



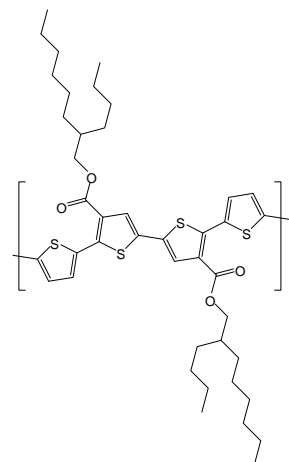
Highly Efficient Fullerence-Free Polymer Solar Cells Fabricated with Polythiophene

Product Specifications

LT-S9288 PDCBT

Name. Poly[2,2''-bis[[2-butylloctyl]oxy]carbonyl][2,2':5',2'':5'',2'''-quaterthiophene]-5,5'''-diyl]

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



* Reference: *Adv. Mater.* **2016**, *28*, 9416–9422

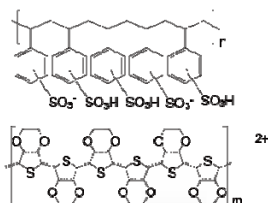
Features

- The result is the best consequent for the PSCs based on PT derivative, which achieves a PCE (power conversion efficiencies) as high as 10.16%.
- PDCBT which by blending with ITIC is better nanoscaled morphology than P3HT so that less geminate and non-geminate charge recombinations can be achieved.

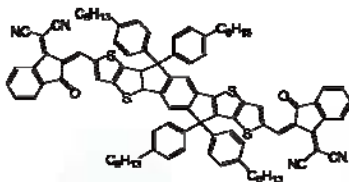
Device Application

The best Device:

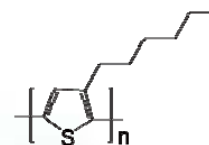
ITO/ PEDOT:PSS/ PDCBT:ITIC, w/w (50:50) /PFN-Br /Al.



LT-PS001 PEDOT:PSS



LT-S9212 ITIC
Al = LT-E005



LT-S909 P3HT

Materials are used by qualified for testing and research only, there are not guaranteed in patent contention by customer use.