



A PTB7-Based Narrow Band-Gap Conjugated Polyelectrolyte as An Efficient Cathode Interlayer in PTB7-Based Polymer Solar Cells

Product Specifications

LT-S9274 PTB7-NBr

Name.

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.

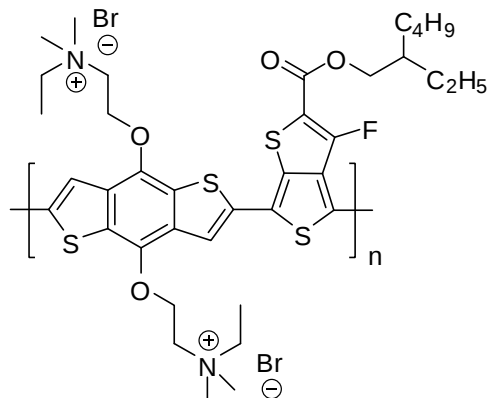
2092936-05-3

Grade

$M_w > 10,000$ (GPC)

Formula

$(C_{37}H_{51}Br_2FN_2O_4S_4)_n$



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

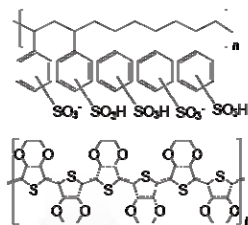
Features

- The good film-forming property of PTB7-NBr facilitates charge transfer across the CIL (cathode interlayer) to the electrode exhibited an optimal PCE (power conversion efficiency) of 9.24%. This is the first report of PSCs (polymer solar cells) with NBGCPE (narrow band-gap conjugates poly-electrolyte) CILs possessing the same backbone as the narrow band-gap donor polymer.

Device Application

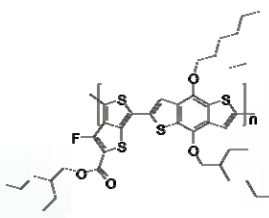
The Best Device:

ITO/ PEDOT:PSS/ PTB7:PC71BM/ PTB7-NBr/ Al.



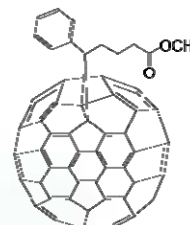
LT-PS001

PEDOT:PSS



LT-S9050

PTB7



LT-S923

PC71BM

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

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