1-Material Inc
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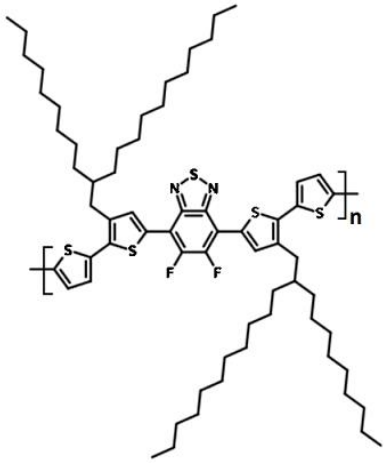
Organic Nano Electronic (ONE=1) Materials for these who understand quality

Technical Data Sheet

1M Material:	OS5798, R2R022
Common Name:	PffBT4T-C9C13, PCE-12.
Chemical Name:	Poly[(5,6-difluoro-2,1,3-benzothiadiazole-4,7-diyl)-*alt*-(3,3‴-di(2-nonyltridecyl)-2,2′,5′,2″,5″,2‴-quaterthiophen-5,5‴-diyl)]
CAS No.:	2001095-79-8
Polymer Structure:	



Appearance:	Purple-black granules
Molecular weight:	Mw: ~120K, PDI ~1.7 (GPC, PS standards)
Solubility:	Soluble in selected non-halogenated solvents
Assay:	99+% (by NMR, provided for internal reference only)

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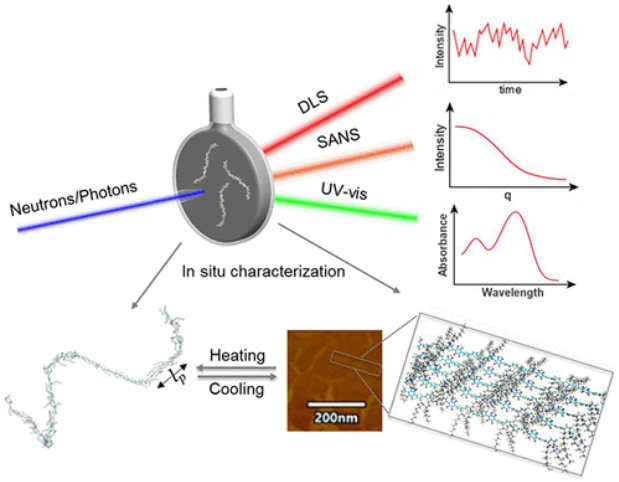
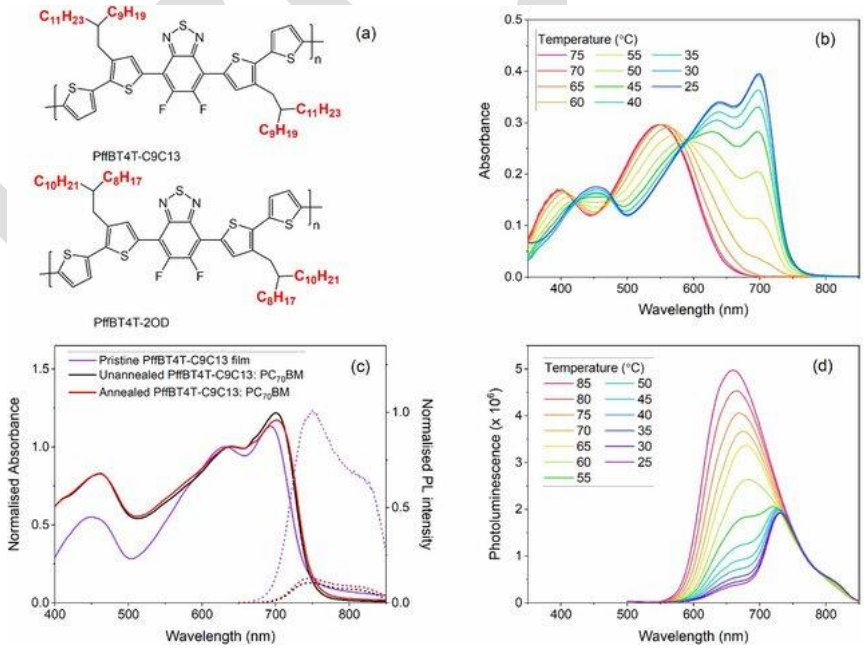
Reference: Xiaodan Gu* *ACS Appl. Polym. Mater.* 2022, 4, 5, 3023–3033

Remark: Slightly increasing side chain length from 2-octyldodecyl (C8C12) to 2-nonyltridecyl (C9C13), PffBT4T-based CPs show a significant decrease in aggregation-to-dissolved chain transition temperature (10 °C), degree of aggregation, enthalpy change of aggregation, and size of the aggregates in solution



Reference: Tracey M Clarke *, J. Phys. Mater. 4 (2021) 044009

Remark: Both PffBT4T-9C13 and PffBT4TOD polymer blends show triplet formation



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