

Hybrid Heterocycle-Containing Electron-Transport Materials for Highly Efficient Phosphorescent OLEDs with Unprecedented Low Operating Voltage

Product Specifications

LT-N890 B3PYPPM

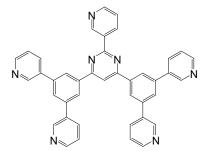
CAS No. 1382639-67-9

Grade Sublimed, > 99% (NMR)

Formula $C_{41}H_{27}N_7$

Molecular Weight617.7 g/moleAbsorption $255 \text{ nm (in CH}_2\text{Cl}_2)$ HOMO/LUMO6.57 / 3.10 eV

Reference: Chemistry of Materials (2012), 24(20), 3817-3827



LT-N891 B4PYPPyPM

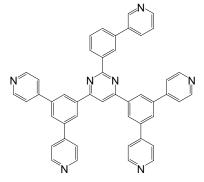
CAS No. 1382639-70-4

Grade Sublimed, > 99% (NMR)

Formula $C_{47}H_{31}N_7$

Molecular Weight693.8 g/moleAbsorption $255 \text{ nm (in } CH_2Cl_2)$ HOMO/LUMO6.62 / 3.17 eV

Reference: Chemistry of Materials (2012), 24(20), 3817-3827



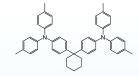
Features

- B3PYPPM shows the lowest operating voltages of 2.49, 2.97V for 100, 1000 cd m⁻² were achieved efficiency: PE of 129, 100 lm W¹; CE of 102, 94.9 cdA⁻¹; EQE of 28.5, 26.4%.
- B4PYPPyPM shows the lowest operating voltages of 2.39, 2.72V for 100, 1000 cd m⁻² were achieved efficiency: PE of 128, 103 lm W⁻¹; CE of 97.0, 89.0 cdA⁻¹; EQE of 26.9, 24.6%.

Device Application

The Best Device:

ITO/TPDPES(20 nm)/TAPC(30 nm)/CBP: 8wt% Ir(PPy)3(10nm)/B3PYPPM or B4PYPPyPM(50 nm)/LiF(0.5 nm)/Al(100 nm) Related products from Lumtec :



F P

LiF

Αl

LT-N137 TAPC

LT-E409 CBP

LT-E607 FIrPic

LT-E001 LiF

LT-E005 Al