



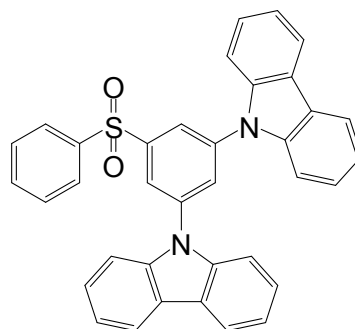
High efficient OLED from thermally activated delayed fluorescence using a sulfone-carbazole host material

Product Specifications

LT-N4112 mCPSOB 3,5-Di(carbazol-9-yl)-1-phenylsulfonylbenzene

CAS No.	1374770-41-8
Grade	Sublimed, > 99% (HPLC)
Formula	$C_{36}H_{24}N_2O_2S$
Molecular Weight	548.65 g/mole
HOMO/LUMO	-5.8 eV/-2.5 eV
Tg	110°C
TGA	> 200°C (0.5 % weight loss)
Triplet Energy	3.02 eV

Reference : *Organic Electronics* 16 (2015) 109-112



Features

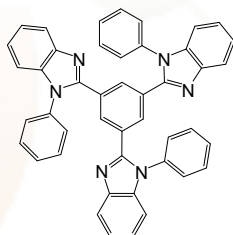
- The host material mCPSOB device showed high performance with a maximum EQE of 26.5% at 10 cd/m² and 21.5% at 1000 cd/m².
- The device exhibited a low turn-on voltage of 3.2 V at 10 cd/m² as well as reduced efficiency roll-off at high current density.

Device Application

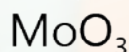
The Best Device :

ITO/MoO₃(15 nm)/Poly-TriCZ(50 nm)/mCPSOB:4CzIPN(5 wt%,25 nm)/TPBi(60 nm)/LiF(1 nm)/Al(100 nm).

Related products from Lumtec :



LT-E302 TPBi



LT-E003 MoO₃



LT-N863 LiF