



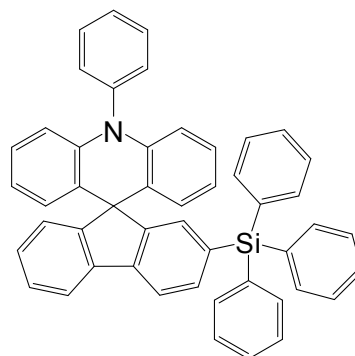
Silicon-Based Material with Spiro-Annulated Fluorene/Triphenylamine as Host and Exciton-Blocking Layer for Blue PhOLED

Product Specifications

LT-N4110 SSTF 10-Phenyl-2'-(triphenylsilyl)-10H-spiro[acridine-9,9'-fluorene]

CAS No.	1454372-37-2
Grade	Sublimed, > 99% (HPLC)
Formula	C ₄₉ H ₃₅ NSi
Molecular Weight	665.89 g/mole
Absorption	285, 313 nm(in CH ₂ Cl ₂)
Photoluminescence	413 nm(in CH ₂ Cl ₂)
Eg	3.81 eV
Tg	109 °C
TGA	>270 °C (0.5 % weight loss)

Reference : Chem. Eur. J. 2013, 19, 11791-11797



Features

- The compound SSTF, with spiro structure that the energy levels make it suitable as a host material or exciton-blocking material in PhOLEDs.
- The blue emitting device with FlrPic as phosphorescent dopant have been show high efficiency with low roll-off.
 - A. When SSTF as host material, the device achieved 44.0 cdA⁻¹ (41.3 lmW⁻¹) at 100 cdm⁻² and 41.9 cdA⁻¹ (32.9 lmW⁻¹) at 1000 cdm⁻².
 - B. When SSTF as exciton-blocking layer material, the device achieved 28.1 lmW⁻¹ at 100 cdm⁻² and 20.6 lmW⁻¹ at 1000 cdm⁻².

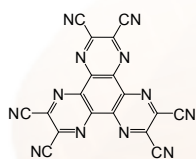
Device Application

The Best Blue Device :

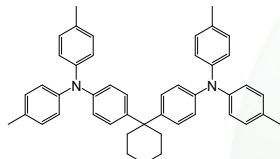
A. ITO/HAT-CN(10 nm)/TAPC(40 nm)/SSTF: FlrPic(15 wt%, 20 nm)/TmPyPB(40 nm)/Liq(2 nm)/Al(100 nm).

B. ITO/HAT-CN(10 nm)/NPB(80 nm)/SSTF(15 nm)/MCP:FlrPic(8 wt%, 20 nm)/TmPyPB(40 nm)/Liq(2 nm)/Al(100 nm).

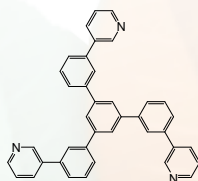
Related products from Lumtec :



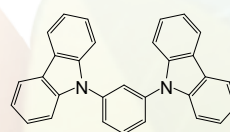
LT-N221 HAT-CN



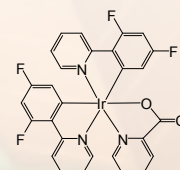
LT-N137 TAPC



LT-N863 TmPyPB



LT-E107 MCP



LT-E607 FlrPic