

# A new tricarbazole phosphine oxide bipolar host for efficient blue PhOLED

# Product Specifications

### LT-N4107 POCz3

**CAS No.** 1392204-91-9

**Grade** Sublimed, >99% (HPLC)

 Formula
  $C_{54}H_{36}N_3OP$  

 M.W.
 773.86 g/mole

 UV-abs
 260 nm (in  $CH_2CI_2$ )

 PL
 351 nm (in  $CH_2CI_2$ )

 HOMO/LUMO
 -5.5eV /-1.8eV

**Tg** 163 °C

**TGA** > 300 °C (0.5% weight loss)

Reference: 1. Dalton Transactions (2015), 44(33), 14613-14624

2. Organic Electronics (2011), 12(12), 2025-2032

N P N O

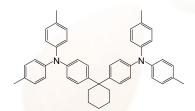
## Features

- A novel tricarbazole phosphine oxide (POCz3) with high triplet energy and promising physical properties serves as a bipolar host material of blue-emitting phosphor (FIrPic).
- In a three-layer device with a double confinement effect exhibiting maximum luminance 60098 cd/m<sup>2</sup> and maximum EQE (power efficiency) of 14.5%(31.3 lm/W).

## Device Application

#### The Best Device:

ITO/TAPC (40 nm)/POCz3:FIrPic 8.0wt% (25 nm)/POCz3 (5 nm)/TmPyPB (50 nm)/LiF (0.8 nm)/Al Related products from Lumtec :



LT-N137 TAPC LT-E607 FIrPic



LT-N863 TmPyPB

LiF

LT-E001 LiF