Luminescence Technology Corp.

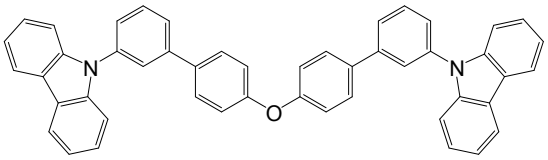
High Triplet Energy Host Material for Blue Phosphorescent Organic Light-Emitting Diodes

Product Specifications

LT-N4086 CBBPE

Formula	$C_{48}H_{32}N_2O$
Grade	Sublimed, > 99% (HPLC)
Molecular Weight	652.78 g/mole
Absorption	282, 340 nm (in CH_2Cl_2)
Photoluminenscence	350 nm (in CH_2Cl_2)

Reference : Dyes and Pigments 98 (2013) 372-376



Features

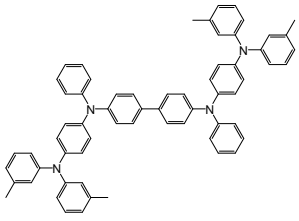
- A carbazole type, thermally stable, high triplet energy host material having a diphenylether linkage, device performances of blue phosphorescent organic light-emitting diodes were quite high.
- The new host material exhibited a high glass transition temperature of 111 °C and a high triplet energy of 2.73 eV for energy transfer to blue triplet emitter.
- Blue devices using the new host material have a high quantum efficiency of 23.5%.

Device Application

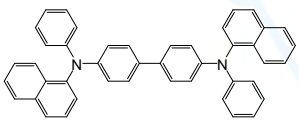
Best Device :

ITO/DNTPD(30 nm)/NPB(15 nm)/MCP(10 nm)/15% FirPic : CBBPE(25 nm)/TSPO1(35 nm)/LiF(1 nm)/ Al(200 nm)

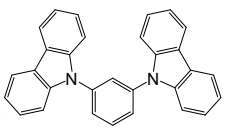
Related products from Lumtec :



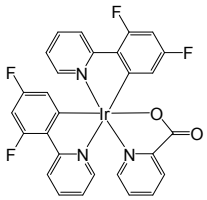
LT-N220 DNTPD



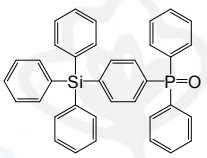
LT-E101 NPB



LT-E107 MCP



LT-E607 FirPic



LT-N4048 TSPO1

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