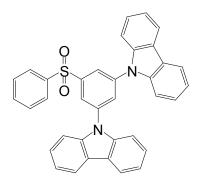
Lumtec Luminescence Technology Corp.

# 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

1374770-41-8 CAS No. Grade Sublimed, > 99% (HPLC) Formula  $C_{36}H_{24}N_{2}O_{2}S$ **Molecular Weight** 548.65 g/mole HOMO/LUMO -5.8 eV/-2.5 eV 110°C Tg 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/m<sup>2</sup> and 21.5% at 1000 cd/m<sup>2</sup>.
- The device exhibited a low turn-on voltage of 3.2 V at 10 cd/m<sup>2</sup> as well as reduced efficiency roll-off at high current density.



# **Device** Application

#### The Best Device :

ITO/MoO<sub>3</sub>(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 :



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