

Small Molecular / Oligomer

LT-D2004 | PbPC

Lead(II) phthalocyanine

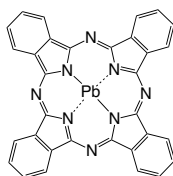
CAS No. : 15187-16-3

Grade : Sublimed >99%

Formula : $C_{32}H_{16}N_8Pb$

M.W. : 719.74 g/mole

UV : 698 nm (in DMF)



LT-E206 | TiOPC

Titanium oxide phthalocyanine

CAS No. : 26201-32-1

Grade : Sublimed >99%

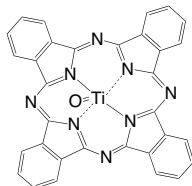
TGA : >440 °C (0.5% wt. loss)

Formula : $C_{32}H_{16}N_8OTi$

M.W. : 576.39 g/mole

UV : 349, 692 nm (in CH_2Cl_2)

PL : 392 nm (film)



LT-N137 | TAPC

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

CAS No. : 58473-78-2

Grade : Sublimed >99.5%

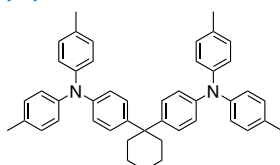
TGA : >290 °C (0.5% wt. loss)

Formula : $C_{46}H_{46}N_2$

M.W. : 626.87 g/mole

UV : 305 nm (in THF)

PL : 414 nm (in THF)



LT-S905 | PCBM

(6,6)-Phenyl C_{61} butyric acid methyl ester

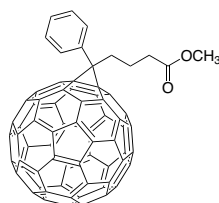
CAS No. : 160848-22-6

Grade : >99.5%

Formula : $C_{72}H_{14}O_2$

M.W. : 910.88 g/mole

UV : 258, 328 nm (in THF)



LT-S906 | ZnPC

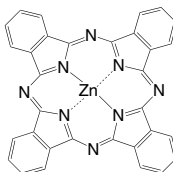
Zinc phthalocyanine

CAS No. : 14320-04-8

Grade : Sublimed >99%

Formula : $C_{32}H_{16}N_8Zn$

M.W. : 577.92 g/mole

PL : 534 nm (in CH_2Cl_2)

LT-S923 | PC71BM

(6,6)-Phenyl C_{71} butyric acid methyl ester, mixture of isomers

CAS No. : 609771-63-3

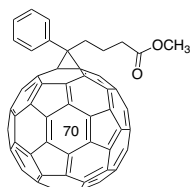
Grade : >99%

TGA : >360 °C (0.5% wt. loss)

Formula : $C_{82}H_{14}O_2$

M.W. : 1030.93 g/mole

UV : 372 nm (in Toluene)



LT-S943 | SubPC

Boron subphthalocyanine chloride

CAS No. : 36530-06-0

Grade : Sublimed >99%

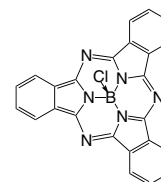
TGA : >340 °C (0.5% wt. loss)

Formula : $C_{24}H_{12}BN_3Cl$

M.W. : 430.66 g/mole

UV : 565 nm (in DMF)

PL : 577 nm (in DMF)



LT-S967 | C70

(5,6)-Fullerene- C_{70}

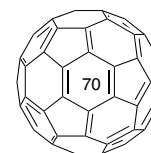
CAS No. : 115383-22-7

Grade : >99%

TGA : >450 °C (0.5% wt. loss)

Formula : C_{70}

M.W. : 840.75 g/mole

UV : 344, 382 nm (in CH_2Cl_2)

LT-S9025 | AIPCCI

Aluminum phthalocyanine chloride

CAS No. : 14154-42-8

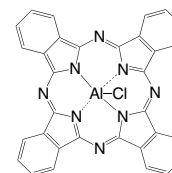
Grade : Sublimed >99%

TGA : >370 °C (0.5% wt. loss)

Formula : $C_{32}H_{16}AlClN_8$

M.W. : 574.97 g/mole

UV : 675 nm (in DMF)



LT-S9125 | DCV3T

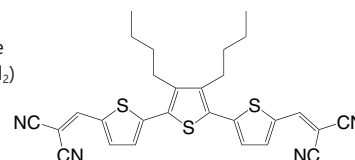
3',4'-Dibutyl-5,5''-bis(dicyanovinyl)-2,2':5',2''-terthiophene

CAS No. : 908588-68-1

Grade : >99%

Formula : $C_{28}H_{24}N_4S_3$

M.W. : 512.71 g/mole

UV : 498 nm (in CH_2Cl_2)

LT-S9172 | F8ZnPC

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

CAS No. : 676519-80-5

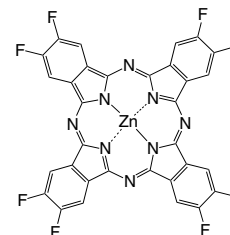
Grade : Sublimed >99%

TGA : >300 °C (0.5% wt. loss)

Formula : $C_{32}H_8F_8N_8Zn$

M.W. : 721.86 g/mole

UV : 338, 656 nm (in DMF)



LT-S9180 | SnNCCl2

Tin(IV) 2,3-naphthalocyanine dichloride

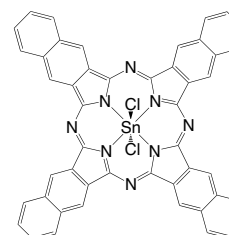
CAS No. : 26857-61-4

Grade : Sublimed product

TGA : >300 °C (0.5% wt. loss)

Formula : $C_{48}H_{24}Cl_2N_8Sn$

M.W. : 902.37 g/mole



Small Molecular / Oligomer

LT-S9625

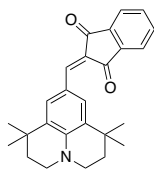
2-((1,1,7,7-Tetramethyl-1,2,3,5,6,7-hexahydropyrido[3,2,1-ij]quinolin-9-yl)methylene)-1H-indene-1,3(2H)-dione

CAS No. : 1952291-92-7

Grade : >99%

Formula : $C_{26}H_{27}NO_2$

M.W. : 385.5 g/mole



LT-S9626 DM-2,9-DMQA

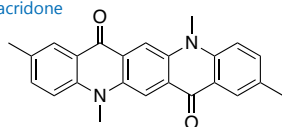
N,N'-dimethyl-2,9-dimethylquinacridone

CAS No. : 16042-42-8

Grade : >98%

Formula : $C_{24}H_{20}N_2O_2$

M.W. : 368.43 g/mole



LT-S9627 F5-SubPC

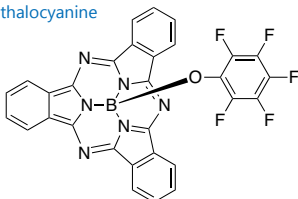
Pentafluorophenoxylboronsubphthalocyanine

CAS No. : 1235758-93-6

Grade : >98%

Formula : $C_{30}H_{12}BF_5N_6O$

M.W. : 578.26 g/mole



LT-S9668 F6-SubPC-Cl

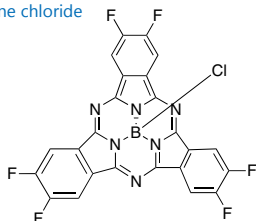
Hexafluoro boron subphthalocyanine chloride

Grade : >95%

Formula : $C_{24}H_6BClF_6N_6$

M.W. : 538.6 g/mole

UV : 552 nm



LT-S9672 ClmFn-F6SubPc

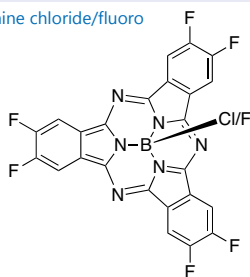
Hexafluoro boron subphthalocyanine chloride/fluoro

Grade : With isomer >95%

Formula : $C_{24}H_6BClF_6N_6$

M.W. : 538.6 g/mole

UV : 560 nm



Polymer Materials

LT-N174

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

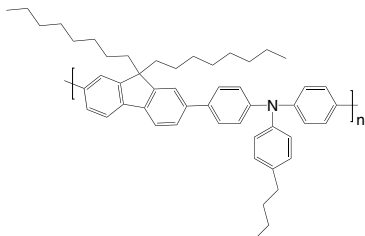
CAS No. : 223569-31-1

Grade : Mw >30,000 (GPC)

Formula : (C₅₁H₆₁N)_n

UV : 385 nm (in THF)

PL : 434 nm (in THF)



LT-S909 P3HT

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

CAS No. : 110134-47-9 / 104934-50-1

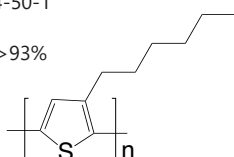
Grade : Mw >45,000 (GPC),

Electronic Grade : Regioregular >93%

Formula : (C₁₀H₁₄S)_n

UV : 445 nm (in THF)

PL : 564 nm (in THF)



LT-S932 MDMO-PPV

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

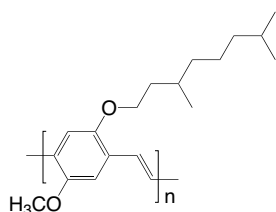
CAS No. : 177716-59-5

Grade : Mw >100,000 (GPC)

Formula : (C₁₉H₂₆O₂)_n

UV : 485 nm (in CH₂Cl₂)

PL : 555 nm (in CH₂Cl₂)



LT-S933 PFO

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

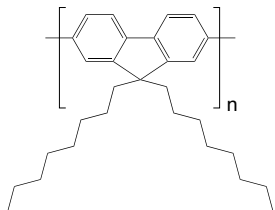
CAS No. : 123864-00-6

Grade : Mw =50,000~150,000 (GPC)

Formula : (C₂₉H₄₀)_n

UV : 376 nm (in THF)

PL : 426 nm (in THF)



LT-S948 PCDTBT

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

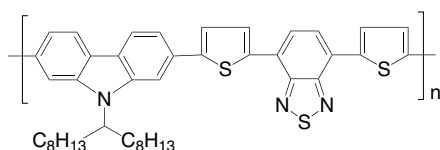
CAS No. : 958261-50-2

Grade : Mw =20,000~100,000

Formula : (C₄₃H₄₇N₃S₃)_n

UV : 390, 554 nm (in THF)

PL : 639 nm (in THF)



LT-S957 F8BT

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

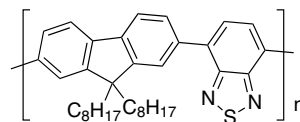
CAS No. : 210347-52-7

Grade : Mw >20,000

Formula : (C₃₅H₄₂N₂S)_n

UV : 453 nm (in THF)

PL : 534 nm (in THF)



LT-S979 F8T2

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

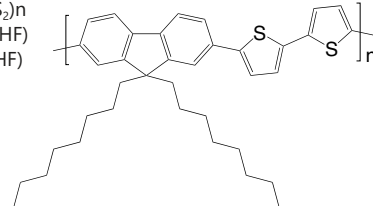
CAS No. : 210347-56-1

Grade : Mw >20,000 (GPC)

Formula : (C₃₇H₄₄S₂)_n

UV : 454 nm (in THF)

PL : 500 nm (in THF)

LT-S982 PBTTC-C₁₄

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

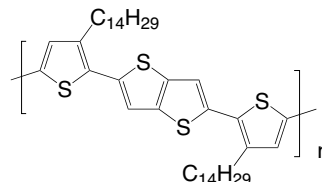
CAS No. : 888491-19-8

Grade : Mw =10,000~100,000 (GPC)

Formula : (C₄₂H₆₂S₄)_n

UV : 466 nm (in THF)

PL : 557 nm (in THF)



LT-S9050 PTB7

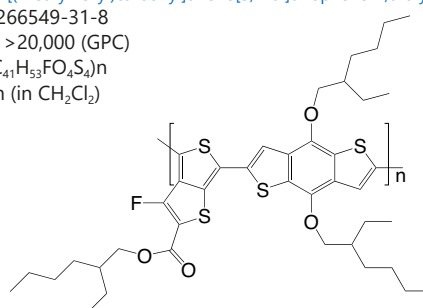
Poly[4,8-bis((2-ethylhexyl)oxy)benzo[1,2-b : 4,5-b']dithiophene-2,6-diyl-alt-3-fluoro-2-[(2-ethylhexyl)carbonyl]thieno[3,4-b]thiophene-4,6-diyl]

CAS No. : 1266549-31-8

Grade : Mw >20,000 (GPC)

Formula : (C₄₁H₅₃FO₄S₄)_n

UV : 670 nm (in CH₂Cl₂)



LT-S9118 PDBT-co-TT

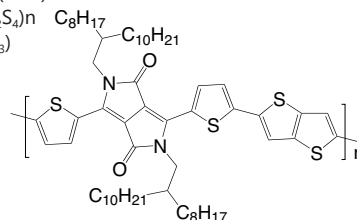
Poly[2,2'-[(2,5-bis(2-octyldodecyl)-3,6-dioxo-2,3,5,6-tetrahydropyrrolo[3,4-c]pyrrole-1,4-diyl)]dithiophene-5,5'-diyl-alt-thieno[3,2-b]thiophen-2,5-diyl]

CAS No. : 1444870-74-9

Grade : Mw >30,000 (GPC)

Formula : (C₆₀H₈₈N₂O₂S₄)_n

UV : 810 nm (in CHCl₃)



Polymer Materials

LT-S9139 | PTB7-Th

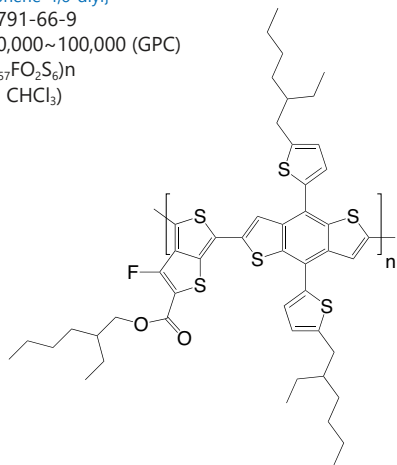
Poly[4,8-bis[5-(2-ethylhexyl)thiophen-2-yl]benzo[1,2-b:4,5-b']-dithiophene-2,6-diyl-alt-3-fluoro-2-[(2-ethylhexyl)carbonyl]-thieno[3,4-b]thiophene-4,6-diyl]

CAS No. : 1469791-66-9

Grade : Mw = 10,000~100,000 (GPC)

Formula : $(C_{49}H_{57}FO_2S_6)_n$

UV : 695 nm (in $CHCl_3$)



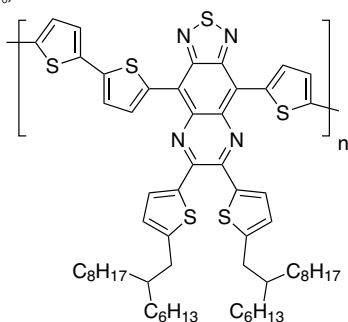
LT-S9980 | PTTQ(HD), PTTQ-HD

Poly[[6,7-bis[5-(2-hexyldecyl)-2-thienyl][1,2,5]thiadiazolo[3,4-g]quinoxaline-4,9-diyl][2,2':5',2''-terthiophene]-5,5'-diyl]

CAS No. : 2500906-17-0

Grade : >99% (monomers) Mw ~100K. PDI~2.5

Formula : $(C_{60}H_{76}N_4S_6)_n$



LT-PS001 | PEDOT:PSS

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

Specification

CAS No. : 155090-83-8

Description : Aqueous dispersion, blue liquid.

Sodium : Max. 400 ppm

Sulfate : Max. 40 ppm

Solid content: 1.3 - 1.7 wt%

PSD d50 : 80 nm

PSD d90 : 100 nm

Resistivity : 500-5000 Ω cm

Viscosity : 5-12 mPas

Technical Data (guide values, not a specification)

Form : liquid

Odour : odourless

Colour : dark blue

PEDOT:PSS ratio: 1:6 (by weight)

PEDOT work function: approx 5.2 eV

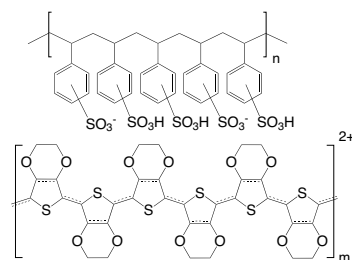
pH : 1.2 - 2.2 at 20°C

Boiling Point : approx 100°C

Storage:

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

Avoid freezing!



Perovskite-based Photodiodes

LT-N174

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

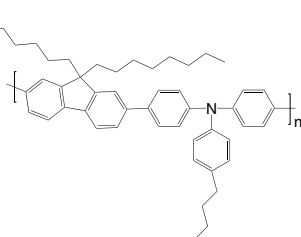
CAS No. : 223569-31-1

Grade : Mw >30,000 (GPC)

Formula : (C₅₁H₆₁N)n

UV : 385 nm (in THF)

PL : 434 nm (in THF)



LT-S909 | P3HT

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

CAS No. : 110134-47-9 / 104934-50-1

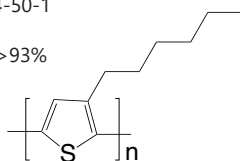
Grade : Mw >45,000 (GPC),

Electronic Grade : Regioregular >93%

Formula : (C₁₀H₁₄S)n

UV : 445 nm (in THF)

PL : 564 nm (in THF)



LT-S932 | MDMO-PPV

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

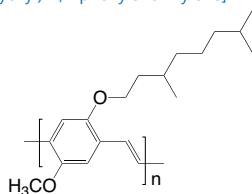
CAS No. : 177716-59-5

Grade : Mw >100,000 (GPC)

Formula : (C₁₉H₂₈O₂)n

UV : 485 nm (in CH₂Cl₂)

PL : 555 nm (in CH₂Cl₂)



LT-S933 | PFO

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

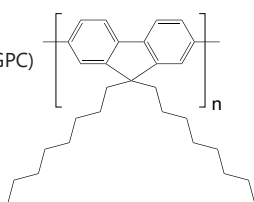
CAS No. : 123864-00-6

Grade : Mw =50,000~150,000 (GPC)

Formula : (C₂₉H₄₀)n

UV : 376 nm (in THF)

PL : 426 nm (in THF)



LT-S957 | F8BT

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

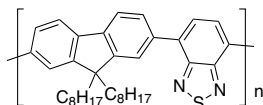
CAS No. : 210347-52-7

Grade : Mw >20,000

Formula : (C₃₅H₄₂N₂S)n

UV : 453 nm (in THF)

PL : 534 nm (in THF)



LT-S979 | F8T2

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

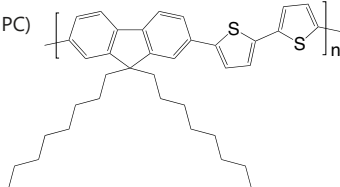
CAS No. : 210347-56-1

Grade : Mw >20,000 (GPC)

Formula : (C₃₇H₄₄S₂)n

UV : 454 nm (in THF)

PL : 500 nm (in THF)

LT-S982 | PBTTT-C₁₄

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

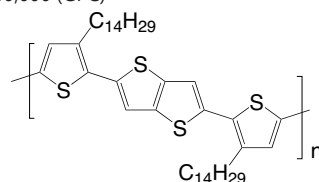
CAS No. : 888491-19-8

Grade : Mw =10,000~100,000 (GPC)

Formula : (C₄₂H₆₂S₄)n

UV : 466 nm (in THF)

PL : 557 nm (in THF)



LT-S9050 | PTB7

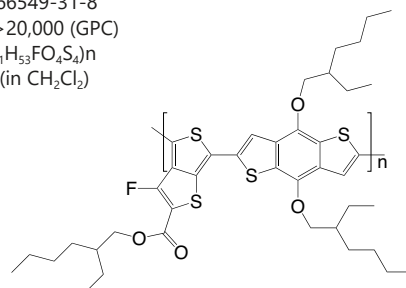
Poly[4,8-bis[(2-ethylhexyl)oxy]benzo[1,2-b : 4,5-b']dithiophene-2,6-diyl-alt-3-fluoro-2-[(2-ethylhexyl)carbonyl]thieno[3,4-b]thiophene-4,6-diyl]

CAS No. : 1266549-31-8

Grade : Mw >20,000 (GPC)

Formula : (C₄₁H₅₃FO₄S₄)n

UV : 670 nm (in CH₂Cl₂)



LT-S9118 | PDBT-co-TT

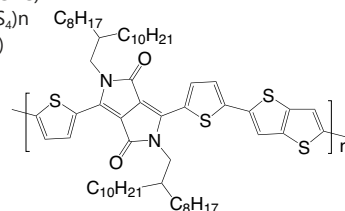
Poly[2,2'-[(2,5-bis(2-octyldodecyl)-3,6-dioxo-2,3,5,6-tetrahydropyrrolo[3,4-c]pyrrole-1,4-diyl)]dithiophene-5,5'-diyl-alt-thieno[3,2-b]thiophene-2,5-diyl]

CAS No. : 1444870-74-9

Grade : Mw >30,000 (GPC)

Formula : (C₆₀H₈₈N₂O₂S₄)n

UV : 810 nm (in CHCl₃)



LT-S9139 | PTB7-Th

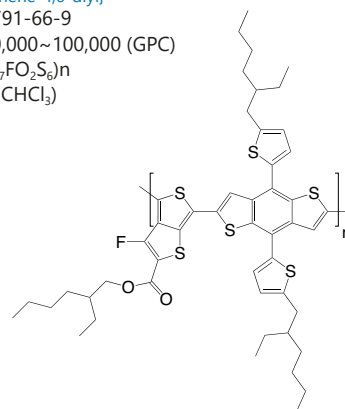
Poly[4,8-bis[5-(2-ethylhexyl)thiophen-2-yl]benzo[1,2-b : 4,5-b']-dithiophene-2,6-diyl-alt-3-fluoro-2-[(2-ethylhexyl)carbonyl]-thieno[3,4-b]thiophene-4,6-diyl]

CAS No. : 1469791-66-9

Grade : Mw =10,000~100,000 (GPC)

Formula : (C₄₉H₅₇FO₂S₆)n

UV : 695 nm (in CHCl₃)



Perovskite-based Photodiodes

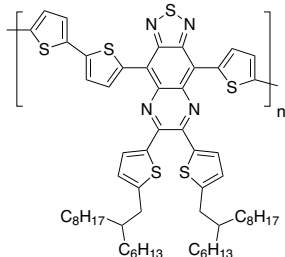
LT-S9980 | PTTQ(HD), PTTQ-HD

Poly[[6,7-bis[5-(2-hexyldecyl)-2-thienyl][1,2,5]thiadiazolo[3,4-g]quinoxaline-4,9-diyl][2,2':5',2''-terthiophene]-5,5''-diyl]

CAS No. : 2500906-17-0

Grade : >99% (monomers) Mw ~100K. PDI~2.5

Formula : $(C_{60}H_{76}N_4S_6)_n$



LT-PS001 | PEDOT:PSS

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

Specification

CAS No. : 155090-83-8

Description : Aqueous dispersion, blue liquid.

Sodium : Max. 400 ppm

Sulfate : Max. 40 ppm

Solid content: 1.3 - 1.7 wt%

PSD d50 : 80 nm

PSD d90 : 100 nm

Resistivity : 500-5000 Ω cm

Viscosity : 5-12 mPas

Technical Data (guide values, not a specification)

Form : liquid

Odour : odourless

Colour : dark blue

PEDOT:PSS ratio: 1:6 (by weight)

PEDOT work function: approx 5.2 eV

pH : 1.2 - 2.2 at 20°C

Boiling Point : approx 100°C

Storage:

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

Avoid freezing!

