

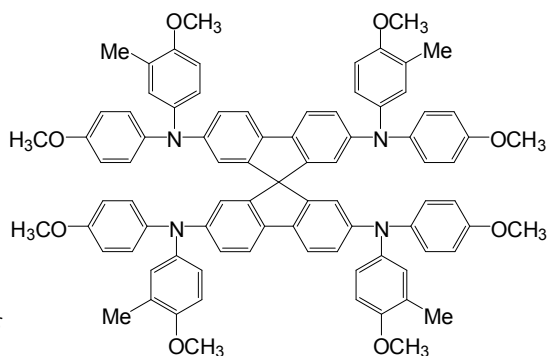


Enhancing Thermal Stability and Lifetime of Solid-State Dye-Sensitized Solar Cells via Molecular Engineering of the Hole-Transporting Material Spiro-MeOTAD

Product Specifications

LT-S9170 Spiro-MeOTAD-HTM1

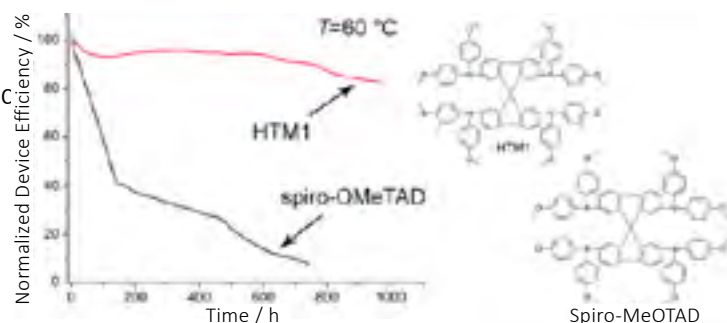
CAS No.	1573202-31-9
Grade	> 99% (HPLC)
Formula	$C_{85}H_{76}N_4O_8$
Molecular Weight	1281.53 g/mole
Absorption	306, 385 nm(in CH_2Cl_2)
Photoluminescence	429 nm(in CH_2Cl_2)
<i>Reference : ACS Appl. Mater. Interfaces 2015, 7, 11107–11116</i>	



Features

- The fully symmetrical Spiro-MeOTAD is prone to crystallization, especially if processed from solution.
- Spiro-MeOTAD-HTM1, analogue with four additional strategically well-placed methyl groups, have demonstrated significantly improved lifetime at elevated temperatures and retained ~90% of their initial efficiency after 1000 h at 60 °C.

*Figure reference: ACS Appl. Mater. Interfaces

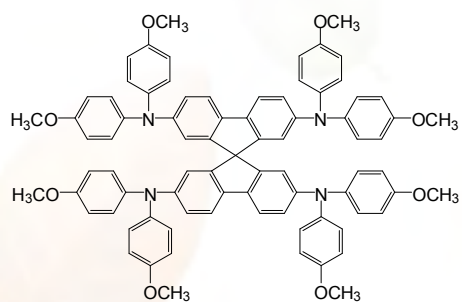


Device Application

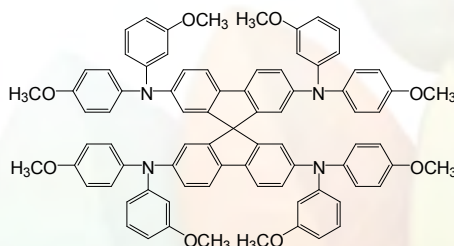
The Best Device :

FTO/ TiO_2 layer/ Spiro-MeOTAD-HTM1 (200 nm)/ Ag (200 nm)

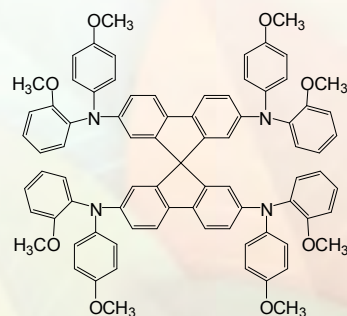
Related products from Lumtec :



LT-S922 Spiro-MeOTAD



LT-S9145 p,m-Spiro-MeOTAD



LT-S9146 p,o-Spiro-MeOTAD