



## Isomerism Effect on the Photovoltaic Properties of Benzotrithiophene-Based Hole-Transporting Materials

### Product Specifications

LT-S9276 BTT-4

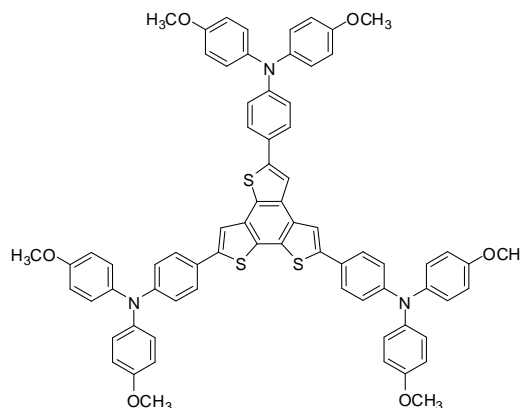
Name. 2,5,8-Tris(4-(bis(4-methoxyphenyl)amino)phenyl)benzotrithiophene

CAS No. 1908506-93-3

Formula  $C_{72}H_{57}N_3O_6S_3$

Molecular Weight 1156.43 g/mole

HOMO/LUMO -5.33 eV/ -2.66 eV



Reference: J. Name., 2013, 00, 1-3

### Features

- Perovskite solar cells (PSCs) using BTT-4 as HTMs show remarkable light-to-energy conversion efficiencies of 19.0% and 18.2%. These results validate the readily available BTT heteroaromatic structure as a valuable core for the design of highly efficient HTMs for the preparation of PSCs.

### Device Application

#### The Best Device:

FTO/ Li-TFSI/  $PbI_2 + CH_3NH_3I + CH_3NH_3Br$ / BTT-4/ Tbp+FK209+Li-TFSI/ Au.

$PbI_2$

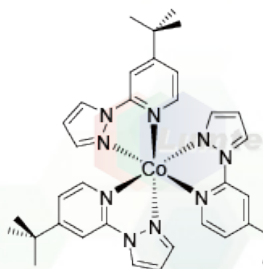
LT-S9147  $PbI_2$

$-NH_3^+ I^-$

LT-S9126  $CH_3NH_3I$

$-NH_3^+ Br^-$

LT-S9137  $CH_3NH_3Br$



LT-S9127 FK209

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

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