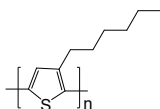


LT-S909 | P3HT

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

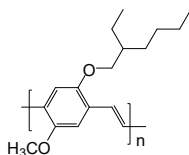
Poly(thiophene-2,5-diyl)

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

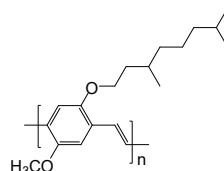
Poly[2-methoxy-5-(2-ethylhexyloxy)-1,4-phenylenevinylene]

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

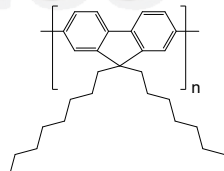
Poly[2-methoxy-5-(3,7-dimethyloxy)-1,4-phenylenevinylene]

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

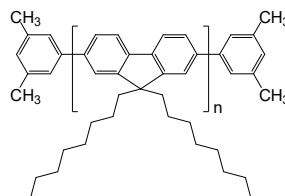
Poly(9,9-dioctylfluorenyl-2,7-diyl)

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

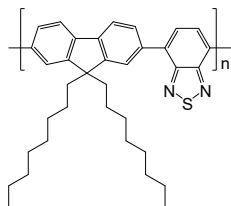
Poly(9,9-dioctylfluorenyl-2,7-diyl) end capped with dimethylphenyl

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

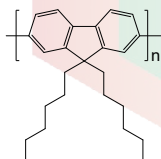
LT-S957 | F8BTPoly[(9,9-dioctylfluorenyl-2,7-diyl)-*alt*-(benzo[2,1,3]thiadiazol-4,7-diyl)]

CAS No. : 210347-52-7
 Grade : $M_w > 20,000$
 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

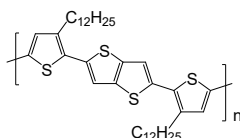
Reference : *Synthetic Metals*, 152, 105, 2005**LT-S958** | PHF

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

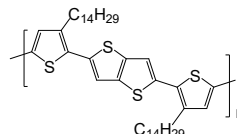
CAS No. : 201807-75-2
 Grade : $M_w = 30,000 \sim 100,000$ (GPC)
 Formula : $(C_{25}H_{32})_n$
 UV : 389 nm (in THF)
 PL : 418 nm (in THF)
 Solubility : Soluble in $CHCl_3$, Chlorobenzene, Dichlorobenzene

**LT-S981** | PBTTC-12Poly[2,5-bis(3-dodecylthiophen-2-yl)thieno[3,2-*b*]thiophene]

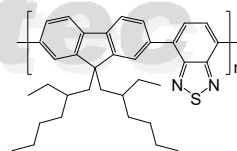
CAS No. : 888491-18-7
 Grade : $M_w = 40,000 \sim 80,000$ (GPC)
 Formula : $(C_{38}H_{54}S_4)_n$
 UV : 460 nm (in THF)
 PL : 557 nm (in THF)
 Solubility : > 5 mg/mL in $CHCl_3$

**LT-S982** | PBTTC-14Poly[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 $CHCl_3$

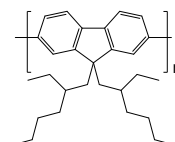
Reference : *Appl. Phys. Lett.*, 92, 113309, 2008**LT-S9003** | F2EHBTPoly[(9,9-bis(2-ethylhexyl)fluorenyl-2,7-diyl)-*alt*-(benzo[2,1,3]thiadiazol-4,7-diyl)]

CAS No. : 1379051-13-4
 Grade : $M_w = 10,000 \sim 500,000$ (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

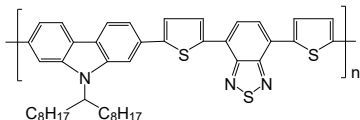


LT-S948 | PCDTBT

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

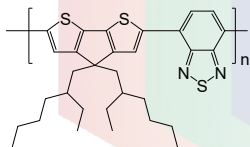


LT-S949 | PCPDTBT

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

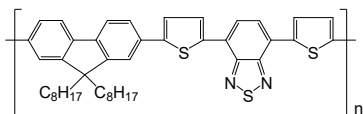


LT-S950 | PFOBT

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

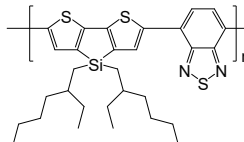


LT-S951 | PSBTBT

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

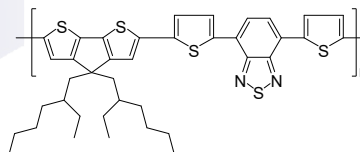


LT-S953 | PCPDTTBT

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

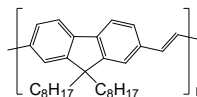
Reference : *Chem. Mater.* 2008, 20, 4045-4050



LT-S9006 |

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

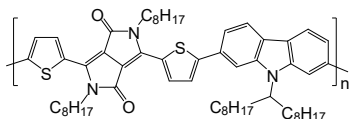


LT-S9032 | PCBTDP

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

CAS No. : 1147374-60-4
 Grade : $M_w > 10,000$ (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

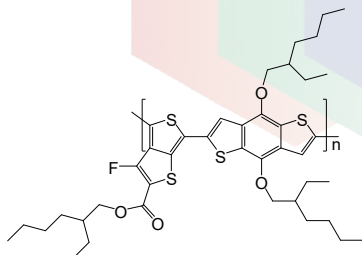
Poly(4,8-bis[(2-ethylhexyl)oxy]benzo[1,2-*b*:4,5-*b'*]dithiophene-2,6-diyl-*alt*-3-fluoro-2-[(2-ethylhexyl)carbonyl]thieno[3,4-*b*]thiophene-4,6-diyl)

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

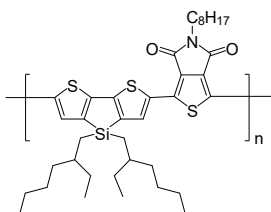


LT-S9066 | PDTSTPD

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

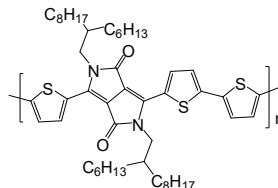


LT-S9109 | PDPP3T

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



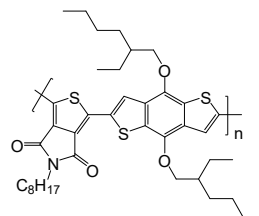
LT-S9111 | PBDTTPD

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 : $(C_{40}H_{53}NO_4S_3)_n$
 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

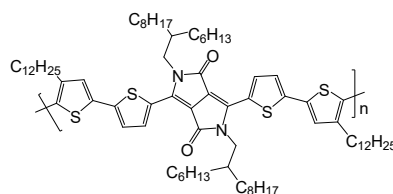


LT-S9112 | pBBDTDP

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

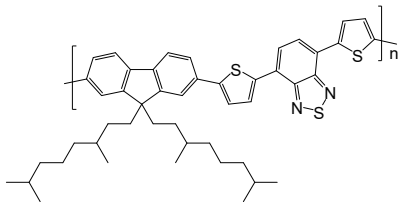


LT-S9113 | BisDMO-PFDTBT

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

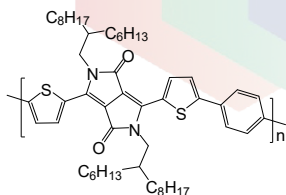
Reference : *Adv. Mater.* 2009, 21, 4238-4242

**LT-S9114** | PDPPTPT

Poly(2,2'-[(2,5-bis(2-hexyldodecyl)-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 : $M_w > 20,000$ (GPC)
 Formula : $(C_{52}H_{74}N_2O_2S_2)_n$
 UV : 628 nm (in $CHCl_3$)
 Solubility : Soluble in $CHCl_3$, Chlorobenzene, Dichlorobenzene

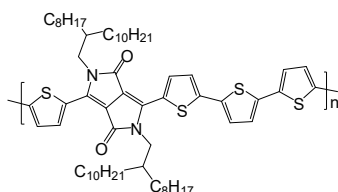
Reference : 1. *Chem. Mater.* 2012, 24, 1316-1323
 2. *Adv. Mater.* 2010, E242-E246

**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

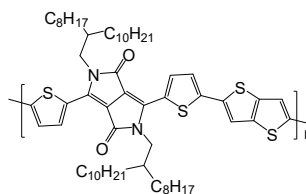
Reference : *J. Mater. Chem. C*, 2013, 1, 4423-4426

**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

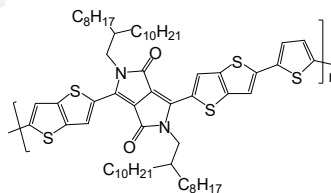
Reference : 1. *Adv. Mater.* 2010, 22, 4862-4866
 2. *Chem. Mater.* 2012, 24, 1316-1323

**LT-S9119** | 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 : $M_w > 30,000$ (GPC)
 Formula : $(C_{62}H_{88}N_2O_2S_5)_n$
 UV : 812 nm (in $CHCl_3$)
 Solubility : Soluble in $CHCl_3$, Chlorobenzene, Dichlorobenzene

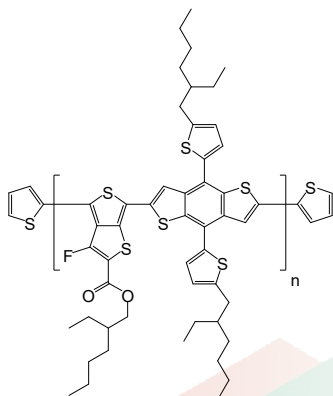
Reference : *J. Am. Chem. Soc.* 2011, 133, 3272-3275



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)

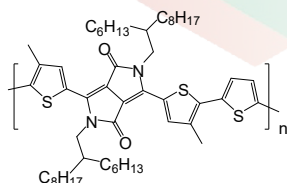
Grade : $M_w > 50,000$ (GPC)
 Formula : $(C_{84}H_{104}S_8F)_n$
 UV : 695 nm (in $CHCl_3$)
 Solubility : > 5 mg/mL in $CHCl_3$
 Reference : *Adv. Mater.* 2013, 25, 4766-4771



LT-S9178 | PMDPP3T

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

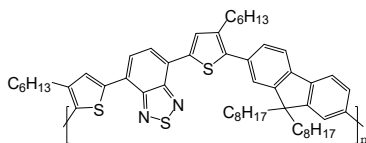
Grade : $M_w > 30,000$ (GPC)
 Formula : $(C_{52}H_{76}N_2O_2S_3)_n$
 UV : 830 nm (in $CHCl_3$)



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

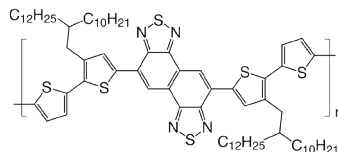
CAS No. : 891911-18-5
 Grade : $M_w > 50,000$ (GPC)
 Formula : $(C_{55}H_{70}N_2S_3)_n$



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 : $M_w > 30,000$ (GPC)
 Formula : $(C_{74}H_{106}N_4S_6)_n$

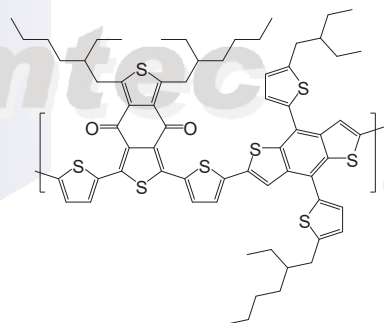


LT-S9273 | PBDB-T

poly[(2,6-(4,8-bis(5-(2-ethylhexyl)thiophen-2-yl)-benzo[1,2-*b*:4,5-*b'*]dithiophene))-alt-(5,5-(1',3'-di-2-thienyl-5',7'-bis(2-ethylhexyl)benzo[1',2'-*c*:4',5'-*c'*]dithiophene-4,8-dione)]

CAS No. : 1415929-80-4
 Grade : $M_w > 10,000$ (GPC)
 Formula : $(C_{68}H_{78}O_2S_8)_n$

Reference : *Adv. Mater.* 2016, 28, 4734-4739

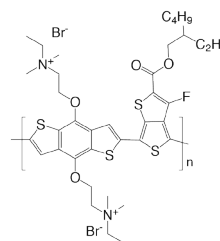


LT-S9274 | PTB7-NBr

Poly(4,8-bis[(N,N-dimethyl)-N-ethylammonium]propyloxy)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. : 2092936-05-3
 Grade : $M_w > 10,000$ (GPC)
 Formula : $(C_{37}H_{51}Br_2FN_2O_4S_4)_n$

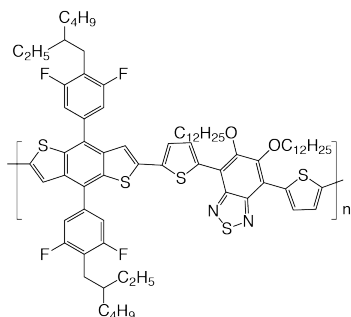
Reference : *Chem. Commun.*, 2017, 53, 2005-2008



LT-S9278 | PTFBDT-BZS

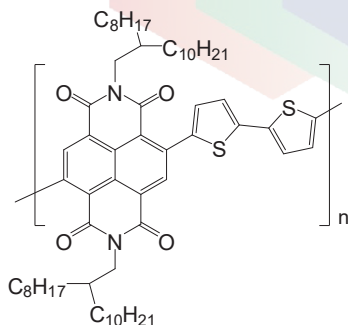
Poly[[5,6-bis(dodecyloxy)-2,1,3-benzothiadiazole-4,7-diyl]-2,5-thiophenediyl[4,8-bis[4-(2-ethylhexyl)-3,5-difluorophenyl]benzo[1,2-b:4,5-b']dithiophene-2,6-diyl]-2,5-thiophenediyl]

CAS No. : 1840869-86-4
 Grade : $M_w > 20,000$ (GPC)
 Formula : $(C_{76}H_{94}F_4N_2O_2S_5)_n$

**LT-S9282**

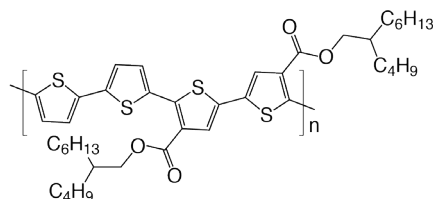
Poly[[1,2,3,6,7,8-hexahydro-2,7-bis(2-octyldodecyl)-1,3,6,8-dioxobenzo[lmn][3,8]phenanthroline-4,9-diyl][2,2'-bithiophene]-5,5'-diyl]

CAS No. : 1100243-40-0
 Grade : $M_w > 10,000$
 Formula : $(C_{62}H_{88}N_2O_4S_2)_n$

**LT-S9288** | PDCBT

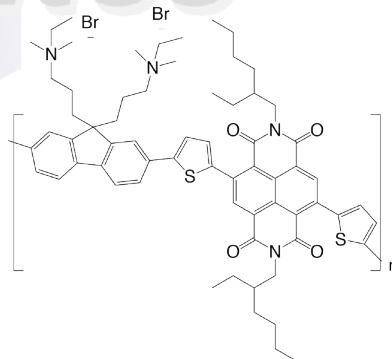
Poly[2,2'-(bis[[(2-butyl)octyl]oxy]carbonyl)[2,2':5',2'':5'',2'''-quaterthiophene]-5,5'''-diyl]

CAS No. : 1609536-17-5
 Grade : $M_w > 10,000$ (GPC)
 Formula : $(C_{42}H_{56}O_4S_4)_n$

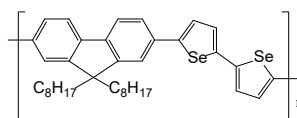
**LT-S9289** | PNDIT-F3N-Br

Poly[[2,7-bis(2-ethylhexyl)-1,2,3,6,7,8-hexahydro-1,3,6,8-tetraoxobenzo[lmn][3,8]phenanthroline-4,9-diyl]-2,5-thiophenediyl[9,9-bis[3'-(N,N-dimethyl)-N-ethylammonium]]propyl]-9H-fluorene-2,7-diyl]-2,5-thiophenediyl]

CAS No. : 2169941-79-9
 Grade : $M_w > 10,000$ (GPC)
 Formula : $(C_{65}H_8Br_2N_4O_4S_2)_n$
 UV : 380, 580 nm (in Methanol)
 Reference : *J. Mater. Chem. A*, 2017, 5, 19447-19455

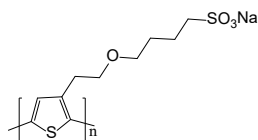
**LT-S9420** | F8Se2

Formula : $(C_{37}H_{44}Se_2)_n$
 M.W. : 25-150 kDa



LT-S9421

Formula : $(C_{10}H_{13}NaO_4S_2)_n$
 M.W. : 40-70 KDa

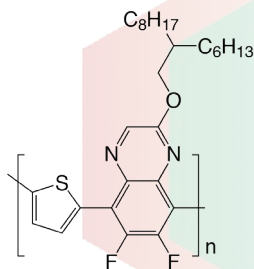


LT-S9435 | PTQ10

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

CAS No. : 2270233-86-6
 Grade : $M_w > 10,000$ (GPC)
 Formula : $(C_{28}H_{36}F_2N_2O_4S)_n$
 UV : A strong Absorption from 450 to 620 nm (in $CHCl_3$ and film)
 HOMO : -5.54 eV
 LUMO : -2.98 eV

Reference : NATURE COMMUNICATIONS | (2018), 9(1), 1-10

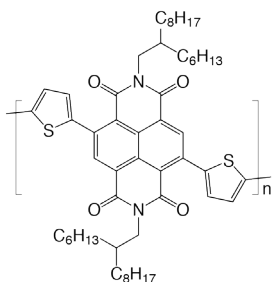


LT-S9448 | PNDI(2HD)2T

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

CAS No. : 1459168-70-7
 Grade : $M_w > 10,000$
 Formula : $(C_{54}H_{72}N_2O_4S_2)_n$
 HOMO : -5.4 eV
 LUMO : -3.95 eV
 PCE : 6.42% (with P3)

Reference : Adv. Funct. Mater, 27, 1701256, 2017

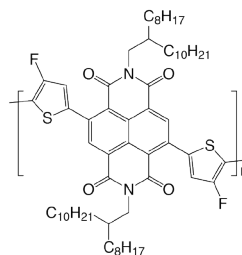


LT-S9449 | PNF222

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

CAS No. : 1773524-46-1
 Grade : $M_w > 10,000$
 Formula : $(C_{62}H_{86}F_2N_2O_4S_2)_n$
 Solubility : Soluble in $CHCl_3$, Chlorobenzene, Dichlorobenzene

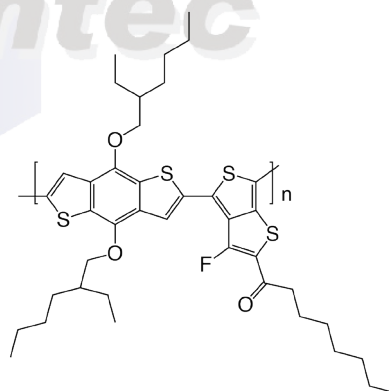
Reference : J. Am. Chem. Soc. 2011, 133, 3272-3275



LT-S9452

CAS No. : 1379592-65-0
 Grade : M_w 50,000-100,000

Reference : Appl. Mater. Interfaces 2016, 8, 30372-30378

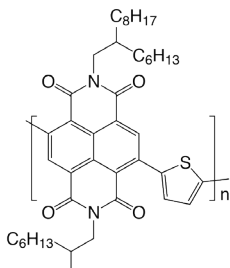


LT-S9454 | PNDI(2HD)T

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 : $M_w > 10,000$
 Formula : $(C_{50}H_{70}N_2O_4S)_n$
 Solubility : Soluble in CHCl₃, Chlorobenzene, Dichlorobenzene

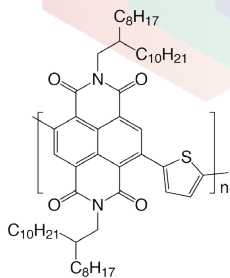
Reference : *J. Mater. Chem. A*, 2017, 5, 21291–21299

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

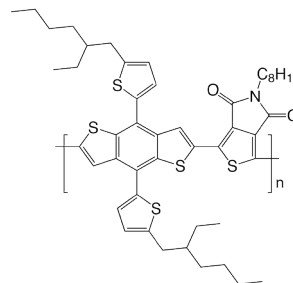
Poly[[1,2,3,6,7,8-hexahydro-2,7-bis(2-octyldecyl)-1,3,6,8-tetraoxobenzo[imn][3,8]phenanthroline-4,9-diyl]-2,5-thiophenediyl]

CAS No. : 1236111-76-4
 Grade : $M_w > 10,000$
 Formula : $(C_{58}H_{86}F_2N_2O_4S)_n$
 Solubility : Soluble in CHCl₃, Chlorobenzene, Dichlorobenzene

Reference : *Adv. Energy Mater.* 2018, 8, 1700908

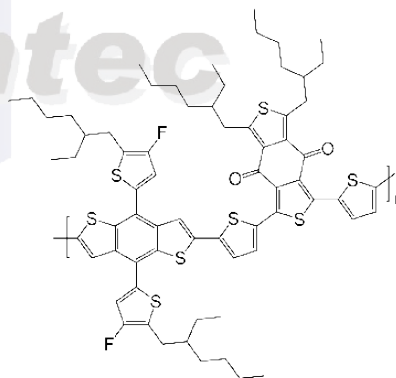
**LT-S9456**

CAS No. : 1426534-44-2
 Grade : M_w 50,000-150,000
 Reference : *Adv. Energy Mater.* 2018, 8, 1701436

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

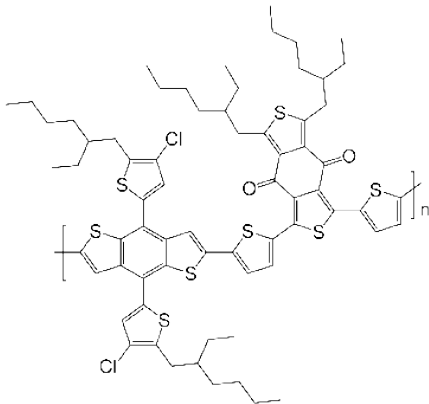
CAS No. : 1802013-83-7
 Grade : $M_w > 50,000$
 Formula : $(C_{68}H_{76}F_2O_2S_8)_n$
 UV : 614nm (in CHCl₃)
 HOMO : -5.45eV
 LUMO : -3.65eV

Reference : *Joule* 3, 1-12, April 17, 2019



LT-S9458

CAS No. : 2239295-71-5
 Grade : $M_w > 200,000$
 Reference : *Adv. Mater.* 2018, 30, 1800868

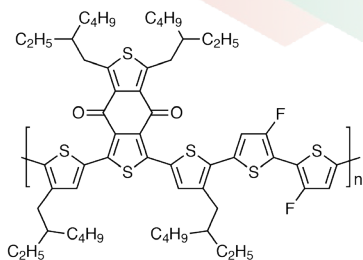


LT-S9462 | PBDD4T-2F

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]]

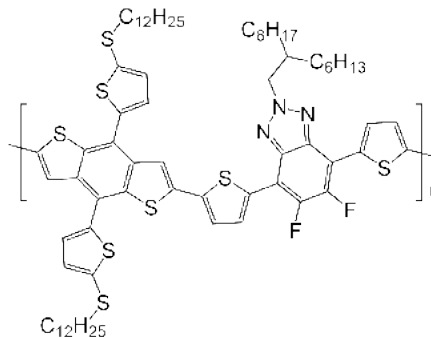
CAS No. : 1890205-85-2
 Grade : $M_w > 10,000$
 Formula : $(C_{58}H_{72}F_2O_2S_6)_n$
 Solubility : Soluble in $CHCl_3$, Chlorobenzene, Dichlorobenzene

Reference : *Adv. Mater.* 2017, 29, 1606340



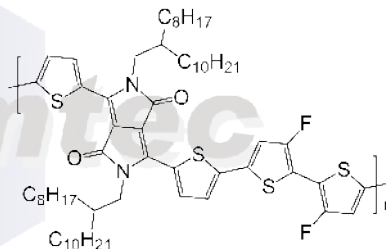
LT-S9463

CAS No. : 1887136-03-9
 Grade : $M_w 50,000-150,000$
 Reference : *J. Am. Chem. Soc.* 2016, 138, 15011-15018



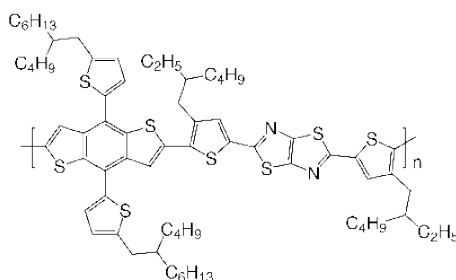
LT-S9464

CAS No. : 1926166-46-2
 Grade : $M_w 50,000-100,000$
 Reference : *Adv. Mater.* 2016, 28, 5133-5138



LT-S9465

CAS No. : 2029196-34-5
 Grade : $M_w 10,000-50,000$
 Reference : *Adv. Mater.* 2017, 29, 1702291

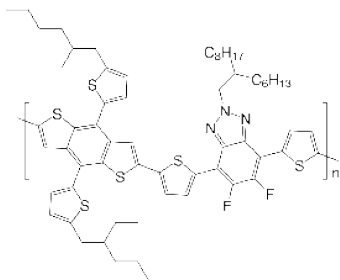


LT-S9469 | J52

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 : $M_w > 10,000$
 Formula : $(C_{64}H_{77}F_2N_3S_6)_n$
 Solubility : Soluble in $CHCl_3$, Chlorobenzene, Dichlorobenzene

Reference : *Adv.Mater.* 2017, 29, 1700437

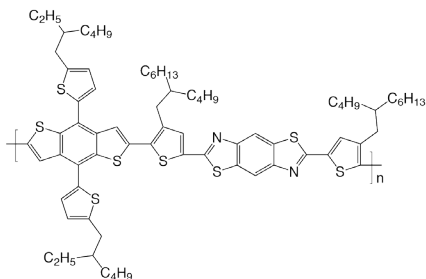


LT-S9480 | PBB-T

poly[[4,8-bis(5-(2-ethylhexyl)thiophen-2-yl)benzo[1,2-b:4,5-b]dithiophene)-2,6-diyl-alt-(2,6-bis(5-bromo-4-(2-butyloctyl)thiophen-2-yl)-benzo[1,2-d:4,5-d]bis(thiazole))]

CAS No. : 2328044-64-8
 Grade : $M_w > 10,000$
 Formula : $(C_{74}H_{96}N_2S_8)_n$
 HOMO : -5.4 eV
 LUMO : -3.3 eV
 PCE : 13.3%(with IT-2F)

Reference : *Chem. Mater.* 31, 919, 2019

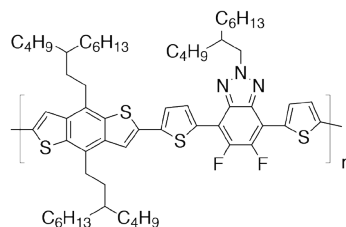


LT-S9497 | FTAZ

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

Grade : $M_w > 10,000$
 Formula : $C_{64}H_{91}F_2N_3S_4$
 HOMO : -5.38 eV
 LUMO : -3.17 eV
 PCE : 12.1%(with ITIC-Th1)

Reference : *Adv. Mater.* 29, 1700144, 2017

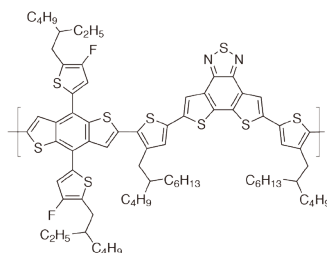


LT-S9502 | D18

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

CAS No. : 1887136-01-7
 Grade : $M_w > 30,000$ (GPC)
 Formula : $(C_{76}H_{92}F_2N_2S_9)_n$
 UV : 555, 581 nm (Film)
 HOMO : -5.51 eV
 LUMO : -2.77 eV

Reference : *Science Bulletin* 65 (2020) 272-275



LT-S9506 | PFN100

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

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

Reference : *ACS Appl. Mater. Interfaces* 2016, 8, 15, 9821-9828

