



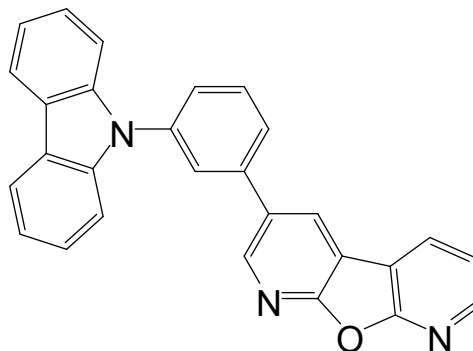
Above 30% External Quantum Efficiency in Green Delayed Fluorescent OLEDs

Product Specifications

LT-N4114 3CzPFP 3-[3-(9H-carbazol-9-yl)phenyl]furo[2,3-b:5,4-b']dipyridine

CAS No.	1443793-91-6
Grade	Sublimed, >99% (HPLC)
Formula	$C_{28}H_{17}N_3O$
Molecular Weight	411.45 g/mole
Photoluminescence	412 nm (in CH_2Cl_2)
HOMO/LUMO	-6.08 eV/-3.06 eV
TGA	> 280 °C (0.5 % weight loss)
Triplet Energy	2.82 eV

Reference : ACS Appl. Mater. Interfaces 2015, 7, 9625–9629



Features

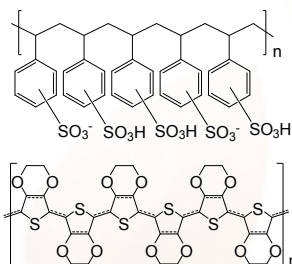
- The high efficient green TADF OLEDs with an external quantum efficiency of 31.2% were investigated by using 3CzPFP derived from carbazole and pyrido[3',2': 4,5]furo-[2,3-b]pyridine.
- The green delayed fluorescence device employing the 3CzPFP host showed high maximum quantum efficiency of $31.2 \pm 0.5\%$ at 1% doping after optimization of the device structure.
- The TADF OLEDs was found to have an efficiency comparable to that of phosphorescent OLEDs, and the device was promising as high-efficiency OLEDs to improve the power consumption.

Device Application

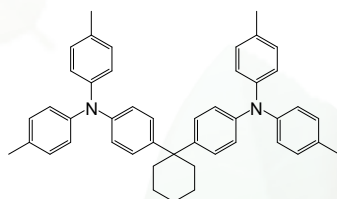
The Best Device :

ITO/ PEDOT:PSS/ TAPC/ MCP/ 3CzPFP: 4CzIPN (1 %)/ TSPO1.

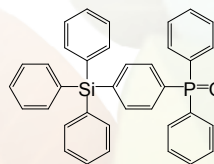
Related products from Lumtec :



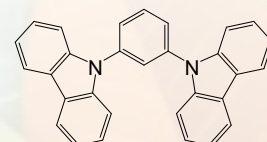
LT-PS001 PEDOT:PSS



LT-N137 TAPC



LT-N4048 TSPO1



LT-E107 mCP