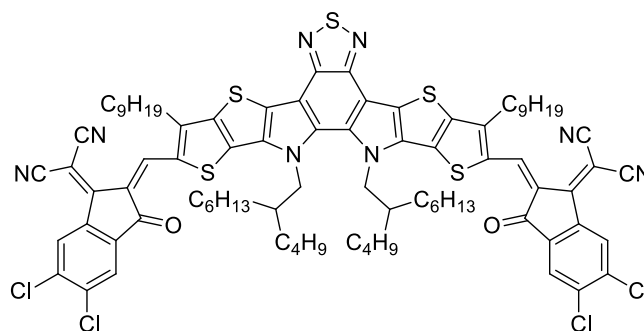


## Single-Junction Organic Photovoltaic Cells with Approaching 18% Efficiency

### Product Specifications

#### LT-S9559 BTP-eC9

Grade	>99%(NMR)
Formula	$C_{86}H_{94}Cl_4N_8O_2S_5$
HOMO/LUMO	-5.64/-4.05 eV
M.W.	1573.89 g/mole



\*Reference: *Adv. Mater.* 2020, 32, 1908205

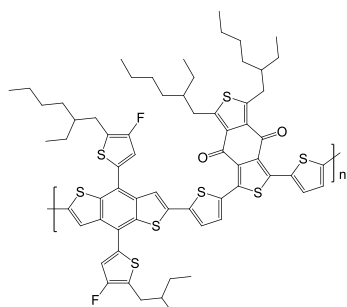
### Features

- In this paper, they synthesized the NFAs of BTP-eC9 and BTP-eC7. The BTP-eC9 maintains good solubility and meanwhile possesses enhanced intermolecular ordering. The better morphology features improve the charge transport and suppress the charge recombination in the BTP-eC9-based device.
- Significantly, due to the simultaneously **enhanced short-circuit current density** and **fill factor**, the BTP-eC9 based single-junction OPV cells record a maximum **PCE of 17.8%** and get a certified value of 17.3%.

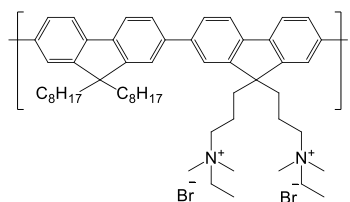
### Device Application

Device: ITO/PEDOT:PSS/PM6:BTP-eC9/PFN-Br/Al

### Related products from Lumtec:



LT- S9457 PM6



LT-N878 PFNBr

