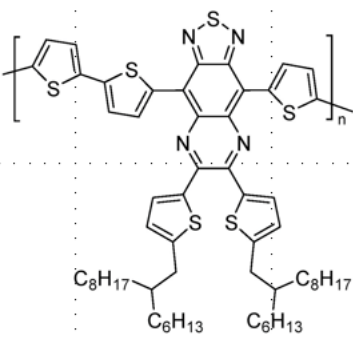


## Technical Data Sheet

1M Material:	PTTQ(HD), OS6170, conjugated polymer for NIR-OPD
Common Name:	PTTQ(HD), PTTQ-HD
Chemical Name:	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#:	2500906-17-0
Molecular Formula:	(C <sub>60</sub> H <sub>76</sub> N <sub>4</sub> S <sub>6</sub> ) <sub>n</sub>
Chemical Structure:	



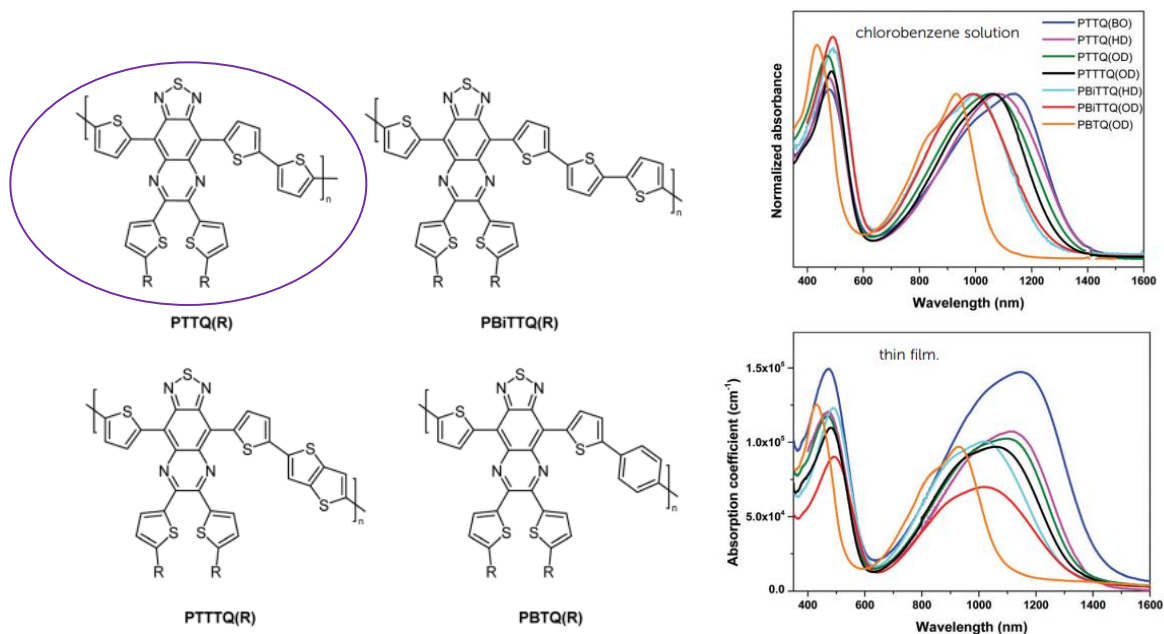
Appearance:	Brown to black solid
Solubility:	Soluble in CHCl <sub>3</sub> , and other selected solvents
Molecular weight:	Mw ~100K. PDI~2.5
Structure confirmation:	NMR of monomers
Assay:	99+% (basing on NMR of monomers)

1-Material is dedicated to provide the material according to customer's needs, and some material we promoted may be solely offered to certain customers for their specific needs in their research and development projects on a custom synthesis basis or on a contract research basis. All the material is offered as it is, along with the information and technical advice-where verbal, in writing or by way of trials-are given in good faith and are believed to be accurate but without warranty since the conditions of use are beyond the control of 1-Material, and this also applies where proprietary rights of third parties are involved. For the condition and term of our offer and service, please consult the disclaimer in our web: [www.1-material.com](http://www.1-material.com)

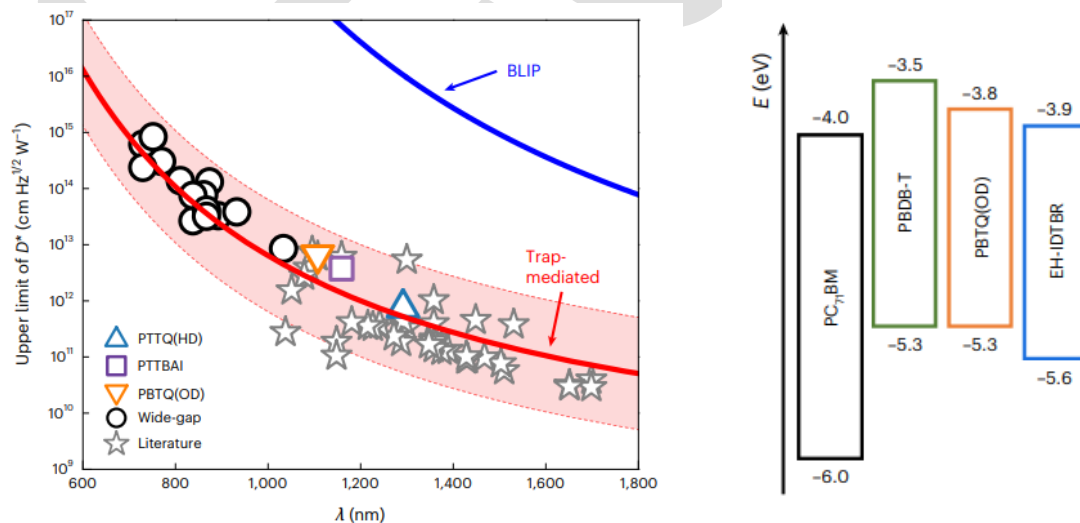
Reference data:

1: doi.10.1039/d0tc01435d

Efficient and readily tuneable near-infrared photodetection up to 1500 nm enabled by thiadiazoloquinoxaline-based push-pull type conjugated polymers.



2: <https://doi.org/10.1038/s41566-023-01173-5>



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## Related materials

Reference Name	1M Code	CAS No.
PM6, PBDB-T-2F, PBDB-TF	PCE135, PM6	1802013-83-7
PCDTBT	OS0502	958261-50-2
PCPDTBT	OS0340	920515-34-0
PNDIT-F3N-Br	OS1799	2169941-79-9
PBDB-T	PCE12, OS0804	1415929-80-4
PTB7-Th	PCE10, PCE-10, OS0100	1469791-66-9
BTP-eC9	BTP-eC9, NFA5398	2598965-39-8
ITIC	OS0064, NFA005	1664293-06-4
O-IDTBT	NFA009, IDTBR-O	2077945-91-4
EH-IDTBR	NFA004, eh-IDTBR, IDTBR	2102510-60-9
PBTTT-C12	PBTTT, PBTTT-12, OS0187	888491-18-7
PBTTT-C14	PBTTT-C14, OS0198	888491-19-8
PC <sub>71</sub> BM	OS0633, PCBM-70, PC <sub>70</sub> BM	609771-63-3
PEDOT:PSS	HT0838, P VP Al 4083	155090-83-8
BQR	OS04287	2376044-28-7
PBTQ(R)	Custom made	Please inquiry
PTTTQ(R)	Custom made	Please inquiry
PBiTTQ(R)	Custom made	Please inquiry

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