT-S9234

## Dimethylammonium iodide

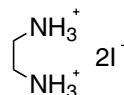
CAS No. : 51066-74-1  
 Grade : >99.5%, recrystallized 4 times  
 Formula :  $C_2H_8IN$   
 M.W. : 173 g/mole



## LT-S9235

## 1,2-Diammoniummethane iodide

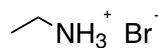
CAS No. : 5700-49-2  
 Grade : >99.5%, recrystallized 4 times  
 Formula :  $C_2H_{10}I_2N_2$   
 M.W. : 315.92 g/mole



## LT-S9236

## Ethylammonium bromide

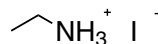
CAS No. : 593-55-5  
 Grade : >99.5%, recrystallized 4 times  
 Formula :  $C_2H_8BrN$   
 M.W. : 125.99 g/mole



## LT-S9237

## Ethylammonium iodide

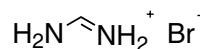
CAS No. : 506-58-1  
 Grade : >99.5%, recrystallized 4 times  
 Formula :  $C_2H_8IN$   
 M.W. : 173 g/mole



## LT-S9238 FABr

## Formamidinium bromide

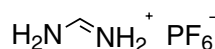
CAS No. : 146958-06-7  
 Grade : >99.5%, recrystallized 4 times  
 Formula :  $CH_5BrN_2$   
 M.W. : 124.97 g/mole



## LT-S9239

## Formamidinium hexafluorophosphate

Grade : >99.5%, recrystallized 4 times  
 Formula :  $CH_5F_6N_2P$   
 M.W. : 190.03 g/mole

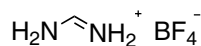


## Perovskite Precursor

## LT-S9240

## Formamidinium tetrafluoroborate

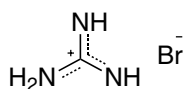
Grade : >99.5%, recrystallized 4 times  
 Formula :  $\text{CH}_5\text{BF}_4\text{N}_2$   
 M.W. : 131.87 g/mole



## LT-S9241

## Guanidinium bromide

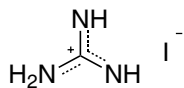
CAS No. : 19244-98-5  
 Grade : >99.5%, recrystallized 4 times  
 Formula :  $\text{CH}_6\text{BrN}_3$   
 M.W. : 139.98 g/mole



## LT-S9242

## Guanidinium iodide

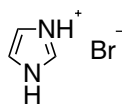
CAS No. : 19227-70-4  
 Grade : >99.5%, recrystallized 4 times  
 Formula :  $\text{CH}_6\text{IN}_3$   
 M.W. : 186.98 g/mole



## LT-S9243

## Imidazolium bromide

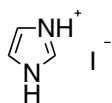
CAS No. : 101023-55-6  
 Grade : >99.5%, recrystallized 4 times  
 Formula :  $\text{C}_3\text{H}_5\text{BrN}_2$   
 M.W. : 148.99 g/mole



## LT-S9244

## Imidazolium iodide

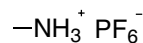
CAS No. : 68007-08-9  
 Grade : >99.5%, recrystallized 4 times  
 Formula :  $\text{C}_3\text{H}_5\text{IN}_2$   
 M.W. : 195.99 g/mole



## LT-S9245

## Methylammonium hexafluorophosphate

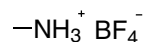
CAS No. : 28302-50-3  
 Grade : >99.5%, recrystallized 4 times  
 Formula :  $\text{CH}_6\text{PF}_6\text{N}$   
 M.W. : 177.03 g/mole



## LT-S9246

## Methylammonium tetrafluoroborate

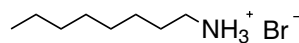
CAS No. : 42539-74-2  
 Grade : >99.5%, recrystallized 4 times  
 Formula :  $\text{CH}_6\text{BF}_4\text{N}$   
 M.W. : 118.87 g/mole



## LT-S9247

## n-Octylammonium bromide

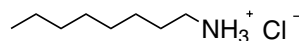
CAS No. : 14846-47-0  
 Grade : >99.5%, recrystallized 4 times  
 Formula :  $\text{C}_8\text{H}_{20}\text{BrN}$   
 M.W. : 210.16 g/mole



## LT-S9248

## n-Octylammonium chloride

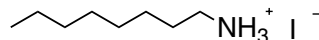
CAS No. : 142-95-0  
 Grade : >99.5%, recrystallized 4 times  
 Formula :  $\text{C}_8\text{H}_{20}\text{ClN}$   
 M.W. : 165.7 g/mole



## LT-S9249

## n-Octylammonium iodide

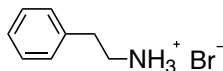
CAS No. : 60734-63-6  
 Grade : >99.5%, recrystallized 4 times  
 Formula :  $\text{C}_8\text{H}_{20}\text{IN}$   
 M.W. : 257.16 g/mole



## LT-S9250

## Phenethylammonium bromide

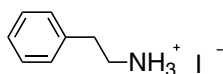
CAS No. : 53916-94-2  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_8H_{12}BrN$   
 M.W. : 202.09 g/mole



## LT-S9251

## Phenethylammonium iodide

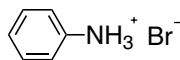
CAS No. : 151059-43-7  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_8H_{12}IN$   
 M.W. : 249.09 g/mole



## LT-S9252

## Phenylammonium bromide

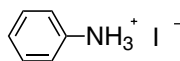
CAS No. : 542-11-0  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_6H_8BrN$   
 M.W. : 174.04 g/mole



## LT-S9253

## Phenylammonium iodide

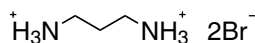
CAS No. : 45497-73-2  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_6H_8IN$   
 M.W. : 221.04 g/mole



## LT-S9254

## 1,3-Diammoniumpropane bromide

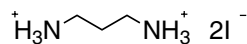
CAS No. : 18773-03-0  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_3H_{12}Br_2N_2$   
 M.W. : 235.95 g/mole



## LT-S9255

## 1,3-Diammoniumpropane iodide

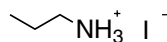
CAS No. : 120675-53-8  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_3H_{12}I_2N_2$   
 M.W. : 329.95 g/mole



## LT-S9256

## n-Propylammonium iodide

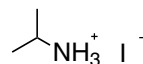
CAS No. : 14488-45-0  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_3H_{10}IN$   
 M.W. : 187.02 g/mole



## LT-S9257

## iso-Propylammonium iodide

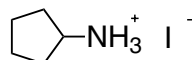
Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_3H_{10}IN$   
 M.W. : 187.02 g/mole



## LT-S9258

## Pyrrolidinium iodide

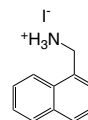
CAS No. : 45361-12-4  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_4H_{10}IN$   
 M.W. : 199.03 g/mole



## LT-S9286

## 1-Naphthylmethylamine iodide

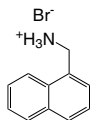
CAS No. : 256222-11-4  
 Grade : >99.5% , recrystallized 4 times  
 Formula :  $C_{11}H_{12}IN$   
 M.W. : 285.12 g/mole



## 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

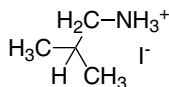
CAS No. : 916849-52-0  
 Grade : >99%  
 Formula :  $C_4H_{14}I_2N_2$   
 M.W. : 343.98 g/mole



## LT-S9301

## iso-Butylammonium iodide

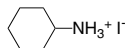
CAS No. : 205508-75-4  
 Grade : >99%  
 Formula :  $C_4H_{12}IN$   
 M.W. : 201.05 g/mole



## LT-S9302

## Cyclohexylammonium iodide

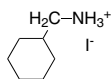
CAS No. : 45492-87-3  
 Grade : >99%  
 Formula :  $C_6H_{14}IN$   
 M.W. : 227.09 g/mole



## LT-S9303

## Cyclohexylmethylammonium iodide

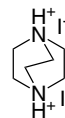
Grade : >99%  
 Formula :  $C_7H_{16}IN$   
 M.W. : 241.11 g/mole



## LT-S9304

## 1,4-Diazabicyclo[2,2,2]octane-1,4-dium iodide

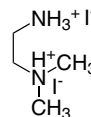
CAS No. : 33322-06-4  
 Grade : >99%  
 Formula :  $C_6H_{14}I_2N_2$   
 M.W. : 368 g/mole



## LT-S9305

## N,N-Dimethyl-1,2-ethanediammonium iodide

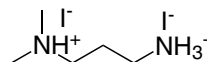
CAS No. : 244234-52-4  
 Grade : >99%  
 Formula :  $C_4H_{14}I_2N_2$   
 M.W. : 343.98 g/mole



## LT-S9306

## N,N-Dimethyl-1,3-propanediammonium iodide

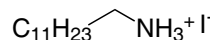
Grade : >99%  
 Formula :  $C_5H_{16}I_2N_2$   
 M.W. : 358 g/mole



## LT-S9307

## n-Dodecylammonium iodide

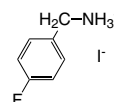
CAS No. : 34099-97-3  
 Grade : >99%  
 Formula :  $C_{12}H_{28}IN$   
 M.W. : 313.26 g/mole



## LT-S9308

## 4-Fluoro-benzylammonium iodide

CAS No. : 2097121-30-5  
 Grade : >99%  
 Formula :  $C_7H_9FIN$   
 M.W. : 253.06 g/mole

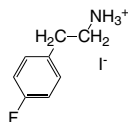


## Perovskite Precursor

## LT-S9309

## 4-Fluoro-phenethylammonium iodide

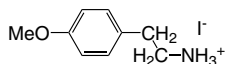
CAS No. : 1413269-55-2  
 Grade : >99%  
 Formula : C<sub>8</sub>H<sub>11</sub>FIN  
 M.W. : 267.08 g/mole



## LT-S9311

## 4-Methoxy-phenethylammonium iodide

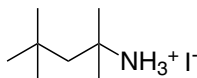
Grade : >99%  
 Formula : C<sub>9</sub>H<sub>14</sub>INO  
 M.W. : 279.12 g/mole



## LT-S9312

## tert-Octylammonium iodide

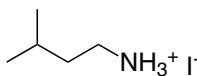
Grade : >99%  
 Formula : C<sub>8</sub>H<sub>20</sub>IN  
 M.W. : 257.16 g/mole



## LT-S9313

## iso-Pentylammonium iodide

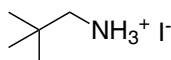
Grade : >99%  
 Formula : C<sub>5</sub>H<sub>14</sub>IN  
 M.W. : 215.06 g/mole



## LT-S9314

## neo-Pentylammonium iodide

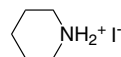
Grade : >99%  
 Formula : C<sub>5</sub>H<sub>14</sub>IN  
 M.W. : 215.08 g/mole



## LT-S9315

## Piperidinium iodide

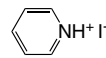
CAS No. : 21701-42-8  
 Grade : >99%  
 Formula : C<sub>5</sub>H<sub>12</sub>IN  
 M.W. : 213.06 g/mole



## LT-S9316

## Pyridinium iodide

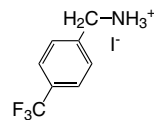
CAS No. : 18820-83-2  
 Grade : >99%  
 Formula : C<sub>5</sub>H<sub>6</sub>IN  
 M.W. : 207.01 g/mole



## LT-S9317

## 4-Trifluoromethyl-benzylammonium iodide

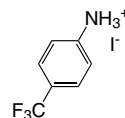
Grade : >99%  
 Formula : C<sub>8</sub>H<sub>9</sub>F<sub>3</sub>IN  
 M.W. : 303.06 g/mole



## LT-S9318

## 4-Trifluoromethyl-phenylammonium iodide

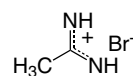
Grade : >99%  
 Formula : C<sub>7</sub>H<sub>7</sub>F<sub>3</sub>N  
 M.W. : 289.04 g/mole



## LT-S9319

## Acetamidinium bromide

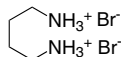
CAS No. : 1040352-82-6  
 Grade : >99%  
 Formula : C<sub>2</sub>H<sub>7</sub>BrN<sub>2</sub>  
 M.W. : 138.99 g/mole



## LT-S9320

Butane-1,4-diammonium bromide

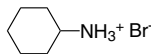
CAS No. : 18773-04-1  
 Grade : >99%  
 Formula :  $C_4H_{14}Br_2N_2$   
 M.W. : 249.98 g/mole



## LT-S9321

Cyclohexylammonium bromide

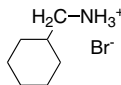
CAS No. : 26227-54-3  
 Grade : >99%  
 Formula :  $C_6H_{14}BrN$   
 M.W. : 180.09 g/mole



## LT-S9322

Cyclohexylmethylammonium bromide

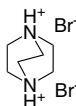
Grade : >99%  
 Formula :  $C_7H_{16}BrN$   
 M.W. : 194.11 g/mole



## LT-S9323

1,4-Diazabicyclo[2,2,2]octane-1,4-dium bromide

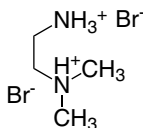
CAS No. : 54581-69-0  
 Grade : >99%  
 Formula :  $C_6H_{14}Br_2N_2$   
 M.W. : 274 g/mole



## LT-S9324

N,N-Dimethylethane-1,2-ethanediammonium bromide

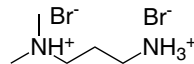
CAS No. : 1245570-04-0  
 Grade : >99%  
 Formula :  $C_4H_{14}Br_2N_2$   
 M.W. : 249.98 g/mole



## LT-S9325

N,N-Dimethyl-1,3-propanediammonium bromide

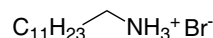
Grade : >99%  
 Formula :  $C_5H_{16}Br_2N_2$   
 M.W. : 264 g/mole



## LT-S9326

n-Dodecylammonium bromide

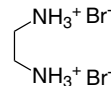
CAS No. : 26204-55-7  
 Grade : >99%  
 Formula :  $C_{12}H_{28}BrN$   
 M.W. : 266.26 g/mole



## LT-S9327

Ethane-1,2-diammonium bromide

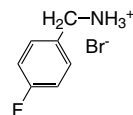
CAS No. : 624-59-9  
 Grade : >99%  
 Formula :  $C_2H_{10}Br_2N_2$   
 M.W. : 221.92 g/mole



## LT-S9328

4-Fluoro-benzylammonium bromide

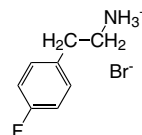
Grade : >99%  
 Formula :  $C_7H_9FBrN$   
 M.W. : 206.06 g/mole



## LT-S9329

4-Fluoro-phenethylammonium bromide

CAS No. : 1807536-06-6  
 Grade : >99%  
 Formula :  $C_8H_{11}BrFN$   
 M.W. : 220.08 g/mole

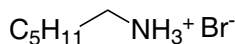




## LT-S9330

## n-Hexylammonium bromide

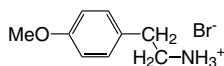
CAS No. : 7334-95-4  
 Grade : >99%  
 Formula :  $C_6H_{16}BrN$   
 M.W. : 182.1 g/mole



## LT-S9331

## 4-Methoxy-phenethylammonium bromide

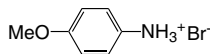
Grade : >99%  
 Formula :  $C_9H_{14}BrNO$   
 M.W. : 232.12 g/mole



## LT-S9332

## 4-Methoxy-phenylammonium bromide

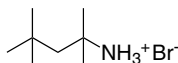
CAS No. : 116436-31-8  
 Grade : >99%  
 Formula :  $C_9H_{14}BrNO$   
 M.W. : 232.12 g/mole



## LT-S9333

## tert-Octylammonium bromide

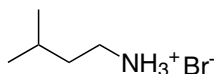
CAS No. : 1093859-61-0  
 Grade : >99%  
 Formula :  $C_8H_{20}BrN$   
 M.W. : 210.16 g/mole



## LT-S9334

## iso-Pentylammonium bromide

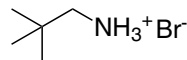
Grade : >99%  
 Formula :  $C_5H_{14}BrN$   
 M.W. : 168.08 g/mole



## LT-S9335

## neo-Pentylammonium bromide

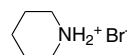
Grade : >99%  
 Formula :  $C_5H_{14}BrN$   
 M.W. : 168.08 g/mole



## LT-S9336

## Piperidinium bromide

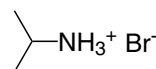
CAS No. : 14066-85-4  
 Grade : >99%  
 Formula :  $C_5H_{12}BrN$   
 M.W. : 166.06 g/mole



## LT-S9337

## iso-Propylammonium bromide

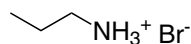
CAS No. : 29552-58-7  
 Grade : >99%  
 Formula :  $C_3H_{10}BrN$   
 M.W. : 140.02 g/mole



## LT-S9338

## n-Propylammonium bromide

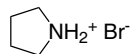
CAS No. : 4905-83-3  
 Grade : >99%  
 Formula :  $C_3H_{10}BrN$   
 M.W. : 140.02 g/mole



## LT-S9339

## Pyrrolidinium bromide

CAS No. : 55810-80-5  
 Grade : >99%  
 Formula :  $C_4H_{10}BrN$   
 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

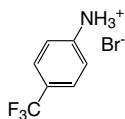
Grade : >99%  
 Formula : C<sub>8</sub>H<sub>9</sub>F<sub>3</sub>BrN  
 M.W. : 256.06 g/mole



## LT-S9342

## 4-Trifluoromethyl-phenylammonium bromide

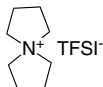
Grade : >99%  
 Formula : C<sub>7</sub>H<sub>7</sub>BrF<sub>3</sub>N  
 M.W. : 242.03 g/mole



## LT-S9343

## 5-Azaspiro[4.4]nonan-5-ium bis(trifluoromethane)sulfonimide

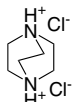
CAS No. : 706759-44-6  
 Grade : >99%  
 Formula : C<sub>10</sub>H<sub>16</sub>F<sub>6</sub>N<sub>2</sub>O<sub>4</sub>S<sub>2</sub>  
 M.W. : 406.37 g/mole



## LT-S9344

## 1,4-Diazabicyclo[2.2.2]octane-1,4-dium chloride

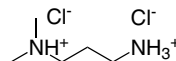
CAS No. : 49563-87-3  
 Grade : >99%  
 Formula : C<sub>6</sub>H<sub>14</sub>Cl<sub>2</sub>N<sub>2</sub>  
 M.W. : 185.09 g/mole



## LT-S9345

## N,N-Dimethyl-1,3-propanediammonium chloride

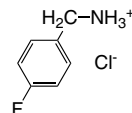
CAS No. : 52198-63-7  
 Grade : >99%  
 Formula : C<sub>5</sub>H<sub>16</sub>Cl<sub>2</sub>N<sub>2</sub>  
 M.W. : 175.1 g/mole



## LT-S9346

## 4-Fluoro-benzylammonium chloride

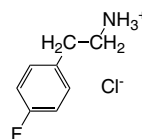
CAS No. : 659-41-6  
 Grade : >99%  
 Formula : C<sub>7</sub>H<sub>9</sub>FCIN  
 M.W. : 161.6 g/mole



## LT-S9347

## 4-Fluoro-phenethylammonium chloride

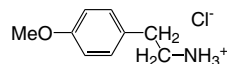
CAS No. : 459-19-8  
 Grade : >99%  
 Formula : C<sub>8</sub>H<sub>11</sub>ClFN  
 M.W. : 175.63 g/mole



## LT-S9348

## 4-Methoxy-phenethylammonium chloride

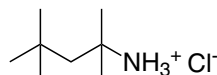
CAS No. : 645-58-9  
 Grade : >99%  
 Formula : C<sub>9</sub>H<sub>14</sub>ClNO  
 M.W. : 187.67 g/mole



## LT-S9349

## tert-Octylammonium chloride

CAS No. : 58618-91-0  
 Grade : >99%  
 Formula : C<sub>8</sub>H<sub>20</sub>ClN  
 M.W. : 165.7 g/mole

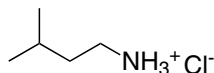


## Perovskite Precursor

## LT-S9350

## iso-Pentylammonium chloride

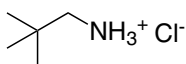
CAS No. : 541-23-1  
 Grade : >99%  
 Formula : C<sub>5</sub>H<sub>14</sub>ClN  
 M.W. : 123.62 g/mole



## LT-S9351

## neo-Pentylammonium chloride

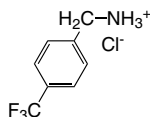
CAS No. : 15925-18-5  
 Grade : >99%  
 Formula : C<sub>5</sub>H<sub>14</sub>ClN  
 M.W. : 123.62 g/mole



## LT-S9352

## 4-Trifluoromethyl-benzylammonium chloride

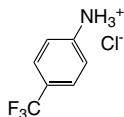
CAS No. : 3047-99-2  
 Grade : >99%  
 Formula : C<sub>8</sub>H<sub>9</sub>F<sub>3</sub>ClN  
 M.W. : 211.61 g/mole



## LT-S9353

## 4-Trifluoromethyl-phenylammonium chloride

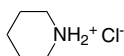
CAS No. : 90774-69-9  
 Grade : >99%  
 Formula : C<sub>7</sub>H<sub>7</sub>ClF<sub>3</sub>N  
 M.W. : 197.59 g/mole



## LT-S9354

## Piperidinium chloride

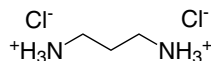
CAS No. : 6091-44-7  
 Grade : >99%  
 Formula : C<sub>5</sub>H<sub>12</sub>ClN  
 M.W. : 121.61 g/mole



## LT-S9355

## Propane-1,3-diammonium chloride

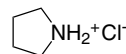
CAS No. : 10517-44-9  
 Grade : >99%  
 Formula : C<sub>3</sub>H<sub>12</sub>Cl<sub>2</sub>N<sub>2</sub>  
 M.W. : 147.05 g/mole



## LT-S9356

## Pyrrolidinium chloride

CAS No. : 25150-61-2  
 Grade : >99%  
 Formula : C<sub>4</sub>H<sub>10</sub>ClN  
 M.W. : 107.58 g/mole



## LT-S9357

## Quinuclidin-1-ium chloride

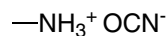
CAS No. : 39896-06-5  
 Grade : >99%  
 Formula : C<sub>7</sub>H<sub>14</sub>ClN  
 M.W. : 147.65 g/mole



## 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

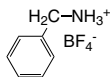
CAS No. : 129211-47-8  
 Grade : >99%  
 Formula : C<sub>8</sub>H<sub>16</sub>BF<sub>4</sub>N  
 M.W. : 213.02 g/mole



## LT-S9360

## Benzylammonium tetrafluoroborate

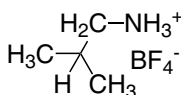
CAS No. : 41579-49-1  
 Grade : >99%  
 Formula :  $C_7H_{10}BF_4N$   
 M.W. : 194.97 g/mole



## LT-S9361

## iso-Butylammonium tetrafluoroborate

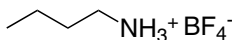
CAS No. : 71852-72-7  
 Grade : >99%  
 Formula :  $C_4H_{12}BF_4N$   
 M.W. : 160.95 g/mole



## LT-S9362

## n-Butylammonium tetrafluoroborate

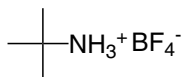
CAS No. : 71852-73-8  
 Grade : >99%  
 Formula :  $C_4H_{12}BF_4N$   
 M.W. : 160.95 g/mole



## LT-S9363

## t-Butylammonium tetrafluoroborate

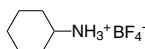
CAS No. : 24418-92-6  
 Grade : >99%  
 Formula :  $C_4H_{12}BF_4N$   
 M.W. : 160.95 g/mole



## LT-S9364

## Cyclohexylammonium tetrafluoroborate

CAS No. : 71893-43-1  
 Grade : >99%  
 Formula :  $C_6H_{14}BF_4N$   
 M.W. : 186.99 g/mole



## LT-S9365

## 1,4-Diazabicyclo[2,2,2]octane-1,4-dium tetrafluoroborate

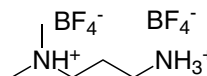
Grade : >99%  
 Formula :  $C_6H_{14}B_2F_8N_2$   
 M.W. : 287.8 g/mole



## LT-S9366

## N,N-Dimethyl-1,3-propanediammonium tetrafluoroborate

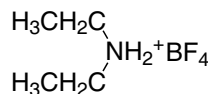
Grade : >99%  
 Formula :  $C_5H_{16}B_2F_8N_2$   
 M.W. : 277.8 g/mole



## LT-S9367

## Diethylammonium tetrafluoroborate

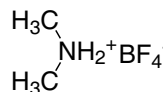
CAS No. : 17085-33-5  
 Grade : >99%  
 Formula :  $C_4H_{12}BF_4N$   
 M.W. : 160.95 g/mole



## LT-S9368

## Dimethylammonium tetrafluoroborate

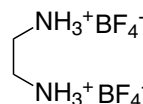
CAS No. : 16970-97-1  
 Grade : >99%  
 Formula :  $C_2H_8BF_4N$   
 M.W. : 132.9 g/mole



## LT-S9369

## Ethane-1,2-diammonium tetrafluoroborate

Grade : >99%  
 Formula :  $C_2H_{10}B_2F_8N_2$   
 M.W. : 235.72 g/mole

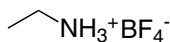


## Perovskite Precursor

## LT-S9370

## Ethylammonium tetrafluoroborate

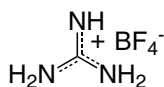
CAS No. : 12070-78-9  
 Grade : >99%  
 Formula :  $C_2H_8BF_4N$   
 M.W. : 132.9 g/mole



## LT-S9371

## Guanidinium tetrafluoroborate

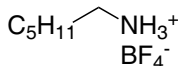
CAS No. : 36595-00-3  
 Grade : >99%  
 Formula :  $CH_6BF_4N_3$   
 M.W. : 146.88 g/mole



## LT-S9372

## n-Hexylammonium tetrafluoroborate

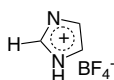
CAS No. : 41579-47-9  
 Grade : >99%  
 Formula :  $C_6H_{16}BF_4N$   
 M.W. : 378.01 g/mole



## LT-S9373

## Imidazolium tetrafluoroborate

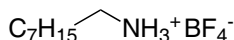
CAS No. : 112725-76-5  
 Grade : >99%  
 Formula :  $C_3H_5BF_4N_2$   
 M.W. : 155.89 g/mole



## LT-S9374

## n-Octylammonium tetrafluoroborate

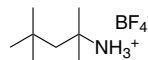
CAS No. : 790269-39-5  
 Grade : >99%  
 Formula :  $C_8H_{20}BF_4N$   
 M.W. : 217.06 g/mole



## LT-S9375

## tert-Octylammonium tetrafluoroborate

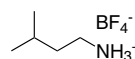
Grade : >99%  
 Formula :  $C_8H_{20}BF_4N$   
 M.W. : 217.06 g/mole



## LT-S9376

## iso-Pentylammonium tetrafluoroborate

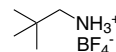
CAS No. : 150178-33-9  
 Grade : >99%  
 Formula :  $C_5H_{14}BF_4N$   
 M.W. : 174.97 g/mole



## LT-S9377

## neo-Pentylammonium tetrafluoroborate

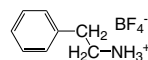
Grade : >99%  
 Formula :  $C_5H_{14}BF_4N$   
 M.W. : 174.98 g/mole



## LT-S9378

## Phenethylammonium tetrafluoroborate

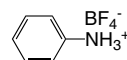
Grade : >99%  
 Formula :  $C_8H_{12}BF_4N$   
 M.W. : 208.99 g/mole



## LT-S9379

## Phenylammonium tetrafluoroborate

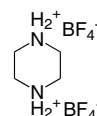
CAS No. : 3796-29-0  
 Grade : >99%  
 Formula :  $C_6H_8BF_4N$   
 M.W. : 180.94 g/mole



## 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

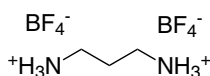
CAS No. : 20935-77-7  
 Grade : >99%  
 Formula : C<sub>5</sub>H<sub>12</sub>BF<sub>4</sub>N  
 M.W. : 172.96 g/mole



## LT-S9382

## Propane-1,3-diammonium tetrafluoroborate

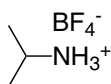
Grade : >99%  
 Formula : C<sub>3</sub>H<sub>12</sub>B<sub>2</sub>F<sub>8</sub>N<sub>2</sub>  
 M.W. : 249.75 g/mole



## LT-S9383

## iso-Propylammonium tetrafluoroborate

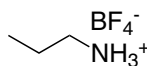
CAS No. : 71852-74-9  
 Grade : >99%  
 Formula : C<sub>3</sub>H<sub>10</sub>BF<sub>4</sub>N  
 M.W. : 146.92 g/mole



## LT-S9384

## n-Propylammonium tetrafluoroborate

CAS No. : 71852-75-0  
 Grade : >99%  
 Formula : C<sub>3</sub>H<sub>10</sub>BF<sub>4</sub>N  
 M.W. : 146.92 g/mole



## LT-S9385

## Pyridinium tetrafluoroborate

CAS No. : 505-07-7  
 Grade : >99%  
 Formula : C<sub>5</sub>H<sub>6</sub>BF<sub>4</sub>N  
 M.W. : 166.91 g/mole



## LT-S9386

## Pyrrolidinium tetrafluoroborate

CAS No. : 95647-26-0  
 Grade : >99%  
 Formula : C<sub>4</sub>H<sub>10</sub>BF<sub>4</sub>N  
 M.W. : 158.93 g/mole



## LT-S9387

## Quinuclidin-1-ium tetrafluoroborate

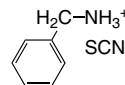
CAS No. : 936025-25-1  
 Grade : >99%  
 Formula : C<sub>7</sub>H<sub>14</sub>BF<sub>4</sub>N  
 M.W. : 199 g/mole



## LT-S9388

## Benzylammonium thiocyanate

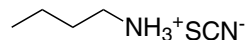
CAS No. : 51571-89-2  
 Grade : >99%  
 Formula : C<sub>8</sub>H<sub>10</sub>N<sub>2</sub>S  
 M.W. : 166.24 g/mole



## LT-S9389

## n-Butylammonium thiocyanate

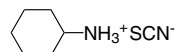
CAS No. : 25162-84-9  
 Grade : >99%  
 Formula : C<sub>5</sub>H<sub>12</sub>N<sub>2</sub>S  
 M.W. : 132.23 g/mole



## 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

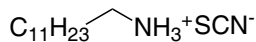


## Perovskite Precursor

## LT-S9391

## n-Dodecylammonium thiocyanate

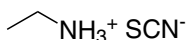
CAS No. : 22031-31-8  
 Grade : >99%  
 Formula : C<sub>13</sub>H<sub>28</sub>N<sub>2</sub>S  
 M.W. : 244.44 g/mole



## LT-S9392

## Ethylammonium thiocyanate

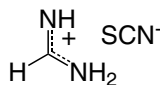
CAS No. : 25153-19-9  
 Grade : >99%  
 Formula : C<sub>3</sub>H<sub>8</sub>N<sub>2</sub>S  
 M.W. : 104.17 g/mole



## LT-S9393

## Formamidinium thiocyanate

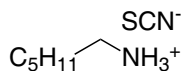
CAS No. : 1821033-48-0  
 Grade : >99%  
 Formula : CH<sub>5</sub>N<sub>3</sub>S  
 M.W. : 103.15 g/mole



## 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

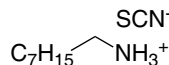
CAS No. : 61540-63-4  
 Grade : >99%  
 Formula : C<sub>2</sub>H<sub>6</sub>N<sub>2</sub>S  
 M.W. : 90.15 g/mole



## LT-S9396

## n-Octylammonium thiocyanate

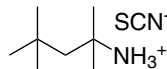
CAS No. : 25162-86-1  
 Grade : >99%  
 Formula : C<sub>9</sub>H<sub>20</sub>N<sub>2</sub>S  
 M.W. : 188.33 g/mole



## LT-S9397

## tert-Octylammonium thiocyanate

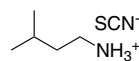
CAS No. : 41115-58-6  
 Grade : >99%  
 Formula : C<sub>9</sub>H<sub>20</sub>N<sub>2</sub>S  
 M.W. : 188.33 g/mole



## LT-S9398

## iso-Pentylammonium thiocyanate

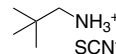
Grade : >99%  
 Formula : C<sub>6</sub>H<sub>14</sub>N<sub>2</sub>S  
 M.W. : 146.25 g/mole



## LT-S9399

## neo-Pentylammonium thiocyanate

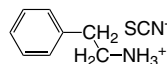
CAS No. : 61540-71-4  
 Grade : >99%  
 Formula : C<sub>6</sub>H<sub>14</sub>N<sub>2</sub>S  
 M.W. : 146.25 g/mole



## LT-S9400

## Phenethylammonium thiocyanate

Grade : >99%  
 Formula : C<sub>9</sub>H<sub>12</sub>N<sub>2</sub>S  
 M.W. : 180.27 g/mole

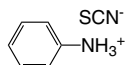


## Perovskite Precursor

## LT-S9401

## Phenylammonium thiocyanate

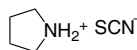
CAS No. : 27248-14-2  
 Grade : >99%  
 Formula :  $C_7H_8N_2S$   
 M.W. : 152.22 g/mole



## 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

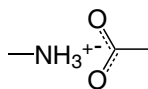
CAS No. : 129211-50-3  
 Grade : >99%  
 Formula :  $C_8H_{16}F_6NP$   
 M.W. : 271.18 g/mole



## LT-S9404

## Methylammonium acetate

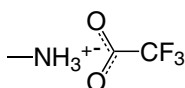
CAS No. : 6998-30-7  
 Grade : >99%  
 Formula :  $C_3H_9NO_2$   
 M.W. : 91.11 g/mole



## LT-S9405

## Methylammonium trifluoroacetate

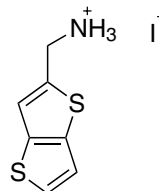
CAS No. : 107326-29-4  
 Grade : >99%  
 Formula :  $C_3H_7F_3NO_2$   
 M.W. : 146.09 g/mole



## LT-S9588 TTMAl

## Thieno[3,2-b]thiophen-2-ylmethanaminium iodide

Grade : >99.5%  
 Formula :  $C_7H_8INS_2$   
 M.W. : 297.18 g/mole

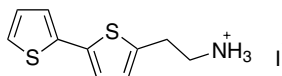


## LT-S9644 2TEAl

**NEW**

## 2-([2,2'-Bithiophen]-5-yl)ethan-1-amium iodide

Grade : >99%  
 Formula :  $C_{10}H_{12}INS_2$   
 M.W. : 337.24 g/mole

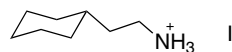


## LT-S9645 CEAl

**NEW**

## Cyclohexylethylammonium iodide

Grade : >99%  
 Formula :  $C_8H_{18}I_2$   
 M.W. : 255.14 g/mole

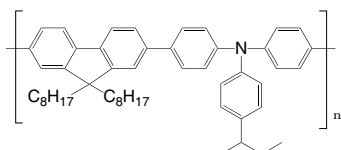




### LT-N148 | TFB

Poly[(9,9-dioctylfluorenyl-2,7-diyl)-*co*-(4,4'-(*N*-(4-*sec*-butylphenyl)diphenylamino)]

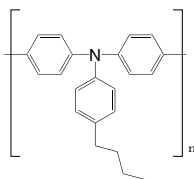
CAS No. : 220797-16-0  
 Grade : Mw >30,000 (GPC)  
 Formula : (C<sub>51</sub>H<sub>61</sub>N)<sub>n</sub>  
 UV : 389 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 PL : 443 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 Solubility : Soluble in CH<sub>2</sub>Cl<sub>2</sub>, Toluene, CHCl<sub>3</sub>



### LT-N149 | Poly-TPD

Poly[*N,N'*-bis(4-butylphenyl)-*N,N'*-bis(phenyl)-benzidine]

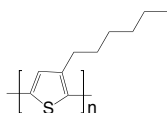
CAS No. : 472960-35-3  
 Grade : Mw =20,000~200,000 (GPC)  
 Formula : (C<sub>22</sub>H<sub>21</sub>N)<sub>n</sub>  
 UV : 371, 388 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 PL : 424 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene



### LT-S909 | P3HT

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

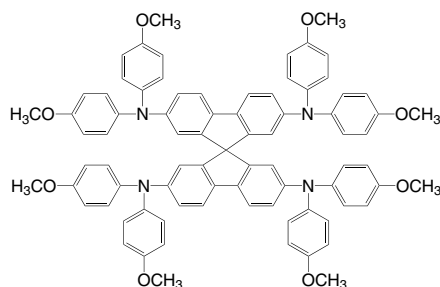
CAS No. : 110134-47-9  
 Grade : Mw >45,000 (GPC) Electronic Grade :  
 Regio Regular >93%  
 Formula : (C<sub>10</sub>H<sub>14</sub>S)<sub>n</sub>  
 UV : 445 nm (in THF)  
 PL : 564 nm (in THF)  
 Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene,  
 Dichlorobenzene



### LT-S922 | Spiro-MeOTAD

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

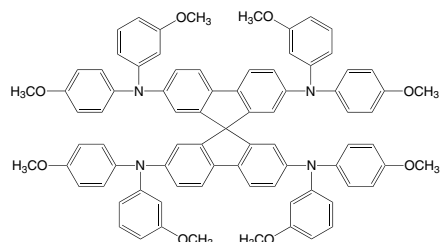
CAS No. : 207739-72-8  
 Grade : >99.5% (HPLC)  
 Formula : C<sub>61</sub>H<sub>68</sub>N<sub>4</sub>O<sub>8</sub>  
 M.W. : 1225.43 g/mole  
 UV : 306, 385 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 PL : 429 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 TGA : >360 °C (0.5% weight loss)



### LT-S9145 | p,m-Spiro-MeOTAD

*N,N',N'',N'''*-Tetrakis(3-methoxyphenyl)-*N,N',N'',N'''*-tetrakis(4-methoxyphenyl)-9,9'-spirobifluorene-2,2',7,7'-tetraamine

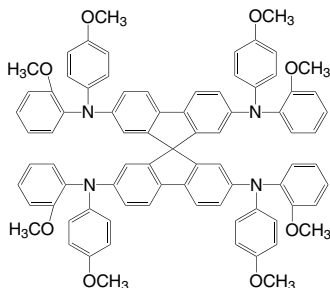
CAS No. : 1573202-44-4  
 Grade : >99% (HPLC)  
 Formula : C<sub>61</sub>H<sub>68</sub>N<sub>4</sub>O<sub>8</sub>  
 M.W. : 1225.43 g/mole  
 UV : 308, 378 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 PL : 414 nm (in CH<sub>2</sub>Cl<sub>2</sub>)  
 TGA : >280 °C (0.5% weight loss)



**LT-S9146** | p,o-Spiro-MeOTAD

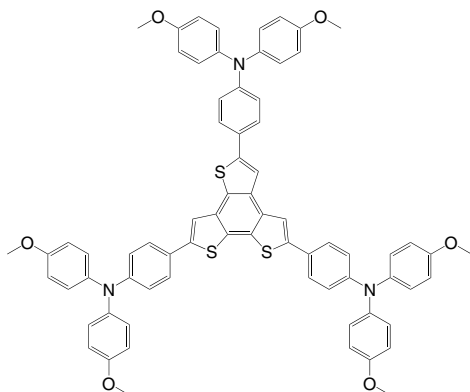
*N*<sup>2</sup>,*N*<sup>2</sup>,*N*<sup>7</sup>,*N*<sup>7</sup>-Tetrakis(2-methoxyphenyl)-*N*<sup>2</sup>,*N*<sup>2</sup>,*N*<sup>7</sup>,*N*<sup>7</sup>-tetrakis(4-methoxyphenyl)-9,9'-spirobifluorene]-2,2',7,7'-tetraamine

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

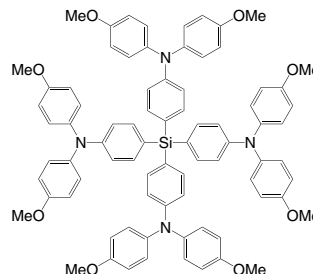
2,5,8-Tris(4-(bis(4-methoxyphenyl)amino)phenyl)benzotrithiophene

CAS No.	: 1908506-93-3
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

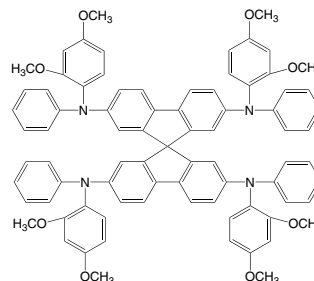
4,4',4'',4'''-Silane-tetrayl-tetrakis(N,N-bis(4-methoxyphenyl)aniline)

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

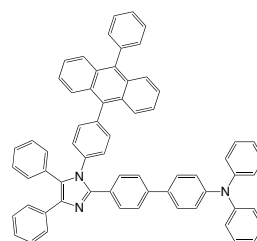
*N*<sup>2</sup>,*N*<sup>2</sup>,*N*<sup>7</sup>,*N*<sup>7</sup>-Tetrakis(2,4-dimethoxyphenyl)-*N*<sup>2</sup>,*N*<sup>2</sup>,*N*<sup>7</sup>,*N*<sup>7</sup>-tetraphenyl-9,9'-spirobifluorene]-2,2',7,7'-tetraamine

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>
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]

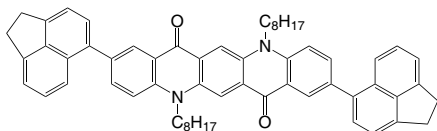
CAS No.	: 2252254-01-4
Grade	: Sublimed >99%
Formula	: C <sub>65</sub> H <sub>45</sub> N <sub>3</sub>
M.W.	: 868.07 g/mole
PCE	: 11.13 %



### LT-S9484 | ACE-QA-ACE

2,9-Bis(1,2-dihydroacenaphthylen-5-yl)-5,12-dioctyl-5,12-dihydroquinolino[2,3-b]acridine-7,14-dione

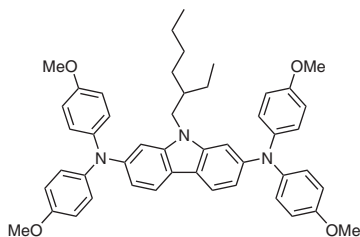
Grade	: >99% (HPLC)
Formula	: C <sub>60</sub> H <sub>60</sub> N <sub>2</sub> O <sub>2</sub>
M.W.	: 841.13 g/mole
UV	: 301 nm (in CHCl <sub>3</sub> )
PL	: 558 nm
HOMO	: -5.59 eV
LUMO	: -3.47 eV



### LT-S9555 | EH-44

9-(2-Ethylhexyl)-N<sup>2</sup>,N<sup>2</sup>,N<sup>7</sup>,N<sup>7</sup>-tetrakis(4-methoxyphenyl)-9H-carbazole-2,7-diamine hydrochloride salt

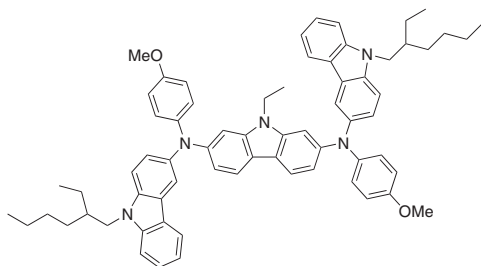
Grade	: >99%
Formula	: C <sub>48</sub> H <sub>51</sub> N <sub>3</sub> O <sub>4</sub>
M.W.	: 733.94 g/mole



### LT-S9556 | EtCz-3EHCz

9-Ethyl-N<sup>2</sup>,N<sup>7</sup>-bis(9-(2-ethylhexyl)-9H-carbazol-3-yl)-N<sup>2</sup>,N<sup>7</sup>-bis(4-methoxyphenyl)-9H-carbazole-2,7-diamine hydrochloride salt

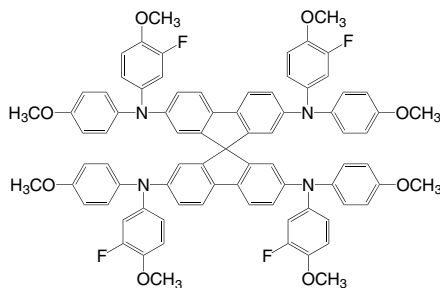
Grade	: >99%
Formula	: C <sub>68</sub> H <sub>73</sub> N <sub>5</sub> O <sub>2</sub>
M.W.	: 992.34 g/mole



### LT-S9564 | Spiro-mF

N<sup>2</sup>,N<sup>2</sup>,N<sup>7</sup>,N<sup>7</sup>-Tetrakis(3-fluoro-4-methoxyphenyl)-N<sup>2</sup>,N<sup>2</sup>,N<sup>7</sup>,N<sup>7</sup>-tetrakis(4-methoxyphenyl)-9,9'-spirobi[fluorene]-2,2',7,7'-tetraamine

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-PS001 | PEDOT:PSS

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

#### Specification

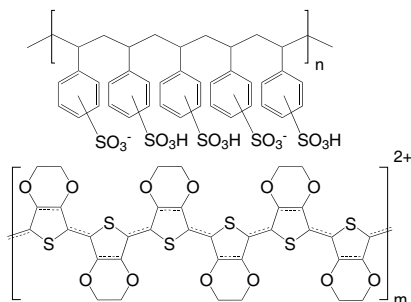
Description	: Aqueous dispersion, blue liquid.
Sodium	: Max. 400 ppm
Sulfate	: Max. 40 ppm
Solid content	: 1.3 - 1.7 wt%
PSD d50	: 80 nm
PSD d90	: 100 nm
Resistivity	: 500-5000 Ωcm
Viscosity	: 5-12 mPas

#### 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:

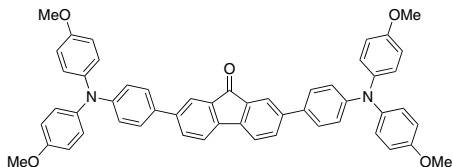
The product is sensitive to frost and should therefore not be stored at temperatures below 5 °C. Avoid freezing!



### LT-S9651 | TPA-2F NEW

2,7-Bis(4-(bis(4-methoxyphenyl)amino)phenyl)-9H-fluoren

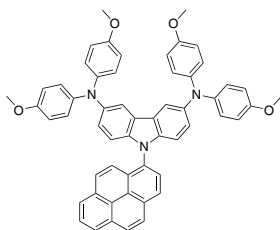
Grade : >99%  
 Formula :  $C_{53}H_{42}N_2O_5$   
 M.W. : 786.91 g/mole  
 HOMO : -5.35 eV  
 LUMO : -3.23 eV



### LT-S9654 | Cz-Pyr NEW

$N_3,N_3,N_6,N_6$ -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

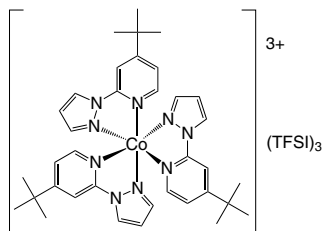


## Hole Transport Dopant

### LT-S9127 | FK209 Co (III) TFSI Salt

Tris(2-(1*H*-pyrazol-1-yl)-4-*tert*-butylpyridine)-cobalt(III)  
tris(bis(trifluoromethylsulfonyl)imide)

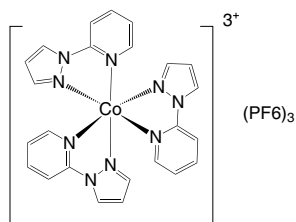
CAS No. : 1447938-61-5  
Grade : >99% (NMR)  
Formula : C<sub>42</sub>H<sub>45</sub>CoF<sub>18</sub>N<sub>12</sub>O<sub>12</sub>S<sub>6</sub>  
M.W. : 1503.18 g/mole  
UV : 227, 287 nm (in Acetonitrile)



### LT-S9135 | FK102 Co (III) PF6 Salt

Tris(1-(pyridin-2-yl)-1*H*-pyrazol)cobalt(III)  
tris(hexafluorophosphate)

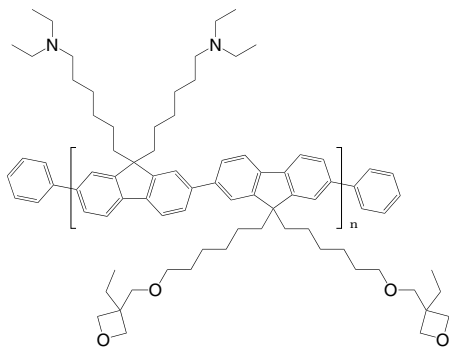
CAS No. : 1346416-70-3  
Grade : >99% (NMR)  
Formula : C<sub>24</sub>H<sub>21</sub>CoF<sub>18</sub>N<sub>9</sub>P<sub>3</sub>  
UV : 929.31 g/mole  
PL : 215, 292 nm (in Acetonitrile)



### LT-N177 | PFN-OX

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

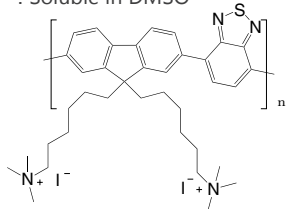
CAS No. : 1345045-27-3  
 Formula :  $(C_{70}H_{102}N_2O_4)_n C_{12}H_{10}$   
 UV :  $378 \pm 10$  nm (in THF)  
 Solubility : Soluble in THF,  $CHCl_3$



### LT-N181 | PFNIBT

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

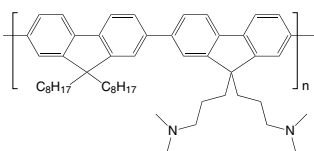
Grade : Mw > 10,000 (GPC)  
 Formula :  $(C_{35}H_{42}I_2N_4S)_n$   
 UV : 317, 448 nm (in DMSO)  
 Solubility : Soluble in DMSO



### LT-N4027 | PFN-DOF

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

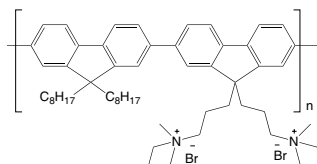
CAS No. : 673474-75-4  
 Grade : Mw > 10,000 (GPC)  
 Formula :  $(C_{52}H_{70}N_2)_n$   
 UV : 378 nm (in  $CH_2Cl_2$ )  
 PL : 414 nm (in  $CH_2Cl_2$ )  
 Solubility : Soluble in  $CH_2Cl_2$ ,  $CHCl_3$ , Toluene



### 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

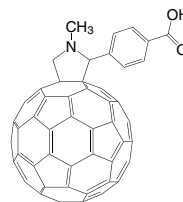
CAS No. : 889672-99-5  
 Grade : Mw > 10,000 (GPC)  
 Formula :  $(C_{56}H_{80}N_2Br_2)_n$   
 UV : 375 nm (in MeOH)  
 PL : 440 nm (in MeOH)  
 Solubility : Soluble in MeOH



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

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

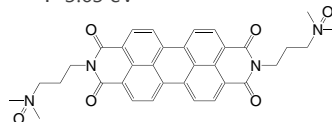
CAS No. : 631918-72-4  
 Grade : >99%  
 Formula :  $C_{70}H_{11}NO_2$   
 M.W. : 897.84 g/mole  
 UV : 345 nm (in  $CH_2Cl_2$ )



### 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



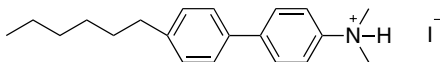
### LT-S9646 | HBPC NEW

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

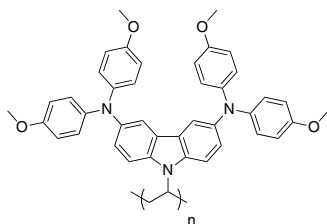
Poly{3,6-bis[N,N'-di(4-methoxyphenyl)amino]-9-vinyl-carbazole}

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)

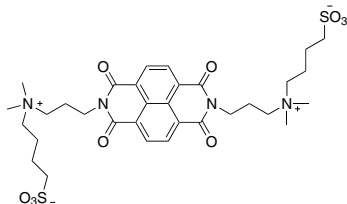
Grade : >98%

Formula :  $C_{32}H_{44}N_4O_{10}S_2$

M.W. : 708.84 g/mole

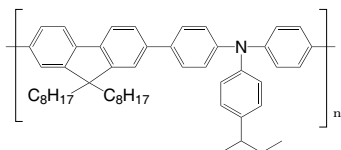
HOMO : -6.91 eV

LUMO : -3.74 eV

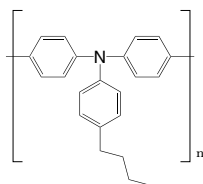


**LT-N148** | TFBPoly[(9,9-dioctylfluorenyl-2,7-diyl)-*co*-(4,4'-(*N*-(4-*sec*-butylphenyl) diphenylamine)]

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>

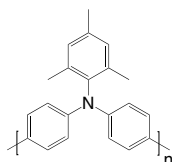
**LT-N149** | Poly-TPDPoly[*N,N'*-bis(4-butylphenyl)-*N,N'*-bis(phenyl)-benzidine]

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

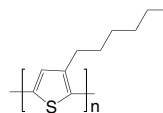
Poly[bis(4-phenyl)(2,4,6-trimethylphenyl)amine]

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 : 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, Dichlorobenzene

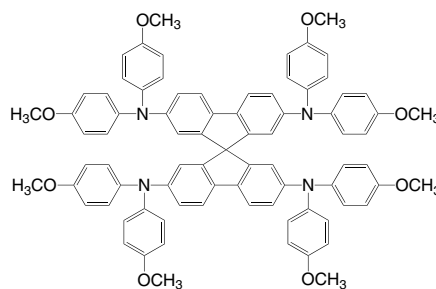
**LT-S909** | P3HT

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

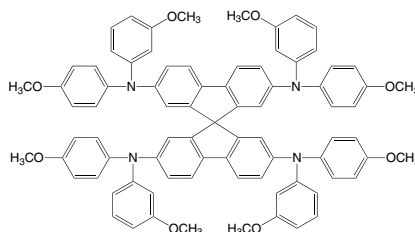
CAS No. : 110134-47-9  
 Grade : Mw >45,000 (GPC) Electronic Grade :  
 Regio Regular >93%  
 Formula : (C<sub>10</sub>H<sub>14</sub>S)<sub>n</sub>  
 UV : 445 nm (in THF)  
 PL : 564 nm (in THF)  
 Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene

**LT-S922** | Spiro-MeOTAD2,2',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>  
 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-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>)

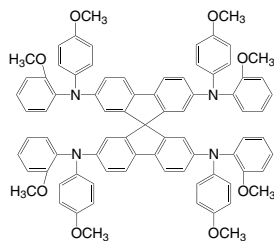




**LT-S9146** | p,o-Spiro-MeOTAD

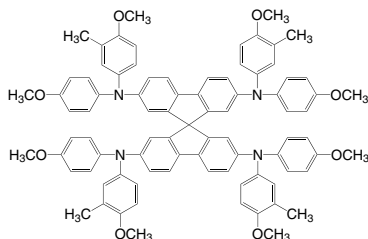
*N*<sup>2</sup>,*N*<sup>2</sup>,*N*<sup>7</sup>,*N*<sup>7</sup>-Tetrakis(2-methoxyphenyl)-*N*<sup>2</sup>,*N*<sup>2</sup>,*N*<sup>7</sup>,*N*<sup>7</sup>-tetrakis(4-methoxyphenyl)-9,9'-spirobifluorene]-2,2',7,7'-tetraamine

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

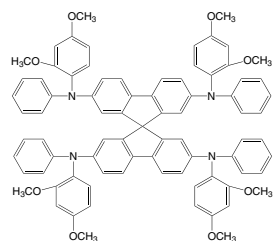
2,2',7,7'-Tetrakis(4,4'-dimethoxy-3-methylidiphenylamino)-9,9'-spirobifluorene

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

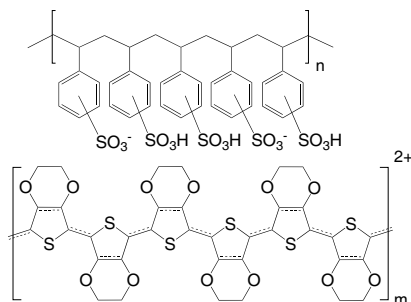
Description : Aqueous dispersion, blue liquid.  
 Sodium : Max. 400 ppm  
 Sulfate : Max. 40 ppm  
 Solid content: 1.3 - 1.7 wt%  
 PSD d50 : 80 nm  
 PSD d90 : 100 nm  
 Resistivity : 500-5000 Ωcm  
 Viscosity : 5-12 mPas

## 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!

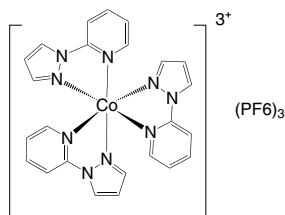


## Redox Couple Electrolytes

**LT-S9135** | FK102 Co (III) PF6\_Salt

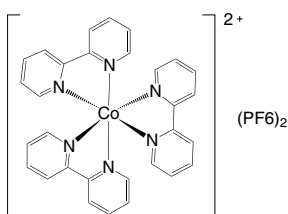
Tris(1-(pyridin-2-yl)-1*H*-pyrazol)cobalt(III)  
tris(hexafluorophosphate)

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>  
M.W. : 1169.43 g/mole

**LT-S9183** | Co (II) (bpy)<sub>3</sub> (PF<sub>6</sub>)<sub>2</sub>

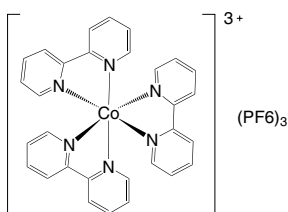
Tris-(2,2'-bipyridine)cobalt(II) bis(hexafluorophosphate)

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>

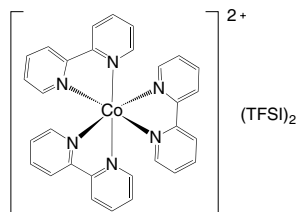
Tris-(2,2'-bipyridine)cobalt(III) tris(hexafluorophosphate)

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>

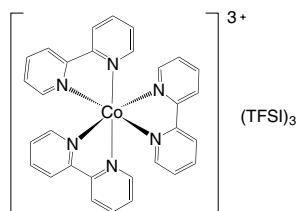
Tris-(2,2'-bipyridine)cobalt(II) bis(trifluoromethanesulfonimide)

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>

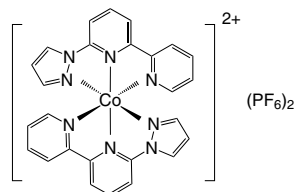
Tris-(2,2'-bipyridine)cobalt(III) tris(trifluoromethanesulfonimide)

CAS No. : 1353745-91-1  
Grade : >99% (NMR)  
Formula : C<sub>36</sub>H<sub>24</sub>CoF<sub>18</sub>N<sub>9</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-(1*H*-pyrazol-1-yl)-2,2'-bipyridine)cobalt(II) bis(hexafluorophosphate), mixture of stereoisomers

CAS 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

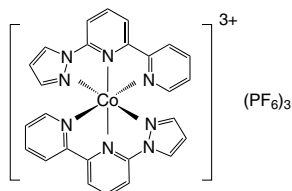


## Redox Couple Electrolytes

**LT-S9188** | Co (III) (bpy-pz)<sub>2</sub> (PF<sub>6</sub>)<sub>3</sub>

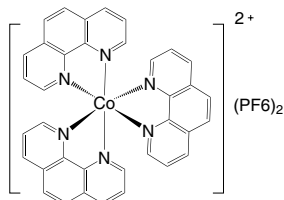
Bis(6-(1H-pyrazol-1-yl)-2,2'-bipyridine)cobalt(III)  
tris(hexafluorophosphate), mixture of stereoisomers

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>

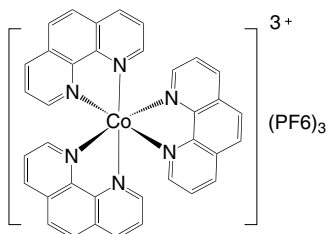
Tris(1,10-phenanthroline)cobalt(II) bis(hexafluorophosphate)

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>

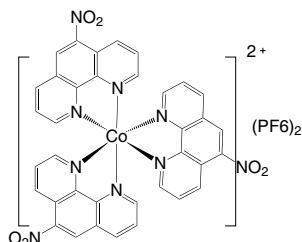
Tris(1,10-phenanthroline)cobalt(III) tris(hexafluorophosphate)

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>

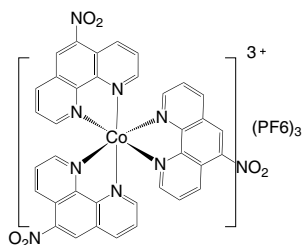
Tris(5-nitro-1,10-phenanthroline)cobalt(II)  
bis(hexafluorophosphate)

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>

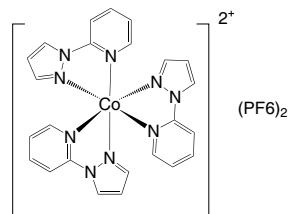
Tris(5-nitro-1,10-phenanthroline)cobalt(III)  
tris(hexafluorophosphate)

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

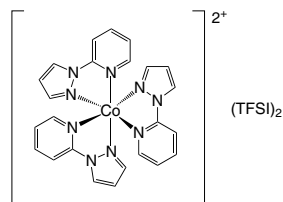


## Redox Couple Electrolytes

### LT-S9406 | FK 102 Co (II) TFSI Salt

Tris(1-(pyridin-2-yl)-1*H*-pyrazol)cobalt(II)  
bis(trifluoromethanesulfonimide)

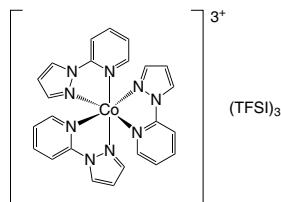
Grade : >99% (NMR)  
Formula :  $C_{28}H_{21}CoN_{11}O_8S_4F_{12}$   
M.W. : 1054.72 g/mole



### LT-S9407 | FK 102 Co (III) TFSI Salt

Tris(1-(pyridin-2-yl)-1*H*-pyrazol)cobalt(III)  
tris(trifluoromethanesulfonimide)

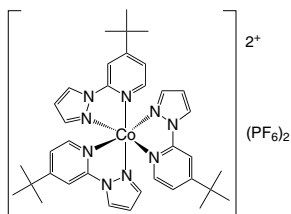
Grade : >99% (NMR)  
Formula :  $C_{30}H_{21}CoN_{12}O_{12}S_6F_{18}$   
M.W. : 1334.87 g/mole



### LT-S9408 | FK 209 Co (II) PF6 salt

Tris[4-(tert-butyl)-2-(1*H*-pyrazol-1-yl)pyridine]cobalt(II)  
bis(hexafluorophosphate)

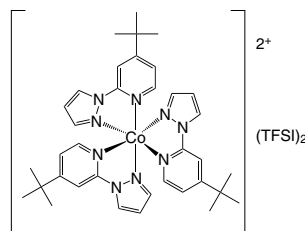
Grade : >99% (NMR)  
Formula :  $C_{36}H_{45}CoN_9P_2F_{12}$   
M.W. : 952.68 g/mole



### LT-S9409 | FK 209 Co (II) TFSI salt

Tris[4-(tert-butyl)-2-(1*H*-pyrazol-1-yl)pyridine]cobalt(II)  
bis(trifluoromethanesulfonimide)

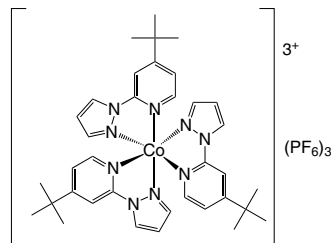
Grade : >99% (NMR)  
Formula :  $C_{40}H_{45}CoN_{11}O_8S_4F_{12}$   
M.W. : 1223.02 g/mole



### LT-S9410 | FK 209 Co (III) PF6 salt

Tris[4-(tert-butyl)-2-(1*H*-pyrazol-1-yl)pyridine]cobalt(III)  
tris(hexafluorophosphate)

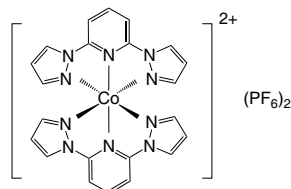
Grade : >99% (NMR)  
Formula :  $C_{36}H_{45}CoN_9P_3F_{18}$   
M.W. : 1097.64 g/mole



### 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

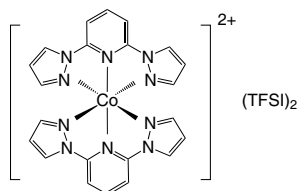


## Redox Couple Electrolytes

**LT-S9413** | FK 269 Co (II) TFSI salt

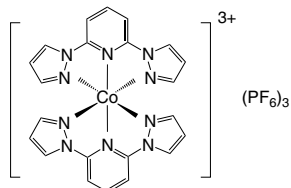
Bis[2,6-di(1*H*-pyrazol-1-yl)pyridine]cobalt(II)  
bis(trifluoromethanesulfonimide)

Grade : >99% (NMR)  
Formula : C<sub>26</sub>H<sub>18</sub>CoN<sub>12</sub>O<sub>8</sub>S<sub>4</sub>F<sub>12</sub>  
M.W. : 1041.67 g/mole

**LT-S9414** | FK 269 Co (III) PF<sub>6</sub> salt

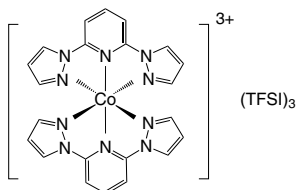
Bis[2,6-di(1*H*-pyrazol-1-yl)pyridine]cobalt(III)  
tris(hexafluorophosphate)

Grade : >99% (NMR)  
Formula : C<sub>22</sub>H<sub>18</sub>CoN<sub>10</sub>P<sub>3</sub>F<sub>18</sub>  
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)

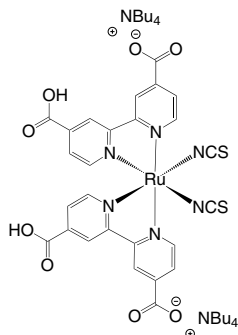
Grade : >99% (NMR)  
Formula : C<sub>28</sub>H<sub>18</sub>CoN<sub>13</sub>O<sub>12</sub>S<sub>6</sub>F<sub>18</sub>  
M.W. : 1321.83 g/mole



## LT-S945 | N719

Di-tetrabutylammonium *cis*-bis(isothiocyanato)bis(2,2'-bipyridyl-4,4'-dicarboxylato)ruthenium(II)

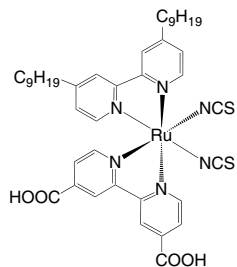
CAS No. : 207347-46-4  
 Grade : >98% (HPLC)  
 Formula :  $C_{58}H_{86}N_8O_8RuS_2$   
 M.W. : 1188.55 g/mole  
 UV : 313, 534 nm (in EtOH)



## LT-S964 | Z-907

*cis*-Bis(isothiocyanato)(2,2'-bipyridyl-4,4'-dicarboxylato)(4,4'-di-nonyl-2'-bipyridyl)ruthenium(II)

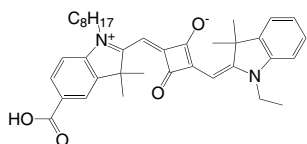
CAS No. : 502693-09-6  
 Grade : >98% (HPLC)  
 Formula :  $C_{42}H_{52}N_6O_4RuS_2$   
 M.W. : 870.10 g/mole  
 UV : 295, 531 nm (in EtOH)



## 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

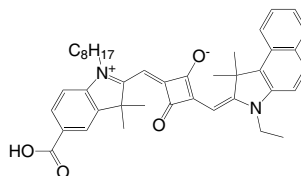
CAS No. : 951248-19-4  
 Grade : >99% (HPLC)  
 Formula :  $C_{37}H_{44}N_2O_4$   
 M.W. : 580.67 g/mole  
 UV : 637 nm (in DMF)  
 TGA : >220 °C (0.5% weight loss)



## 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

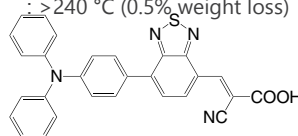
CAS No. : 1240041-84-2  
 Grade : >99% (HPLC)  
 Formula :  $C_{41}H_{46}N_2O_4$   
 M.W. : 630.81 g/mole  
 UV : 662 nm (in DMF)  
 TGA : >250 °C (0.5% weight loss)



## LT-S9068 | RL-1

2-Cyano-3-(7-(4-(diphenylamino)phenyl)-benzo[c][1,2,5]-thiadiazol-4-yl)acrylic acid

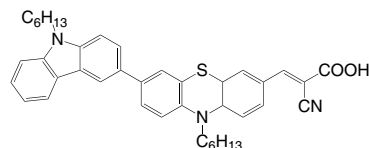
CAS No. : 1415134-59-6  
 Grade : >99% (NMR)  
 Formula :  $C_{28}H_{18}N_4O_2S$   
 M.W. : 474.53 g/mole  
 UV : 324, 486 nm (in THF)  
 TGA : >240 °C (0.5% weight loss)



## LT-S9120 | PTCbCA

(*E*)-2-Cyano-3-(10-hexyl-7-(9-hexyl-9*H*-carbazol-3-yl)-10*H*-phenothiazin-3-yl)acrylic acid

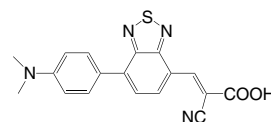
CAS No. : 1347758-70-6  
 Grade : >99% (NMR)  
 Formula :  $C_{40}H_{41}N_3O_2S$   
 M.W. : 627.84 g/mole



## 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

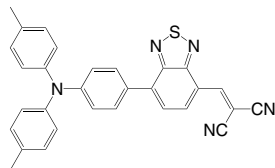


## Dye-sensitized

### LT-S9122 | DTDCPB

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

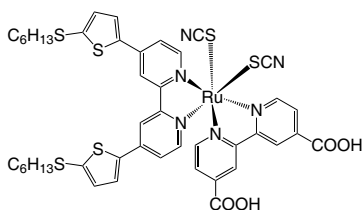
CAS No. : 1393343-58-2  
 Grade : >99% (NMR)  
 Formula : C<sub>30</sub>H<sub>21</sub>N<sub>5</sub>S  
 M.W. : 483.59 g/mole  
 UV : 306, 568 nm (in CH<sub>2</sub>Cl<sub>2</sub>)



### 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)

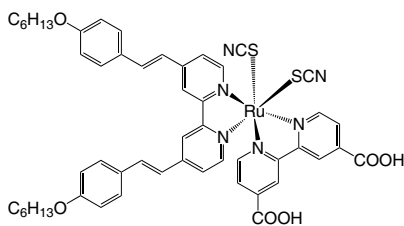
CAS No. : 1152310-69-4  
 Formula : C<sub>44</sub>H<sub>44</sub>N<sub>6</sub>O<sub>4</sub>RuS<sub>6</sub>  
 M.W. : 1014.32 g/mole



### 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<sub>52</sub>H<sub>52</sub>N<sub>6</sub>O<sub>6</sub>RuS<sub>2</sub>  
 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<sub>69</sub>H<sub>117</sub>N<sub>9</sub>O<sub>6</sub>RuS<sub>3</sub>  
 M.W. : 1364.98 g/mole

