

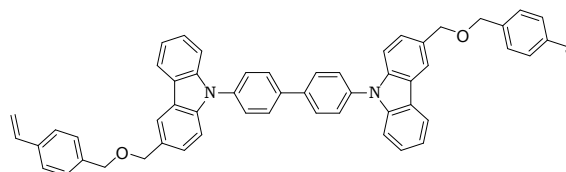


## Noval Thermally Cross-Linkable Host Materials for Multilayered Solution-Processed OLEDs

### Product Specifications

#### LT-N4063 DV-CBP

|                         |                   |
|-------------------------|-------------------|
| <b>Formula</b>          | $C_{40}H_{28}N_2$ |
| <b>Molecular Weight</b> | 536.66 g/mole     |
| <b>Absorption</b>       | 240 nm (Film)     |
| <b>Emission</b>         | 384 nm (Film)     |
| <b>HOMO (eV)</b>        | -6.1 eV           |
| <b>LUMO (eV)</b>        | -2.75 eV          |



Reference : *Organic Electronics* 14 (2013) 1614–1620

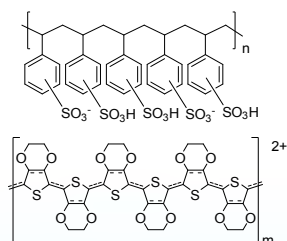
### Features

- A thermally cross-linkable host material DV-CBP is thermally cross-linked at styrene end-groups through curing at approximately 180°C without polymerization initiator.
- The DV-CBP host exhibited a PL quantum efficiency of 76% when doped with blue-fluorescent BDAVBi, which is comparable to efficiency of 78% that observed using CBP as host.
- Introduction of the TPBi electron-transporting layer on top of the cross-linked emissive layer can improve the electron injection and hole blocking in the devices and thus lead to lower driving voltages and higher efficiencies than those of a device with a vacuum deposited Ca electrode.

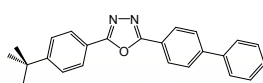
### Device Application

ITO/PEDOT:PSS(40 nm)/ DV-CBP : 20wt%PBD : 8 wt%BDAVB(40nm)/TPBi(40nm)/NaF(4nm)/Al(100nm).

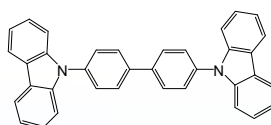
Related products from Lumtec :



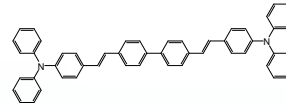
LT-PS001 PEDOT:PSS



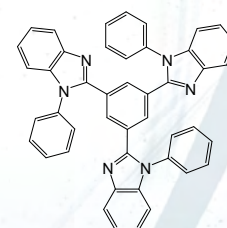
LT-E303 PBD



LT-E409 CBP



LT-E608 BDAVB



LT-E302 TPBi