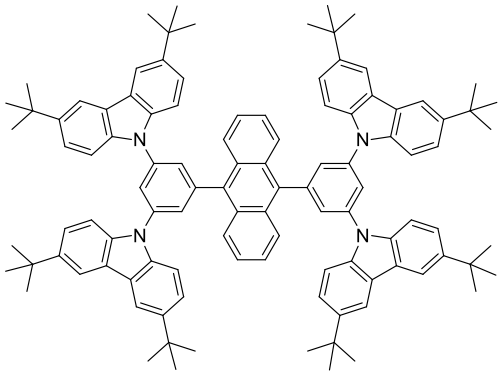
Bis(carbazol-9-yl)phenyl end-caped polyaromatics as solution-processed deep blue fluorescent emitters for simple structure solution-processed electroluminescent devices

Product Specifications

LT-N6072 C-A-C	
Grade	Sublimed, >99%
Formula	$C_{106}H_{110}N_4$
PL	432 nm (film)
HOMO/LUMO	-5.90/-2.96 eV
M.W.	1440.03 g/mole



*Reference: *Dyes and Pigments.**2021**, 186*, 109065

Features

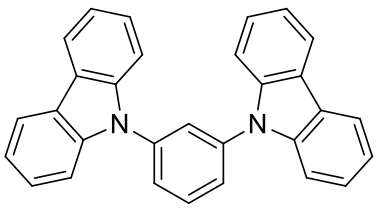
●In this paper, the molecules are constructed from basic building blocks of blue chromophores (anthracene or pyrene derivatives) and end-capped with charge transporting (1,3 phenylene)bis (3,6-di-*tert*-butyl-9H-carbazole) units which provided the tunable emission in the blue spectral range.

●The best device performance based on **C-A-C** as the emitter offered low turn on voltage of 3.7 V, external quantum efficiency of 3.24%, strong deep-blue emission of 424 nm with high color purity at CIE coordinates (0.155, 0.066).

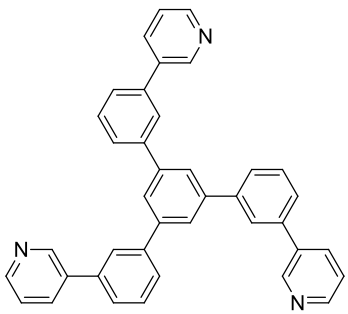
Device Application

Device: ITO / PEDOT:PSS / 20 wt% C-A-C : mCP / TmPyPB / LiF / Al

Related products from Lumtec:



LT-E107 mCP



LT-N863 TmPyPB

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