



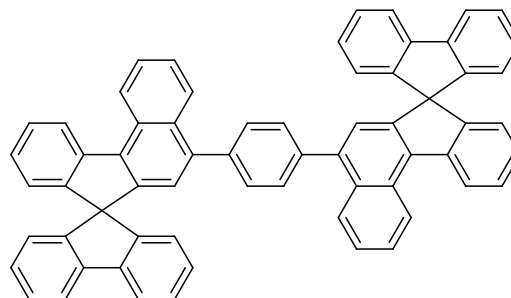
Novel Host / Dopant Material
for High Efficiency Deep Blue Fluorescence OLEDs

Product Specifications

LT-N4087 SBFF2B

Formula	$C_{64}H_{38}$
Molecular Weight	806.99 g/mole
Absorption	341,365 nm (solution)
Emission	429 nm (solution)
T_d	462 °C
T_g	223 °C
HOMO	-5.95 eV
LUMO	-2.77eV

Reference : *Dyes and Pigments 98 (2013) 471-478*

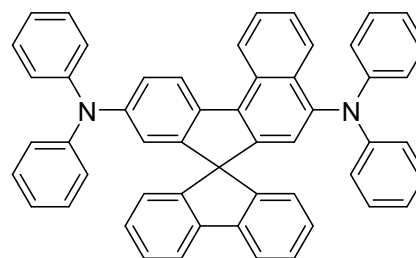


LT-N677 TPA-SBFF

Formula	$C_{53}H_{36}N_2$
Molecular Weight	700.87 g/mole
Absorption	407 nm (solution)
Emission	478 nm (solution)
T_d	429 °C
T_g	120 °C
HOMO	-5.48 eV
LUMO	-2.74 eV

Reference : 1. *Dyes and Pigments 98 (2013) 471-478*

2. *Bull. Korean Chem. Soc. 2012, Vol. 33, No. 7 2287*



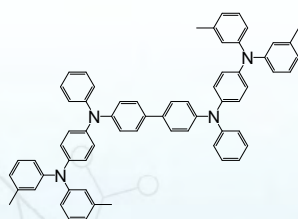
Features

- The spirobenzofluorene group is advantageous for morphological stability of the host/dopant material at a high temperature, both SBFF2B and TPA-SBFF show high thermal stability of $T_d > 400$ °C.
- A basic device obtained from SBFF2B doped with TPA-SBFF showed a high color purity of (0.146 and 0.148), efficiency of 7.44 cd A⁻¹ and an external quantum efficiency of 5.60% at 7 V.

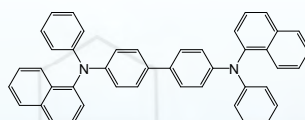
Device Application

ITO /DNTPD(60 nm)/NPB(30 nm)/SBFF2B : TPA-SBFF(30 nm, 10%)/Alq3(20 nm)/LiF(1 nm)/Al(200 nm)

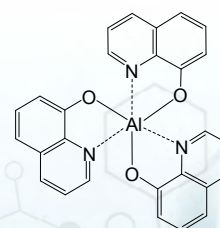
Related products from Lumtec :



LT-N220 DNTPD



LT-E101 NPB



LT-E401 Alq3