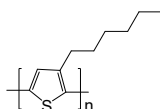


**LT-S909** | P3HT

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

CAS No. : 104934-50-1  
 Grade :  $M_w > 45,000$  (GPC)  
 Regioregular Electronic Grade > 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

Reference : *Adv. Mater.* 2010, 22, 4355-4358**LT-S911** | PT

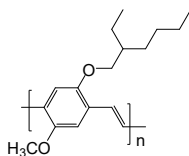
Poly(thiophene-2,5-diyl)

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

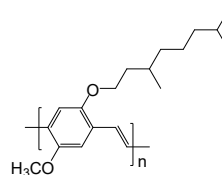
Poly[2-methoxy-5-(2-ethylhexyloxy)-1,4-phenylenevinylene]

CAS No. : 138184-36-8  
 Grade :  $M_w > 100,000$  (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  $CHCl_3$ ,  
 Chlorobenzene, Dichlorobenzene

Reference : *Appl. Phys. Lett.* 78, 841 (2001)**LT-S932** | MDMO-PPV

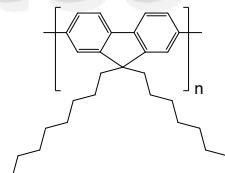
Poly[2-methoxy-5-(3,7-dimethyloctyloxy)-1,4-phenylenevinylene]

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

Reference : *Thin Solid Films* 511-512 (2006) 587-592**LT-S933** | PFO

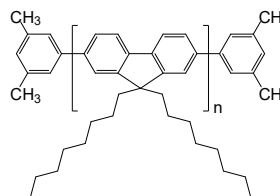
Poly(9,9-dioctylfluorenyl-2,7-diyl)

CAS No. : 123864-00-6  
 Grade :  $M_w = 50,000 \sim 150,000$  (GPC)  
 Formula :  $(C_{29}H_{40})_n$   
 UV : 376 nm (in THF)  
 PL : 426, 440 nm (in THF)  
 Solubility : Soluble in  $CHCl_3$ ,  
 Chlorobenzene, Dichlorobenzene

Reference : *Appl. Phys. Lett.* 2004, 85, 4576-4578**LT-S934** | PFO-DMP

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

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

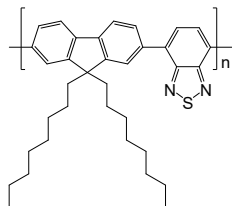
Reference : *Appl. Phys. Lett.* 2004, 85, 4576-4578

### LT-S957 | F8BT

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

CAS No. : 210347-52-7  
 Grade :  $M_w > 20,000$   
 Formula :  $(C_{35}H_{42}N_2S)_n$   
 UV : 453 nm (in THF)  
 PL : 534 nm (in THF)  
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene, Dichlorobenzene

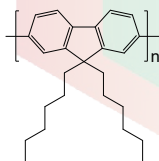
Reference : *Synthetic Metals*, 152, 105, 2005



### LT-S958 | PHF

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

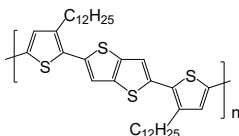
CAS No. : 201807-75-2  
 Grade :  $M_w = 30,000 \sim 100,000$  (GPC)  
 Formula :  $(C_{25}H_{32})_n$   
 UV : 389 nm (in THF)  
 PL : 418 nm (in THF)  
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene, Dichlorobenzene



### LT-S981 | PBTTC-12

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

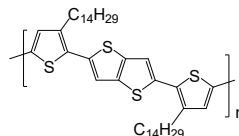
CAS No. : 888491-18-7  
 Grade :  $M_w = 20,000 \sim 80,000$  (GPC)  
 Formula :  $(C_{38}H_{54}S_4)_n$   
 UV : 460 nm (in THF)  
 PL : 557 nm (in THF)  
 Solubility :  $> 5$  mg/mL in  $CHCl_3$



### LT-S982 | PBTTC-14

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

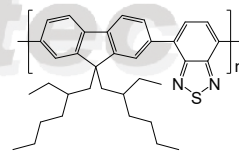
CAS No. : 888491-19-8  
 Grade :  $M_w > 40,000$  (GPC)  
 Formula :  $(C_{42}H_{62}S_4)_n$   
 UV : 466 nm (in THF)  
 PL : 557 nm (in THF)  
 Solubility :  $> 5$  mg/mL in  $CHCl_3$   
 Reference : *Appl. Phys. Lett.*, 92, 113309, 2008



### LT-S9003 | F2EHBT

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

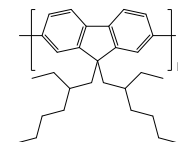
CAS No. : 1379051-13-4  
 Grade :  $M_w = 10,000 \sim 500,000$  (GPC)  
 Formula :  $(C_{35}H_{42}N_2S)_n$   
 UV : 453 nm (in THF)  
 PL : 645 nm (in THF)  
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene, Dichlorobenzene



### LT-S9004 | PF2EH

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

CAS No. : 188201-16-3  
 Grade :  $M_w > 20,000$  (GPC)  
 Formula :  $(C_{29}H_{40})_n$   
 UV : 389 nm (in THF)  
 PL : 418 nm (in THF)  
 Solubility : Soluble in THF,  $CHCl_3$ , Chlorobenzene, Dichlorobenzene

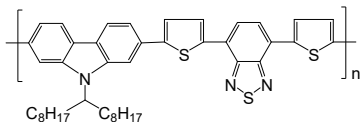


**LT-S948** | PCDTBT

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

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

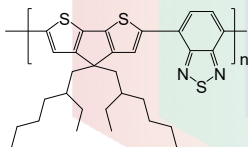
Reference : *Orange Electronics*, v12, 2011, P1788-1793

**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 :  $M_w = 7,000 \sim 20,000$  (GPC)  
 Formula :  $(C_{31}H_{38}N_2S_3)_n$   
 UV : 695 nm (in THF)  
 PL : 564 nm (in THF)  
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene, Dichlorobenzene

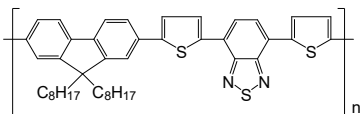
Reference : *Adv. Mater.* 2006, 18, 2884-2889

**LT-S950** | PFOBT

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 :  $M_w = 10,000 \sim 50,000$  (GPC)  
 Formula :  $(C_{43}H_{46}N_2S_3)_n$   
 UV : 523 nm (in  $CH_2Cl_2$ )  
 PL : 630 nm (in  $CH_2Cl_2$ )  
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene, Dichlorobenzene

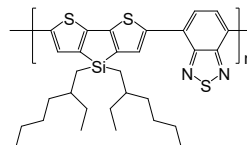
Reference : *Adv. Funct. Mater.*, 2006, 16, 667-674

**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 :  $M_w = 10,000 \sim 30,000$  (GPC)  
 Formula :  $(C_{30}H_{38}N_2S_3Si)_n$   
 UV : 523 nm (in  $CH_2Cl_2$ )  
 PL : 630 nm (in  $CH_2Cl_2$ )  
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene, Dichlorobenzene

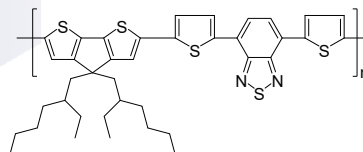
Reference : *J. Am. Chem. Soc.*, 2008, 130, 16144-16145

**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 :  $M_w = 8,000 \sim 20,000$  (GPC)  
 Formula :  $(C_{39}H_{42}N_2S_5)_n$   
 UV : 523 nm (in  $CH_2Cl_2$ )  
 PL : 749 nm (in  $CH_2Cl_2$ )  
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene, Dichlorobenzene

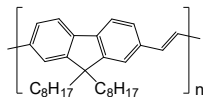
Reference : *Chem. Mater.* 2008, 20, 4045-4050



### LT-S9006

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

CAS No. : 360068-36-6  
 Grade :  $M_w > 20,000$  (GPC)  
 Formula :  $(C_{31}H_{42})_n$   
 UV : 455 nm (in  $CH_2Cl_2$ )

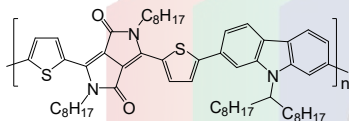


### LT-S9032 | PCBTDPP

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

CAS No. : 1147374-60-4  
 Grade :  $M_w > 10,000$  (GPC)  
 Formula :  $(C_{59}H_{81}N_3O_2S_2)_n$   
 UV : 647 nm (in  $CH_2Cl_2$ )  
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene, Dichlorobenzene

Reference : *Organic Electronics* 11 (2010) 1053–1058



### LT-S9050 | PTB7

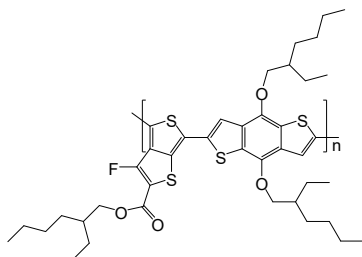
Poly(4,8-bis[(2-ethylhexyl)oxy]benzo[1,2-*b*:4,5-*b'*]dithiophene-2,6-diyl-*alt*-3-fluoro-2-[(2-ethylhexyl)carbonyl]thieno[3,4-*b*]thiophene-4,6-diyl)

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

Reference : 1. *Nature Photonics* 6, 591-595 (2012)

2. *Adv. Mater.*, 2010, 22, 135-138

3. *Adv. Mater.*, 2014, 26, 6653-6657

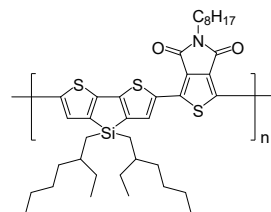


### LT-S9066 | PDTSTPD

Poly[2,6-(4,4'-bis(ethylhexyl)dithieno[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 :  $M_w = 7,000 \sim 30,000$  (GPC)  
 Formula :  $(C_{38}H_{53}NO_2S_3Si)_n$   
 UV : 614, 670 nm (film)  
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene, Dichlorobenzene

Reference : *Adv. Funct. Mater.* 2012, 22, 2345-2351



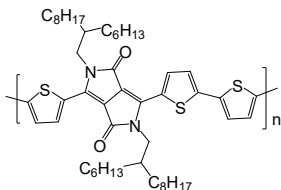
Lumtec

## LT-S9109 | PDPP3T

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 :  $M_w > 30,000$  (GPC)  
 Formula :  $(C_{50}H_{72}N_2O_2S_3)_n$   
 UV : 830 nm (in  $CHCl_3$ )  
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene, Dichlorobenzene

Reference : *J. Am. Chem. Soc.* 2009, 131, 16616-16617

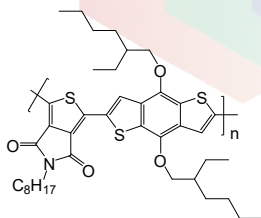


## LT-S9111 | PBDTTPD

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 :  $M_w > 30,000$  (GPC)  
 Formula :  $(C_{40}H_{53}NO_4S_2)_n$   
 UV : 610 nm (in  $CHCl_3$ )  
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene, Dichlorobenzene

Reference : 1. *Chem. Mater.* 2010, 22, 2696-2698  
 2. *J. Am. Chem. Soc.* 2010, 132, 5330-5331

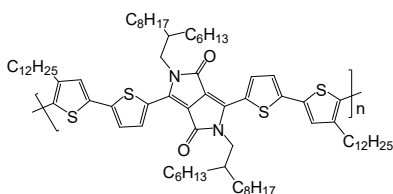


## LT-S9112 | pBBDTDP2

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]

Grade :  $M_w > 30,000$  (GPC)  
 Formula :  $(C_{78}H_{124}N_2O_2S_4)_n$   
 UV : 650 nm (in  $CHCl_3$ )  
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene, Dichlorobenzene

Reference : *J. Phys. Chem. C*, 2011, 115(30), pp15075-15080

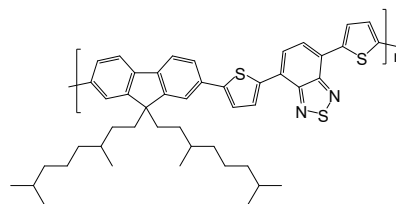


## LT-S9113 | BisDMO-PFDTBT

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

CAS No. : 1204005-82-2  
 Grade :  $M_w > 10,000$  (GPC)  
 Formula :  $(C_{47}H_{54}N_2S_3)_n$   
 UV : 560 nm (in  $CHCl_3$ )  
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene, Dichlorobenzene

Reference : *Adv. Mater.* 2009, 21, 4238-4242

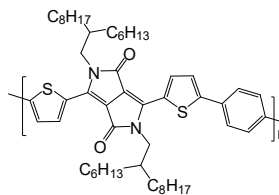


## LT-S9114 | PDPPTPT

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 :  $M_w > 10,000$  (GPC)  
 Formula :  $(C_{52}H_{74}N_2O_2S_2)_n$   
 UV : 628 nm (in  $CHCl_3$ )  
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene, Dichlorobenzene

Reference : 1. *Chem. Mater.* 2012, 24, 1316-1323  
 2. *Adv. Mater.* 2010, E242-E246

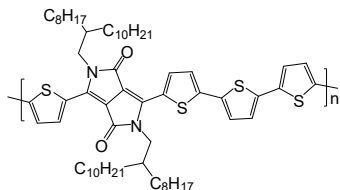


### LT-S9117 | PDQT

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 :  $M_w > 30,000$  (GPC)  
 Formula :  $(C_{62}H_{90}N_2O_2S_4)_n$   
 UV : 810 nm (in  $CHCl_3$ )  
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene, Dichlorobenzene

Reference : *J. Mater. Chem. C*, 2013, 1, 4423-4426

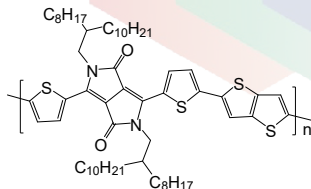


### LT-S9118 | PDBT-co-TT

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

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

Reference : 1. *Adv. Mater.* 2010, 22, 4862-4866  
 2. *Chem. Mater.* 2012, 24, 1316-1323

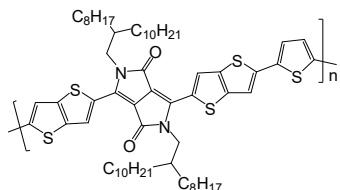


### LT-S9119 | PDPPBT

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 :  $M_w > 30,000$  (GPC)  
 Formula :  $(C_{62}H_{88}N_2O_2S_5)_n$   
 UV : 812 nm (in  $CHCl_3$ )  
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene, Dichlorobenzene

Reference : *J. Am. Chem. Soc.* 2011, 133, 3272-3275

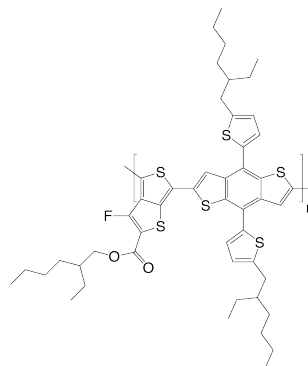


### LT-S9139 | PTB7-Th

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

CAS No. : 1469791-66-9  
 Grade :  $M_w > 50,000$  (GPC)  
 Formula :  $(C_{68}H_{66}S_2)(C_{49}H_{57}FO_2S_6)_n$   
 UV : 695 nm (in  $CHCl_3$ )  
 Solubility :  $> 5$  mg/mL in  $CHCl_3$

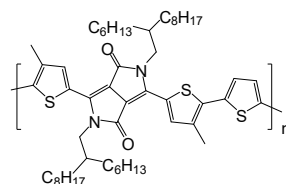
Reference : *Adv. Mater.* 2013, 25, 4766-4771



### LT-S9178 | PMDPP3T

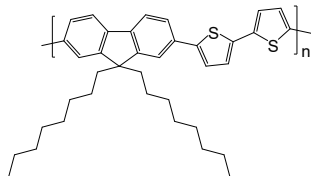
Poly[[2,5-bis(2-hexyldecyl)-2,3,5,6-tetrahydro-3,6-dioxopyrrolo[3,4-c]pyrrole-1,4-diyl]-*alt*-[3',3''-dimethyl-2,2':5',2''-terthiophene]-5,5''-diyl]

Grade :  $M_w > 30,000$  (GPC)  
 Formula :  $(C_{52}H_{76}N_2O_2S_3)_n$   
 UV : 830 nm (in  $CHCl_3$ )  
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene, Dichlorobenzene



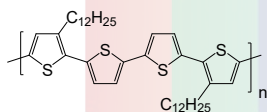
**LT-S979** | F8T2Poly[(9,9-di-*n*-octylfluorenyl-2,7-diyl)-*alt*-2,2'-bithiophene-5,5'-diyl]

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

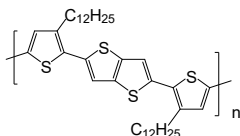
Reference : *Appl. Phys. Lett.* 87, 153511 (2005)**LT-S980** | PQT-12

Poly[bis(3-dodecyl-2-thienyl)-2,2'-dithiophene-5,5'-diyl]

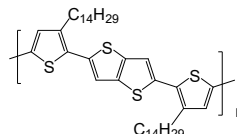
CAS No. : 827343-06-6  
 Grade :  $M_w = 10,000 \sim 40,000$  (GPC)  
 Formula :  $(C_{40}H_{56}S_4)_n$   
 UV : 473 nm (in Toluene)  
 Solubility :  $> 5$  mg/mL in  $CHCl_3$

Reference : *Adv. Mater.*, 2005, 17, 184**LT-S981** | PBTTC-C<sub>12</sub>Poly[2,5-bis(3-dodecylthiophen-2-yl)thieno[3,2-*b*]thiophene]

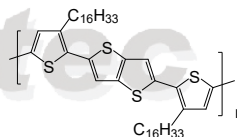
CAS No. : 888491-18-7  
 Grade :  $M_w = 40,000 \sim 80,000$  (GPC)  
 Formula :  $(C_{38}H_{54}S_4)_n$   
 UV : 460 nm (in THF)  
 PL : 557 nm (in THF)  
 Solubility :  $> 5$  mg/mL in  $CHCl_3$

Reference : *Nature Materials* 5, 328-333 (2006)**LT-S982** | PBTTC-C<sub>14</sub>Poly[2,5-bis(3-tetradecylthiophen-2-yl)thieno[3,2-*b*]thiophene]

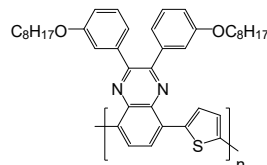
CAS No. : 888491-19-8  
 Grade :  $M_w = 40,000 \sim 80,000$  (GPC)  
 Formula :  $(C_{38}H_{54}S_4)_n$   
 UV : 466 nm (in THF)  
 PL : 557 nm (in THF)  
 Solubility :  $> 5$  mg/mL in  $CHCl_3$

Reference : *Nature Materials* 5, 328-333 (2006)**LT-S9060** | PBTTC-C<sub>16</sub>Poly[2,5-bis(3-hexadecylthiophen-2-yl)thieno[3,2-*b*]thiophene]

Grade :  $M_w > 20,000$  (GPC)  
 Formula :  $(C_{46}H_{70}S_4)_n$   
 UV : 466 nm (in THF)  
 PL : 557 nm (in THF)  
 Solubility :  $> 5$  mg/mL in  $CHCl_3$

Reference : *Nano Lett.*, 2009, 9 (12), pp4153-4157**LT-S9091** | TQ1Poly[2,3-bis-(3-octyloxyphenyl)quinoxaline-5,8-diyl-*alt*-thiophene-2,5-diyl]

CAS No. : 565228-37-7  
 Grade :  $M_w > 20,000$  (GPC)  
 Formula :  $(C_{40}H_{46}N_2O_2S)_n$   
 M.W. : 618.89 g/mole  
 Solubility :  $> 5$  mg/mL in  $CHCl_3$

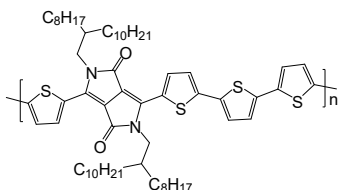
Reference : *Journal of Materials Chemistry A: Materials for Energy and Sustainability* (2014), 2(41), 17676-17682

## 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 :  $M_w > 30,000$  (GPC)  
 Formula :  $(C_{62}H_{90}N_2O_2S_4)_n$   
 UV : 810 nm (in  $CHCl_3$ )  
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene, Dichlorobenzene

Reference : *J. Mater. Chem. C*, 2013, 1, 4423-4426

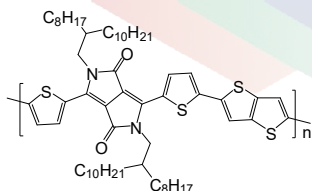


## LT-S9118 | PDBT-co-TT

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*]thiophene-2,5-diyl)

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

Reference : 1. *Adv. Mater.* 2010, 22, 4862-4866  
 2. *Chem. Mater.* 2012, 24, 1316-1323

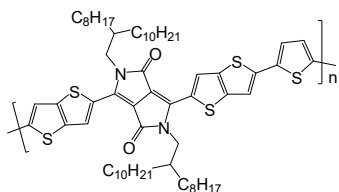


## LT-S9119 | PDPPBT

Poly(2,2'-[(2,5-bis(2-octyldodecyl)-3,6-dioxo-2,3,5,6-tetrahydropyrrolo[3,4-c]pyrrole-1,4-diyl)]dithieno[3,2-*b*]thiophene-5,5'-diyl-*alt*-thiophene-2,5-diyl)

CAS No. : 1270977-98-4  
 Grade :  $M_w > 30,000$  (GPC)  
 Formula :  $(C_{62}H_{88}N_2O_2S_3)_n$   
 UV : 812 nm (in  $CHCl_3$ )  
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene, Dichlorobenzene

Reference : *J. Am. Chem. Soc.* 2011, 133, 3272-3275

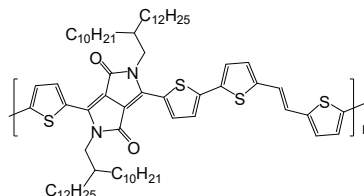


## LT-S9133 | PDVT-10

Poly(3,6-dithiophen-2-yl-2,5-di(2-decyltetradecyl)pyrrolo[3,4-c]pyrrole-1,4-dione-*alt*-thienylenevinylene-2,5-yl)

CAS No. : 1442682-99-6  
 Formula :  $(C_{72}H_{108}N_2O_2S_4)_n$   
 Grade :  $M_w > 30,000$  (GPC)  
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene, Dichlorobenzene

Reference : *Nature Communications* 5, Article number: 4183

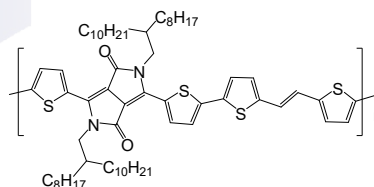


## LT-S9155 | PDVT-8

Poly(3,6-dithiophen-2-yl-2,5-di(2-octyldodecyl)pyrrolo[3,4-c]pyrrole-1,4-dione-*alt*-thienylenevinylene-2,5-yl)

CAS No. : 1403959-01-2  
 Grade :  $M_w > 20,000$  (GPC)  
 Formula :  $(C_{64}H_{92}N_2O_2S_4)_n$   
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene, Dichlorobenzene

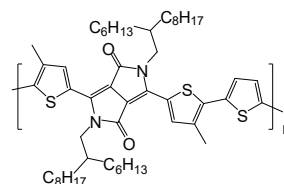
Reference : *Journal of Materials Chemistry A: Materials for Energy and Sustainability* (2014), 2(41), 17676-17682



## LT-S9178 | PMDPP3T

Poly[[2,5-bis(2-hexyldodecyl)-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]

Grade :  $M_w > 30,000$  (GPC)  
 Formula :  $(C_{52}H_{76}N_2O_2S_3)_n$   
 UV : 830 nm (in  $CHCl_3$ )  
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene, Dichlorobenzene

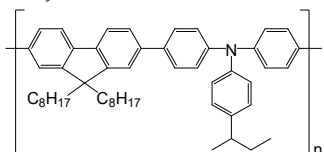




### LT-N148 | TFB

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

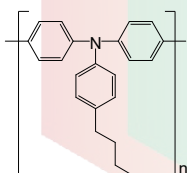
CAS No. : 220797-16-0  
 Grade :  $M_w > 30,000$  (GPC)  
 Formula :  $(C_{51}H_{61}N)_n$   
 UV : 389 nm (in  $CH_2Cl_2$ )  
 PL : 443 nm (in  $CH_2Cl_2$ )  
 Solubility : Soluble in  $CH_2Cl_2$ , Toluene,  $CHCl_3$   
 Reference : *Synthetic Metals* 160 (2010) 2393-2396



### LT-N149 | Poly-TPD

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

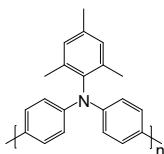
CAS No. : 472960-35-3  
 Grade :  $M_w 20,000 \sim 200,000$  (GPC)  
 Formula :  $(C_{22}H_{21}N)_n$   
 UV : 371, 388 nm (in  $CH_2Cl_2$ )  
 PL : 424 nm (in  $CH_2Cl_2$ )  
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene  
 Reference : *Nature Photonics* 8, 128-132 (2014)



### LT-N168 | PTAA

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

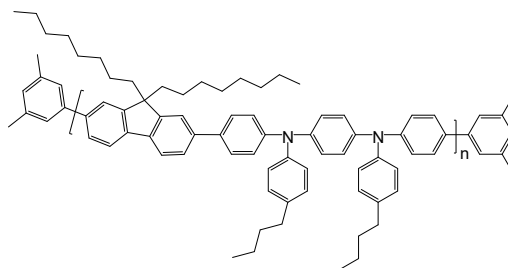
CAS No. : 1333317-99-9  
 Grade :  $M_w > 10,000$  (GPC)  
 Formula :  $(C_{21}H_{19}N)_n$   
 UV : 371, 388 nm (in  $CH_2Cl_2$ )  
 PL : 424 nm (in  $CH_2Cl_2$ )  
 Solubility : Soluble in THF,  $CHCl_3$ , Chlorobenzene, Dichlorobenzene



### LT-N169

Poly[(9,9-dioctylfluorenyl-2,7-diyl)-co-(N,N'-diphenyl)-N,N'-di(p-butylphenyl)-1,4-diamino-benzene] end capped with dimethylphenyl

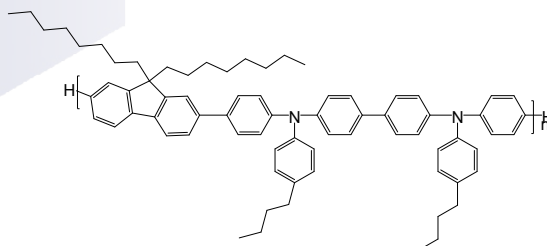
Grade :  $M_w > 10,000$  (GPC)  
 Formula :  $C_{16}H_{18}(C_{67}H_{78}N_2)_n$   
 UV : 380 nm (in THF)  
 PL : 494 nm (in THF)  
 Solubility : Soluble in THF,  $CHCl_3$ , Chlorobenzene, Dichlorobenzene



### LT-N170

Poly[(9,9-dioctylfluorenyl-2,7-diyl)-alt-(N,N'-bis(4-butylphenyl)-benzidine)]

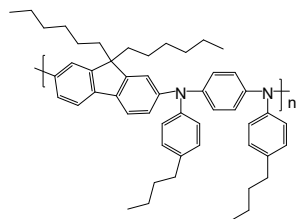
Grade :  $M_w > 10,000$  (GPC)  
 Formula :  $(C_{73}H_{82}N_2)_n$   
 UV : 380 nm (in THF)  
 PL : 435 nm (in THF)  
 Solubility : Soluble in THF,  $CHCl_3$ , Chlorobenzene, Dichlorobenzene



### LT-N171

Poly[(9,9-dihexylfluorenyl-2,7-diyl)-alt-(N,N'-bis-(p-butylphenyl)-1,4-diaminophenylene)]

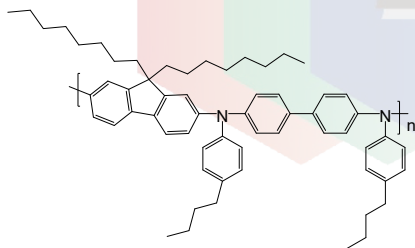
CAS No. : 870517-32-1  
 Grade :  $M_w > 10,000$  (GPC)  
 Formula :  $(C_{51}H_{62}N_2)_n$   
 UV : 398 nm (in THF)  
 PL : 425 nm (in THF)  
 Solubility : Soluble in THF,  $CHCl_3$ , Chlorobenzene, Dichlorobenzene



### LT-N172

Poly[(9,9-dioctylfluorenyl-2,7-diyl)-alt-(N,N'-bis(p-butylphenyl)-1,1'-biphenylene-4,4'-diamine)]

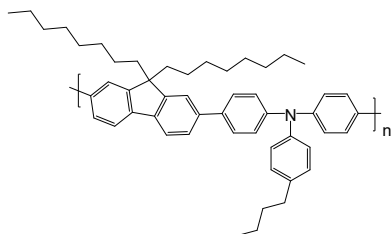
CAS No. : 1115424-53-7  
 Grade :  $M_w > 10,000$  (GPC)  
 Formula :  $(C_{61}H_{74}N_2)_n$   
 UV : 397 nm (in THF)  
 PL : 420 nm (in THF)  
 Solubility : Soluble in THF,  $CHCl_3$ , Chlorobenzene, Dichlorobenzene



### LT-N174

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

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



### LT-N175

Poly(1-vinylnaphthalene)

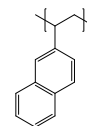
CAS No. : 29793-40-6  
 Grade :  $M_w > 20,000$  (GPC)  
 Formula :  $(C_{12}H_{10})_n$   
 Solubility : Soluble in THF,  $CHCl_3$ , Chlorobenzene, Dichlorobenzene



### LT-N176

Poly(2-vinylnaphthalene)

CAS No. : 28406-56-6  
 Grade :  $M_w > 100,000$  (GPC)  
 Formula :  $(C_{12}H_{10})_n$   
 Solubility : Soluble in THF,  $CHCl_3$ , Chlorobenzene, Dichlorobenzene

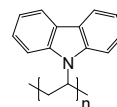


### LT-N4077 PVK

Poly(9-vinylcarbazole)

CAS No. : 25067-59-8  
 Grade :  $M_w > 20,000$  (GPC)  
 Formula :  $(C_{14}H_{11}N)_n$   
 UV : 261, 294 nm (in  $CH_2Cl_2$ )  
 PL : 380 nm (in THF)  
 Solubility : Soluble in THF,  $CHCl_3$ , Chlorobenzene, Dichlorobenzene

Reference : 1. *J. Chem. Phys.* 62, 4697 (1975)  
 2. *Appl. Phys. Lett.* 88, 251110 (2006)

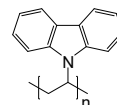


### LT-N4078 PVK

Poly(9-vinylcarbazole)

CAS No. : 25067-59-8  
 Grade :  $M_w > 100,000$  (GPC)  
 Formula :  $(C_{14}H_{11}N)_n$   
 UV : 261, 294 nm (in  $CH_2Cl_2$ )  
 PL : 380 nm (in THF)  
 Solubility : Soluble in THF,  $CHCl_3$ , Chlorobenzene, Dichlorobenzene

Reference : 1. *J. Chem. Phys.* 62, 4697 (1975)  
 2. *Appl. Phys. Lett.* 88, 251110 (2006)



### LT-S9155 | PDVT-8

Poly(3,6-dithiophen-2-yl-2,5-di(2-octyldodecyl)pyrrolo [3,4-c]pyrrole-1,4-dione-*alt*-thienylenevinylene-2,5-yl)

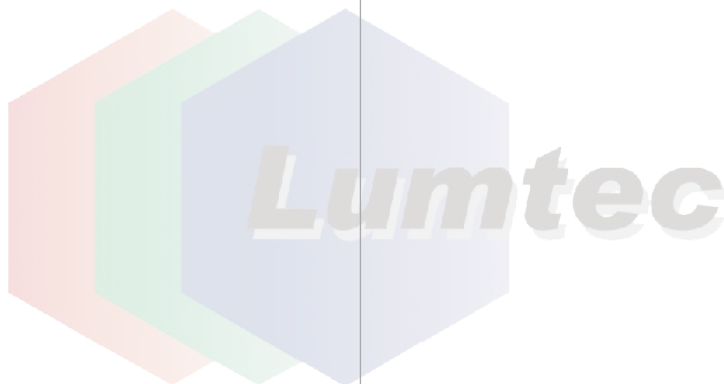
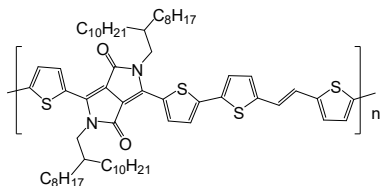
CAS No. : 1403959-01-2

Grade :  $M_w > 20,000$  (GPC)

Formula :  $(C_{64}H_{92}N_2O_2S_4)_n$

Solubility : Soluble in THF,  $CHCl_3$ ,  
Chlorobenzene, Dichlorobenzene

Reference : *Journal of Materials Chemistry A: Materials for Energy and Sustainability* (2014), 2(41), 17676-17682

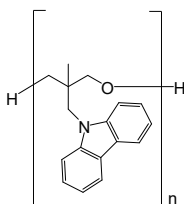


### LT-N4037 | PCMO

Poly[3-(carbazol-9-ylmethyl)-3-methyloxetane]

CAS No. : 69678-71-3  
 Grade :  $M_w > 30,000$  (GPC)  
 Formula :  $(C_{17}H_{17}NO)_n$   
 UV : 237, 263 nm (in  $CH_2Cl_2$ )  
 Solubility : Soluble in THF,  $CHCl_3$ ,  
 Chlorobenzene, Dichlorobenzene

Reference : *J. Mater. Chem.*, 2011, 21, 9546-9552



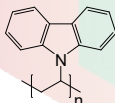
### LT-N4077 | PVK

Poly(9-vinylcarbazole)

CAS No. : 25067-59-8  
 Grade :  $M_w > 20,000$  (GPC)  
 Formula :  $(C_{14}H_{11}N)_n$   
 UV : 261, 294 nm (in  $CH_2Cl_2$ )  
 PL : 380 nm (in THF)  
 Solubility : Soluble in THF,  $CHCl_3$ ,  
 Chlorobenzene, Dichlorobenzene

Reference : 1. *J. Chem. Phys.* 62, 4697 (1975)

2. *Appl. Phys. Lett.* 88, 251110 (2006)



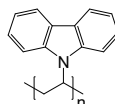
### LT-N4078 | PVK

Poly(9-vinylcarbazole)

CAS No. : 25067-59-8  
 Grade :  $M_w > 100,000$  (GPC)  
 Formula :  $(C_{14}H_{11}N)_n$   
 UV : 261, 294 nm (in  $CH_2Cl_2$ )  
 PL : 380 nm (in THF)  
 Solubility : Soluble in THF,  $CHCl_3$ ,  
 Chlorobenzene, Dichlorobenzene

Reference : 1. *J. Chem. Phys.* 62, 4697 (1975)

2. *Appl. Phys. Lett.* 88, 251110 (2006)



Lumtec

# Flexible Printed Electronics

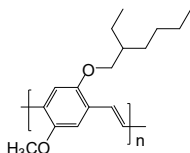
## Light-Emitting Layer Polymers

### LT-S931 | MEH-PPV

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

CAS No. : 138184-36-8  
 Grade :  $M_w > 100,000$  (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

Reference : *Appl. Phys. Lett.* 78, 841 (2001)

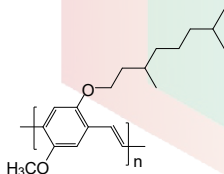


### LT-S932 | MDMO-PPV

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

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

Reference : *Thin Solid Films* 511-512 (2006) 587-592

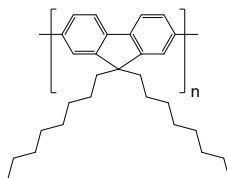


### LT-S933 | PFO

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

CAS No. : 123864-00-6  
 Grade :  $M_w = 50,000 \sim 150,000$  (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

Reference : *Appl. Phys. Lett.*, 2004, 85, 4576-4578

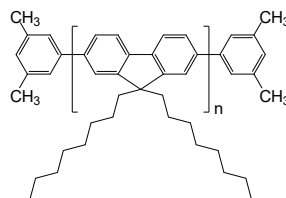


### LT-S934 | PFO-DMP

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

CAS No. : 874816-14-5  
 Grade :  $M_w = 50,000 \sim 150,000$  (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

Reference : *Appl. Phys. Lett.*, 2004, 85, 4576-4578

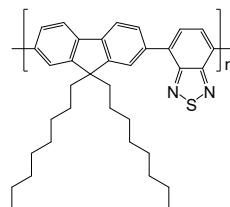


### LT-S957 | F8BT

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

CAS No. : 210347-52-7  
 Grade :  $M_w = 20,00 \sim 100,000$  (GPC)  
 Formula :  $(C_{35}H_{42}N_2S)_n$   
 UV : 453 nm (in THF)  
 PL : 645 nm (in THF)  
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene,  
 Dichlorobenzene

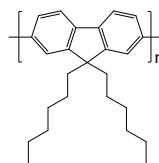
Reference : *Synthetic Metals*, 152, 105, 2005



### LT-S958 | PHF

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

CAS No. : 201807-75-2  
 Grade :  $M_w = 30,000 \sim 100,000$  (GPC)  
 Formula :  $(C_{25}H_{32})_n$   
 UV : 389 nm (in THF)  
 PL : 418 nm (in THF)  
 Solubility : Soluble in THF,  $CHCl_3$ ,  
 Chlorobenzene, Dichlorobenzene

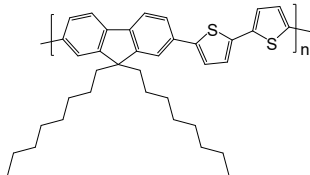


### LT-S979 | F8T2

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

CAS No. : 210347-56-1  
 Grade :  $M_w = 20,000 \sim 60,000$  (GPC)  
 Formula :  $(C_{37}H_{44}S_2)_n$   
 UV : 454 nm (in THF)  
 PL : 500 nm (in THF)  
 Solubility : Soluble in THF,  $CHCl_3$ , Chlorobenzene, Dichlorobenzene

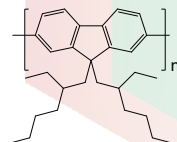
Reference : *Appl. Phys. Lett.* 87, 153511 (2005)



### LT-S9004

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

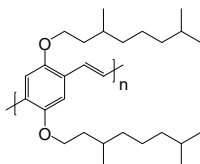
CAS No. : 188201-16-3  
 Grade :  $M_w > 20,000$  (GPC)  
 Formula :  $(C_{29}H_{40})_n$   
 UV : 389 nm (in THF)  
 PL : 418 nm (in THF)  
 Solubility : Soluble in THF,  $CHCl_3$ , Chlorobenzene, Dichlorobenzene



### LT-A1001

Poly[2,5-bis(3',7'-dimethyloctyloxy)-1,4-phenylenevinylene]

CAS No. : 189012-99-5  
 Grade :  $M_w > 100,000$  (GPC)  
 Formula :  $(C_{28}H_{46}O_2)_n$   
 UV : 480 nm (in Toluene)  
 PL : 548 nm (in Toluene)  
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene, Dichlorobenzene

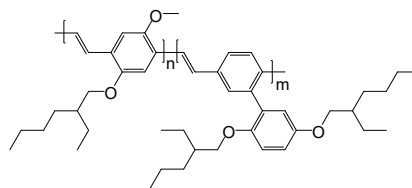


### LT-A1003 | BEHP-CO-MEH-PPV

Poly([2-[2',5'-bis(2'-ethylhexyloxy)phenyl]-1,4-phenylenevinylene]-co-[2-methoxy-5-(2'-ethylhexyloxy)-1,4-phenylenevinylene]), (m:n=60:40 mole ratio)

Grade :  $M_w > 100,000$  (GPC)  
 Formula :  $(C_{17}H_{26}O_2)_n(C_{28}H_{38}O_2)_m$   
 UV : 325 nm (in  $CH_2Cl_2$ )  
 PL : 545 nm (in  $CH_2Cl_2$ )  
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene, Dichlorobenzene

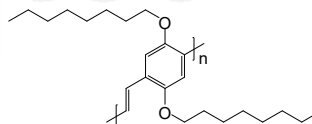
Reference : *Physica E: Low-dimensional Systems and Nanostructures* 53, 2013, 66-71



### LT-A1004

Poly[2,5-bis(octyloxy)-1,4-phenylenevinylene]

CAS No. : 133069-19-9  
 Grade :  $M_w > 3,000$  (GPC)  
 Formula :  $(C_{24}H_{38}O_2)_n$   
 UV : 477 nm (in  $CH_2Cl_2$ )  
 PL : 548 nm (in  $CH_2Cl_2$ )  
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene, Dichlorobenzene

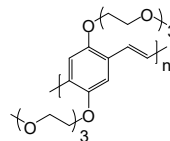


### LT-A1005 | BTEM-PPV

Poly(2,5-bis(1,4,7,10-tetraoxaundecyl)-1,4-phenylenevinylene)

CAS No. : 221244-49-1  
 Grade :  $M_w > 10,000$  (GPC)  
 Formula :  $(C_{21}H_{32}O_8)_n$   
 UV : 491 nm (in THF)  
 PL : 549 nm (in THF)  
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene, Dichlorobenzene

Reference : *Appl. Phys. Lett.* 75, 2014 (1999)



# Flexible Printed Electronics

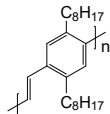
## Light-Emitting Layer Polymers

### LT-A1006 | POPPV

Poly(2,5-dioctyl-1,4-phenylenevinylene)

CAS No. : 808735-22-0  
 Grade :  $M_w > 3,000$  (GPC)  
 Formula :  $(C_{24}H_{38})_n$   
 UV : 403 nm (in  $CH_2Cl_2$ )  
 PL : 491 nm (in  $CH_2Cl_2$ )  
 Solubility : Soluble in  $CHCl_3$ ,  
 Chlorobenzene, Dichlorobenzene

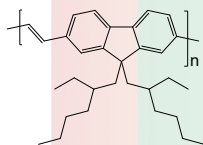
Reference : *Adv. Funct. Mater.* 2009, 19, 3604-3609



### LT-A1007

Poly(9,9-di-(2-ethylhexyl)-9H-fluorene-2,7-vinylene)

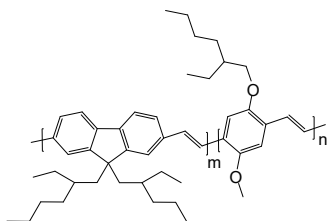
CAS No. : 1019638-19-7  
 Grade :  $M_w > 20,000$  (GPC)  
 Formula :  $(C_{31}H_{42})_n$   
 UV : 280 nm (in  $CH_2Cl_2$ )  
 PL : 454 nm (in  $CH_2Cl_2$ )  
 Solubility : Soluble in  $CHCl_3$ ,  
 Chlorobenzene, Dichlorobenzene



### LT-A1008

Poly[(9,9-di-(2-ethylhexyl)-9H-fluorene-2,7-vinylene)-co-(2-methoxy-5-(2-ethylhexyloxy)-1,4-phenylenevinylene)] (m:n=95:5 mole ratio)

Grade :  $M_w > 20,000$  (GPC)  
 Formula :  $(C_{29}H_{38})_m(C_{17}H_{24}O_2)_n$   
 UV : 280 nm (in  $CH_2Cl_2$ )  
 PL : 510 nm (in  $CH_2Cl_2$ )  
 Solubility : Soluble in  $CHCl_3$ ,  
 Chlorobenzene, Dichlorobenzene

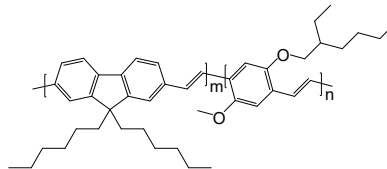


### LT-A1009 | Poly(FV-CO-MEHPV)

Poly((9,9-dihexyl-9H-fluorene-2,7-vinylene)-co-(1-methoxy-4-(2-ethylhexyloxy)-2,5-phenylenevinylene)), (m:n=95:5 mole ratio)

Grade :  $M_w > 20,000$  (GPC)  
 Formula :  $(C_{27}H_{34})_m(C_{17}H_{24}O_2)_n$   
 UV : 280 nm (in  $CH_2Cl_2$ )  
 PL : 500 nm (in  $CH_2Cl_2$ )  
 Solubility : Soluble in  $CHCl_3$ ,  
 Chlorobenzene, Dichlorobenzene

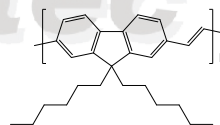
Reference : *Macromolecules*, 2003, 36 (11), pp 3841-3847



### LT-A1010

Poly(9,9-di-n-hexylfluorenyl-2,7-vinylene)

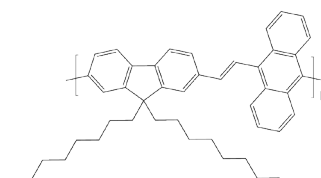
CAS No. : 203927-82-6  
 Grade :  $M_w > 20,000$  (GPC)  
 Formula :  $(C_{27}H_{34})_n$   
 UV : 373 nm (in  $CH_2Cl_2$ )  
 PL : 454 nm (in  $CH_2Cl_2$ )  
 Solubility : Soluble in  $CHCl_3$ ,  
 Chlorobenzene, Dichlorobenzene



### LT-A1011

Poly[(9,9-dioctyl-2,7-divinylfluorenylene)-alt-(9,10-anthracene)]

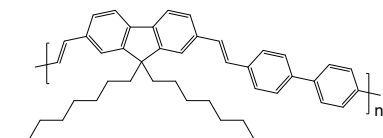
CAS No. : 474975-19-4  
 Grade :  $M_w > 20,000$  (GPC)  
 Formula :  $(C_{47}H_{52})_n$   
 UV : 445 nm (in THF)  
 PL : 556 nm (in THF)  
 Solubility : Soluble in  $CHCl_3$ ,  
 Chlorobenzene, Dichlorobenzene



### LT-A1012

Poly[(9,9-dioctyl-2,7-divinylene-fluorenylene)-*alt*-(4,4'-biphenylene)]

CAS No. : 474975-20-7  
 Grade :  $M_w > 20,000$  (GPC)  
 Formula :  $(C_{45}H_{52})_n$   
 UV : 430 nm (in THF)  
 PL : 448 nm (in THF)  
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene, Dichlorobenzene

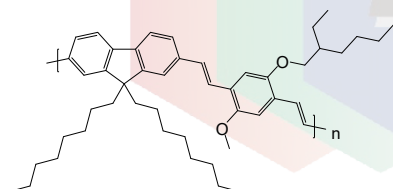


### LT-A1013 PEPV

Poly[(9,9-dioctyl-2,7-divinylene-fluorenylene)-*alt*-(2-methoxy-5-(2-ethylhexyloxy)-1,4-phenylene)]

CAS No. : 475101-36-1  
 Grade :  $M_w > 30,000$  (GPC)  
 Formula :  $(C_{48}H_{66}O_2)_n$   
 UV : 480 nm (in THF)  
 PL : 539 nm (in THF)  
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene, Dichlorobenzene

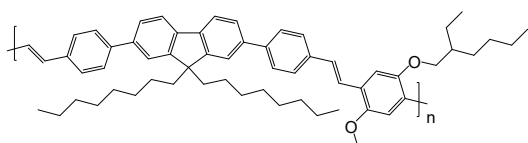
Reference : *J. Am. Chem. Soc.*, 2007, 129 (43), pp 12904-12905



### LT-A1014

Poly[(9,9-dioctylfluorenyl-2,7-diyl)-*co*-(1,4-diphenylene-vinylene-2-methoxy-5-(2-ethylhexyloxy)-benzene)]

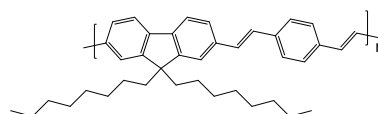
CAS No. : 577705-37-4  
 Grade :  $M_w > 30,000$  (GPC)  
 Formula :  $(C_{60}H_{74}O_2)_n$   
 UV : 426 nm (in THF)  
 PL : 466 nm (in THF)  
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene, Dichlorobenzene



### LT-A1015

Poly[(9,9-dioctyl-2,7-divinylene-fluorenylene)-*alt*-(1,4-phenylene)]

CAS No. : 579505-60-5  
 Grade :  $M_w > 30,000$  (GPC)  
 Formula :  $(C_{39}H_{48})_n$   
 UV : 456 nm (in THF)  
 PL : 495 nm (in THF)  
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene, Dichlorobenzene

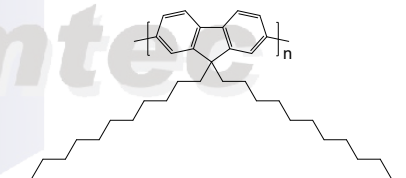


### LT-A1016 PFD

Poly(9,9-di-*n*-dodecylfluorenyl-2,7-diyl)

CAS No. : 248256-53-3  
 Grade :  $M_w > 40,000$  (GPC)  
 Formula :  $(C_{37}H_{56})_n$   
 UV : 369 nm (in  $CH_2Cl_2$ )  
 PL : 421 nm (in  $CH_2Cl_2$ )  
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene, Dichlorobenzene

Reference : *Sensors*, 2010 IEEE, 2603-2606

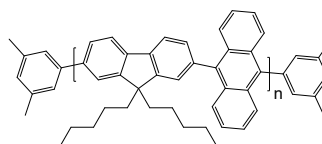


### LT-A1017 PFH-A-DMP

Poly[(9,9-dihexylfluorene-2,7-diyl)-*co*-(anthracene-9,10-diyl)] end capped with dimethylphenyl

Grade :  $M_w > 10,000$  (GPC)  
 Formula :  $C_{16}H_{18}(C_{39}H_{40})_n$   
 UV : 375 nm (in  $CH_2Cl_2$ )  
 PL : 440 nm (in  $CH_2Cl_2$ )  
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene, Dichlorobenzene

Reference : *Nano Lett.*, 2007, 7 (10), pp 3013-3017



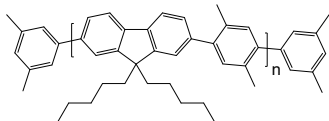


### LT-A1018 | PF-DMB

Poly[(9,9-dihexylfluorene-2,7-diyl)-*alt*-(2,5-dimethyl-1,4-phenylene)] end capped with dimethylphenyl

CAS No. : 579505-48-9  
 Grade :  $M_w > 20,000$  (GPC)  
 Formula :  $C_{16}H_{18}(C_{33}H_{40})_n$   
 UV : 330 nm (in  $CH_2Cl_2$ )  
 PL : 378 nm (in  $CH_2Cl_2$ )  
 Solubility : Soluble in  $CHCl_3$ ,  
 Chlorobenzene, Dichlorobenzene

Reference : *Nanotechnology*, 2012, 23(7), 075701

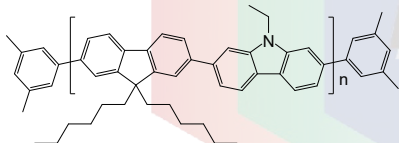


### LT-A1019 | PFH-EC

Poly[(9,9-dihexylfluorene-2,7-diyl)-*co*-(9-ethylcarbazol-2,7-diyl)]end capped with dimethylphenyl

Grade :  $M_w > 20,000$  (GPC)  
 Formula :  $C_{16}H_{18}(C_{39}H_{43}N)_n$   
 UV : 374 nm (in  $CH_2Cl_2$ )  
 PL : 417 nm (in  $CH_2Cl_2$ )  
 Solubility : Soluble in  $CHCl_3$ ,  
 Chlorobenzene, Dichlorobenzene

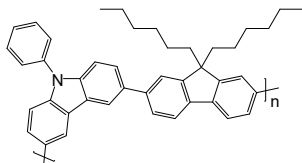
Reference : *Journal of Power Sources* 246, 2014, 184-191



### LT-A1020

Poly(9,9-n-dihexyl-2,7-fluorene-*alt*-9-phenyl-3,6-carbazole)

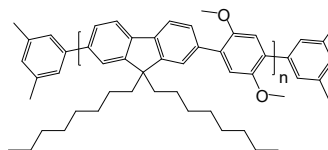
CAS No. : 856893-75-9  
 Grade :  $M_w > 30,000$  (GPC)  
 Formula :  $(C_{43}H_{43}N)_n$   
 UV : 333 nm (in  $CH_2Cl_2$ )  
 PL : 398 nm (in  $CH_2Cl_2$ )  
 Solubility : Soluble in  $CHCl_3$ ,  
 Chlorobenzene, Dichlorobenzene



### LT-A1021

Poly[(9,9-dioctylfluorenyl-2,7-diyl)-*co*-(1,4-(2,5-dimethoxy)benzene)] end capped with dimethylphenyl

Grade :  $M_w > 20,000$  (GPC)  
 Formula :  $C_{16}H_{18}(C_{37}H_{48}O_2)_n$   
 UV : 369 nm (in THF)  
 PL : 410 nm (in THF)  
 Solubility : Soluble in  $CHCl_3$ ,  
 Chlorobenzene, Dichlorobenzene

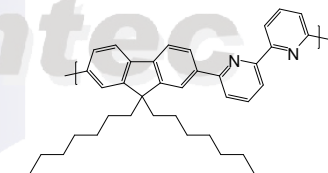


### LT-A1023 | PFO-BPy

Poly[(9,9-dioctylfluorenyl-2,7-diyl)-*alt*-(6,6'-(2,2'-bipyridine))]

CAS No. : 1423043-97-3  
 Grade :  $M_w > 10,000$  (GPC)  
 Formula :  $(C_{39}H_{46}N_2)_n$   
 UV : 360 nm (in THF)  
 PL : 410 nm (in THF)  
 Solubility : Soluble in  $CHCl_3$ ,  
 Chlorobenzene, Dichlorobenzene

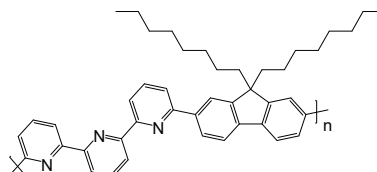
Reference : *ACS Nano*, 2013, 7(3), pp 2231-2239



### LT-A1024

Poly[(9,9-dioctylfluorenyl-2,7-diyl)-*alt*-(6,6'-(2,2':6',2''-terpyridine))]

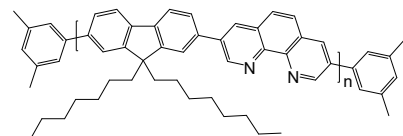
CAS No. : 934690-41-2  
 Grade :  $M_w > 10,000$  (GPC)  
 Formula :  $(C_{44}H_{49}N_3)_n$   
 UV : 347 nm (in THF)  
 PL : 368 nm (in THF)  
 Solubility : Soluble in  $CHCl_3$ ,  
 Chlorobenzene, Dichlorobenzene



### LT-A1025

Poly[9,9-dioctyl-2,7-fluorenylene]-*co*-(3,8-phenanthroline) end capped with dimethylphenyl

Grade :  $M_w > 30,000$  (GPC)  
 Formula :  $C_{16}H_{18}(C_{41}H_{46}N_2)_n$   
 UV : 388 nm (in THF)  
 PL : 410 nm (in THF)  
 Solubility : Soluble in  $CHCl_3$ ,  
 Chlorobenzene, Dichlorobenzene

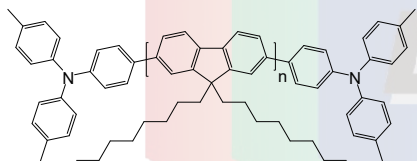


### LT-A1026

Poly[9,9-dioctylfluorenyl-2,7-diyl] end capped with *N,N*-Bis(4-methylphenyl)-aniline

Grade :  $M_w > 20,000$  (GPC)  
 Formula :  $C_{40}H_{36}N_2(C_{29}H_{40})_n$   
 UV : 393 nm (in THF)  
 PL : 412 nm (in THF)  
 Solubility : Soluble in  $CHCl_3$ ,  
 Chlorobenzene, Dichlorobenzene

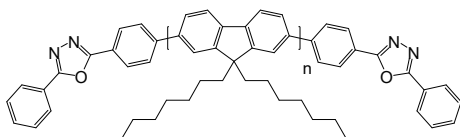
Reference : *New J. Phys.* 2004, 6, 185



### LT-A1027

Poly[9,9-dioctylfluorenyl-2,7-diyl] end capped with 2,5-diphenyl-1,2,4-oxadiazole

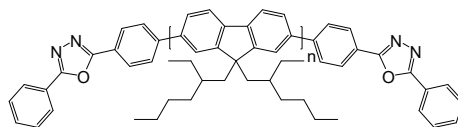
Grade :  $M_w > 20,000$  (GPC)  
 Formula :  $C_{28}H_{18}N_4O_2(C_{29}H_{42})_n$   
 UV : 393 nm (in THF)  
 PL : 412 nm (in THF)  
 Solubility : Soluble in  $CHCl_3$ ,  
 Chlorobenzene, Dichlorobenzene



### LT-A1028

Poly[9,9-di-(2-ethylhexyl)-fluorenyl-2,7-diyl] end capped with 2,5-diphenyl-1,2,4-oxadiazole

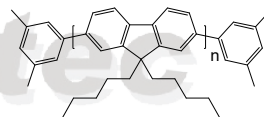
Grade :  $M_w > 10,000$  (GPC)  
 Formula :  $C_{28}H_{18}N_4O_2(C_{29}H_{42})_n$   
 UV : 393 nm (in THF)  
 PL : 412 nm (in THF)  
 Solubility : Soluble in  $CHCl_3$ ,  
 Chlorobenzene, Dichlorobenzene



### LT-A1029

Poly[9,9-dihexylfluorenyl-2,7-diyl] end capped with dimethylphenyl

CAS No. : 1010129-39-1  
 Grade :  $M_w = 50,000 \sim 150,000$  (GPC)  
 Formula :  $C_{16}H_{18}(C_{25}H_{32})_n$   
 UV : 393 nm (in THF)  
 PL : 412 nm (in THF)  
 Solubility : Soluble in  $CHCl_3$ ,  
 Chlorobenzene, Dichlorobenzene

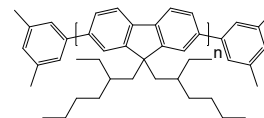


### LT-A1030

Poly[9,9-di-(2-ethylhexyl)-fluorenyl-2,7-diyl] end capped with dimethylphenyl

Grade :  $M_w > 20,000$  (GPC)  
 Formula :  $C_{16}H_{18}(C_{29}H_{40})_n$   
 UV : 393 nm (in THF)  
 PL : 412 nm (in THF)  
 Solubility : Soluble in  $CHCl_3$ ,  
 Chlorobenzene, Dichlorobenzene

Reference : *Chin. J. Chem.* 2010, 28, 1482-1486

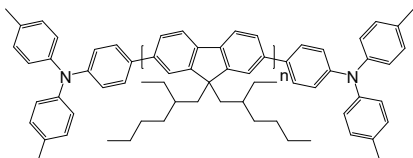


### LT-A1031

Poly[9,9-di-(2-ethylhexyl)-fluorenyl-2,7-diyl] end capped with *N,N*-Bis(4-methylphenyl)-aniline

Grade :  $M_w > 10,000$  (GPC)  
 Formula :  $C_{40}H_{36}N_2(C_{29}H_{40})_n$   
 UV : 393 nm (in THF)  
 PL : 412 nm (in THF)  
 Solubility : Soluble in  $CHCl_3$ ,  
 Chlorobenzene, Dichlorobenzene

Reference : *Chin. J. Chem.* 2010, 28, 1482-1486

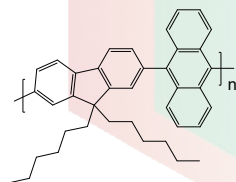


### LT-A1032 PFH-A

Poly[(9,9-dihexylfluorenyl-2,7-diyl)-co-(9,10-anthracene)]

CAS No. : 474975-22-9  
 Grade :  $M_w > 10,000$  (GPC)  
 Formula :  $(C_{39}H_{40})_n$   
 UV : 375 nm (in THF)  
 PL : 440 nm (in THF)  
 Solubility : Soluble in  $CHCl_3$ ,  
 Chlorobenzene, Dichlorobenzene

Reference : *Nano Lett.*, 2007, 7 (10), pp 3013-3017

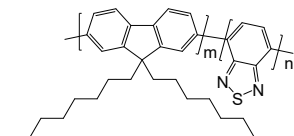


### LT-A1033

Poly[(9,9-dioctylfluorenyl-2,7-diyl)-co-(1,4-benzo-[2,1,3]-thiadiazole)] (m:n=95:5 mole ratio)

Grade :  $M_w > 20,000$  (GPC)  
 Formula :  $(C_{29}H_{40})_m(C_6H_2N_2S)_n$   
 UV : 386 nm (in THF)  
 PL : 535 nm (in THF)  
 Solubility : Soluble in  $CHCl_3$ ,  
 Chlorobenzene, Dichlorobenzene

Reference : *ACS Nano*, 2011, 5(2), pp 1468-1475

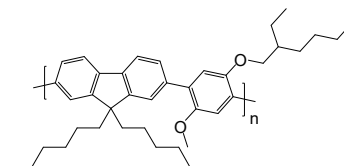


### LT-A1034

Poly[(9,9-dihexylfluorenyl-2,7-diyl)-alt-(2-methoxy-5-(2-ethylhexyloxy)-1,4-phenylene)]

CAS No. : 475102-99-9  
 Grade :  $M_w > 30,000$  (GPC)  
 Formula :  $(C_{40}H_{54}O_2)_n$   
 UV : 366 nm (in THF)  
 PL : 410 nm (in THF)  
 Solubility : Soluble in  $CHCl_3$ ,  
 Chlorobenzene, Dichlorobenzene

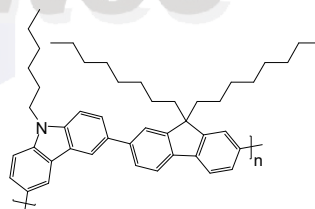
Reference : *Journal of Nanoscience and Nanotechnology*, 2012, Vol.12, pp 5407-5411



### LT-A1035

Poly[(9,9-dioctylfluorenyl-2,7-diyl)-alt-(9-hexyl-3,6-carbazole)]

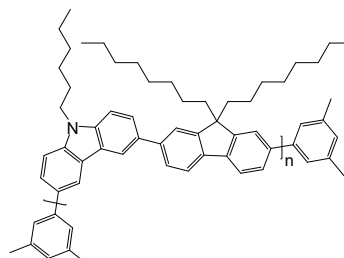
Grade :  $M_w > 10,000$  (GPC)  
 Formula :  $(C_{47}H_{59}N)_n$   
 UV : 360 nm (in THF)  
 PL : 410 nm (in THF)  
 Solubility : Soluble in  $CHCl_3$ ,  
 Chlorobenzene, Dichlorobenzene



### LT-A1036

Poly[(9,9-dioctylfluorenyl-2,7-diyl)-co-(9-hexyl-3,6-carbazole)] end capped with dimethylphenyl

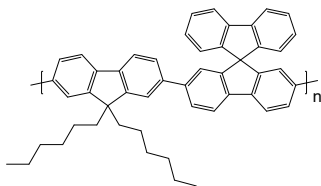
Grade :  $M_w > 10,000$  (GPC)  
 Formula :  $C_{16}H_{18}(C_{47}H_{59}N)_n$   
 UV : 364 nm (in THF)  
 PL : 412 nm (in THF)  
 Solubility : Soluble in  $CHCl_3$ ,  
 Chlorobenzene, Dichlorobenzene



### LT-A1037

Poly[(9,9-dihexylfluorenyl-2,7-diyl)-*alt*-(9,9'-spiro-bifluorene-2,7-diyl)]

CAS No. : 474975-24-1  
 Grade :  $M_w > 20,000$  (GPC)  
 Formula :  $(C_{50}H_{46})_n$   
 UV : 380 nm (in THF)  
 PL : 410 nm (in THF)  
 Solubility : Soluble in  $CHCl_3$ ,  
 Chlorobenzene, Dichlorobenzene



### LT-A1038

Poly[(9,9-dioctylfluorenyl-2,7-diyl)-*co*-(2,5-p-xylene)]

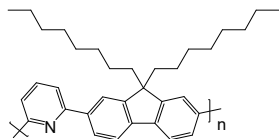
CAS No. : 1687752-52-8  
 Grade :  $M_w > 20,000$  (GPC)  
 Formula :  $(C_{37}H_{48})_n$   
 UV : 335 nm (in THF)  
 PL : 400 nm (in THF)  
 Solubility : Soluble in  $CHCl_3$ ,  
 Chlorobenzene, Dichlorobenzene



### LT-A1039

Poly[(9,9-dioctylfluorenyl-2,7-diyl)-*alt*-(2,6-pyridine)]

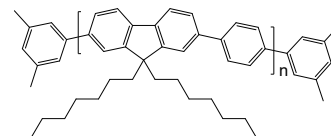
CAS No. : 773895-96-8  
 Grade :  $M_w > 20,000$  (GPC)  
 Formula :  $(C_{34}H_{43}N)_n$   
 UV : 364 nm (in THF)  
 PL : 406 nm (in THF)  
 Solubility : Soluble in  $CHCl_3$ ,  
 Chlorobenzene, Dichlorobenzene



### LT-A1040

Poly[(9,9-dioctylfluorenyl-2,7-diyl)-*co*-(1,4-phenylene)]  
 end capped with dimethylphenyl

CAS No. : 1025775-95-4  
 Grade :  $M_w > 30,000$  (GPC)  
 Formula :  $C_{16}H_{18}(C_{35}H_{44})_n$   
 UV : 377 nm (in THF)  
 PL : 405 nm (in THF)  
 Solubility : Soluble in  $CHCl_3$ ,  
 Chlorobenzene, Dichlorobenzene

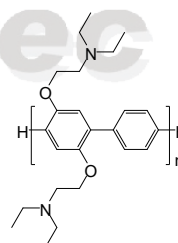


### LT-A1050

Poly[(2,5-bis(2-(*N,N*-diethylamino)ethoxy)-1,4-phenylene)-*alt*-1,4-phenylene]

Grade :  $M_w > 30,000$  (GPC)  
 Formula :  $(C_{24}H_{34}N_2O_2)_n$   
 UV : 340 nm (in  $CH_2Cl_2$ )  
 PL : 400 nm (in  $CH_2Cl_2$ )  
 Solubility : Soluble in  $CHCl_3$ ,  
 Chlorobenzene, Dichlorobenzene

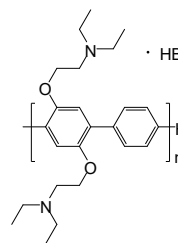
Reference : *Macromolecules*, 1999, 32 (12), pp 3970-3978



### LT-A1051

Poly[(2,5-bis(2-(*N,N*-diethylammonium bromide)ethoxy)-1,4-phenylene)-*alt*-1,4-phenylene]

Grade :  $M_w > 30,000$  (GPC)  
 Formula :  $(C_{24}H_{36}Br_2N_2O_2)_n$   
 UV : 340 nm (in DMSO)  
 PL : 421 nm (in DMSO)  
 Solubility : Soluble in MeOH



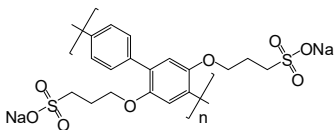
# Flexible Printed Electronics

## Light-Emitting Layer Polymers

### LT-A1052 | PPP-OPSO<sub>3</sub>

Poly(2,5-bis(3-sulfonatopropoxy)-1,4-phenylene, disodium salt-*alt*-1,4-phenylene)

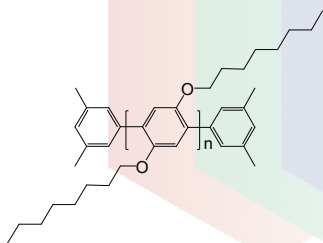
Grade :  $M_w > 30,000$  (GPC)  
 Formula :  $(C_{18}H_{18}Na_2O_8S_2)_n$   
 UV : 341 nm (in H<sub>2</sub>O)  
 PL : 420 nm (in H<sub>2</sub>O)  
 Solubility : Soluble in H<sub>2</sub>O  
 Reference : 1. *Macromolecules*, 1998, 31 (4), pp 964-974  
 2. *Phys. Rev. B* 86, 235420 (2012)



### LT-A1054 |

Poly[2,5-dioctyl-1,4-phenylene] end capped with dimethylphenyl

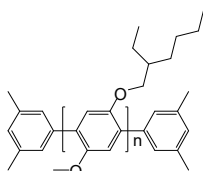
Grade :  $M_w > 10,000$  (GPC)  
 Formula :  $C_{16}H_{18}(C_{22}H_{36}O_2)_n$   
 UV : 335 nm (in THF)  
 PL : 397 nm (in THF)  
 Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene



### LT-A1055 |

Poly[2-methoxy-5-(2-ethylhexyloxy)-1,4phenylene] end capped with dimethylphenyl

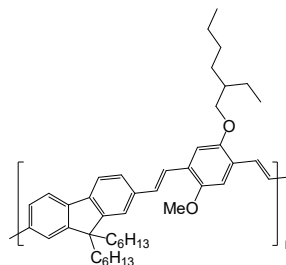
Grade :  $M_w > 10,000$  (GPC)  
 Formula :  $C_{16}H_{18}(C_{15}H_{22}O_2)_n$   
 UV : 325 nm (in THF)  
 PL : 390 nm (in THF)  
 Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene



### LT-A1056 |

Poly((9,9-dihexyl-9H-fluorene-2,7-vinylene)-*co*-(1-methoxy-4-(2-ethylhexyloxy)-2,5-phenylenevinylene))

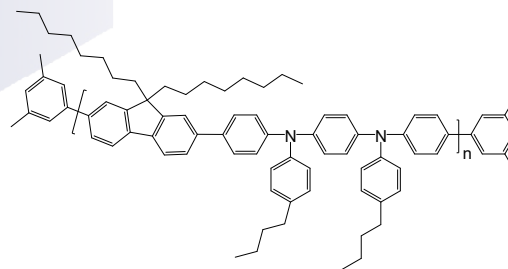
Grade :  $M_w > 20,000$  (GPC)  
 Formula :  $(C_{44}H_{58}O_2)_n$   
 UV : 325 nm (in THF)  
 PL : 390 nm (in THF)  
 Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene



### LT-N169 |

Poly[(9,9-dioctylfluorenyl-2,7-diyl)-*co*-(*N,N'*-diphenyl)-*N,N'*-di(*p*-butylphenyl)-1,4-diamino-benzene] end capped with dimethylphenyl

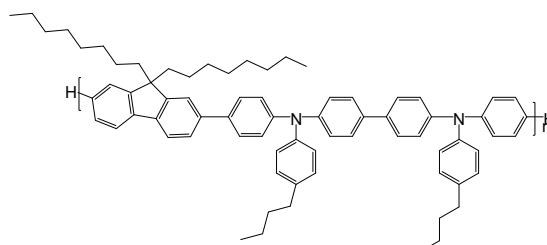
Grade :  $M_w > 10,000$  (GPC)  
 Formula :  $C_{16}H_{18}(C_{67}H_{78}N_2)_n$   
 UV : 380 nm (in THF)  
 PL : 494 nm (in THF)  
 Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene



### LT-N170 |

Poly[(9,9-dioctylfluorenyl-2,7-diyl)-*alt*-(*N,N'*-bis(4-butylphenyl)-benzidine-*N,N'*-[1,4-diphenylene])] end capped with dimethylphenyl

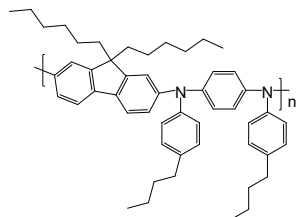
Grade :  $M_w > 10,000$  (GPC)  
 Formula :  $(C_{73}H_{82}N_2)_n$   
 UV : 380 nm (in THF)  
 PL : 435 nm (in THF)  
 Solubility : Soluble in CHCl<sub>3</sub>, Chlorobenzene, Dichlorobenzene



### LT-N171

Poly[(9,9-dihexylfluorenyl-2,7-diyl)-*alt*-(*N,N'*-bis-(*p*-butylphenyl)-1,4-diaminophenylene)]

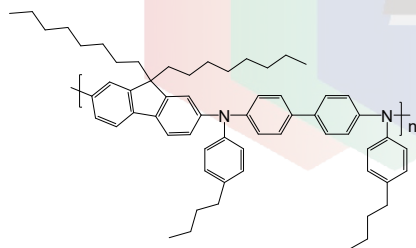
CAS No. : 870517-32-1  
 Grade :  $M_w > 10,000$  (GPC)  
 Formula :  $(C_{51}H_{62}N_2)_n$   
 UV : 398 nm (in THF)  
 PL : 425 nm (in THF)  
 Solubility : Soluble in THF,  $CHCl_3$ , Chlorobenzene, Dichlorobenzene



### LT-N172

Poly[(9,9-dioctylfluorenyl-2,7-diyl)-*alt*-(*N,N'*-bis(*p*-butylphenyl)-1,1'-biphenylene-4,4'-diamine)]

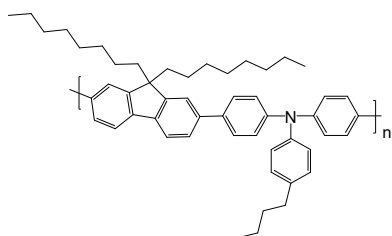
CAS No. : 1115424-53-7  
 Grade :  $M_w > 10,000$  (GPC)  
 Formula :  $(C_{61}H_{74}N_2)_n$   
 UV : 397 nm (in THF)  
 PL : 420 nm (in THF)  
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene, Dichlorobenzene



### LT-N174

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

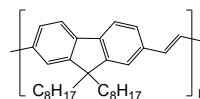
CAS No. : 223569-31-1  
 Grade :  $M_w > 30,000$  (GPC)  
 Formula :  $(C_{51}H_{61}N)_n$   
 UV : 385 nm (in THF)  
 PL : 434 nm (in THF)  
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene, Dichlorobenzene



### LT-S9006

Poly[2,7-(9-(tridecan-7-ylidene)-9*H*-fluorene)-*alt*-4,7-bis(thiophen-2-yl)-5,6-bis(octyloxy)benzo[*c*][1,2,5]thiadiazole]

CAS No. : 360068-36-6  
 Grade :  $M_w > 20,000$  (GPC)  
 Formula :  $(C_{31}H_{42})_n$   
 UV : 455 nm (in  $CH_2Cl_2$ )  
 Solubility : Soluble in  $CHCl_3$ , Chlorobenzene, Dichlorobenzene

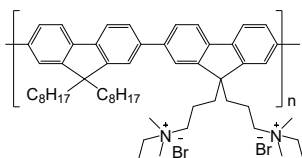


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### LT-N878 | PFNBr

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

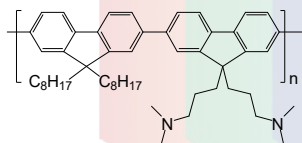
Grade :  $M_w > 10,000$  (GPC)  
 Formula :  $(C_{56}H_{80}N_2Br_2)_n$   
 UV : 375 nm (in MeOH)  
 PL : 440 nm (in MeOH)  
 Solubility : Soluble in MeOH  
 Reference : *Chem. Mater.*, 2004, 16, 708



### 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  
 Reference : *Chem. Mater.*, Vol. 16, No. 4, 2004



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