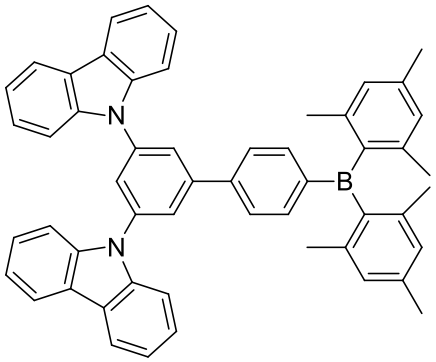
Lumtec Luminescence Technology Corp.

Synthesis, crystal structure, aggregation-induced emission enhancement and electroluminescence properties of a novel compound containing carbazole and triarylborane groups

Product Specifications

LT-N4224	DB-BCZ
Grade	Sublimed, >99%
PL	424 nm (films)
Formula	$C_{54}H_{45}BN_2$
HOMO/LUMO	-5.39/-2.02 eV
M.W.	732.76 g/mole



*Reference: *Journal of Molecular Structure*, **2021**, 1228 , 129721*

Features

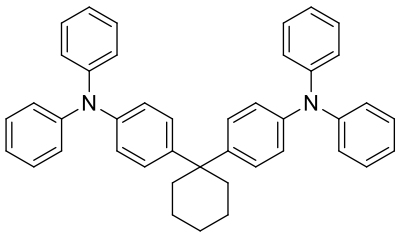
●In this study, a new compound DB- BCZ was synthesized by using carbazole as electron-donors and triarylborane as an electron-acceptor.

●The non-doped OLED employing DB-BCZ as emitting layer displays bluish-violet emission, and exhibits a turn-on voltage of 5.6 V, a maximum luminance of 5374 cd m^{-2} , a maximum current efficiency of 2.26 cd A^{-1} and a maximum power efficiency of 0.96 lm W^{-1}.

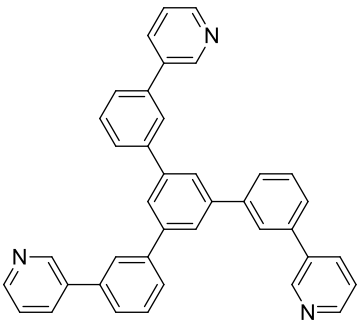
Device Application

Device: ITO / HAT-CN / TAPC / DB-BCZ / TmPyPB / LiF / Al.

Related products from Lumtec:



LT-N137 TAPC



LT-N863 TmPyPB

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