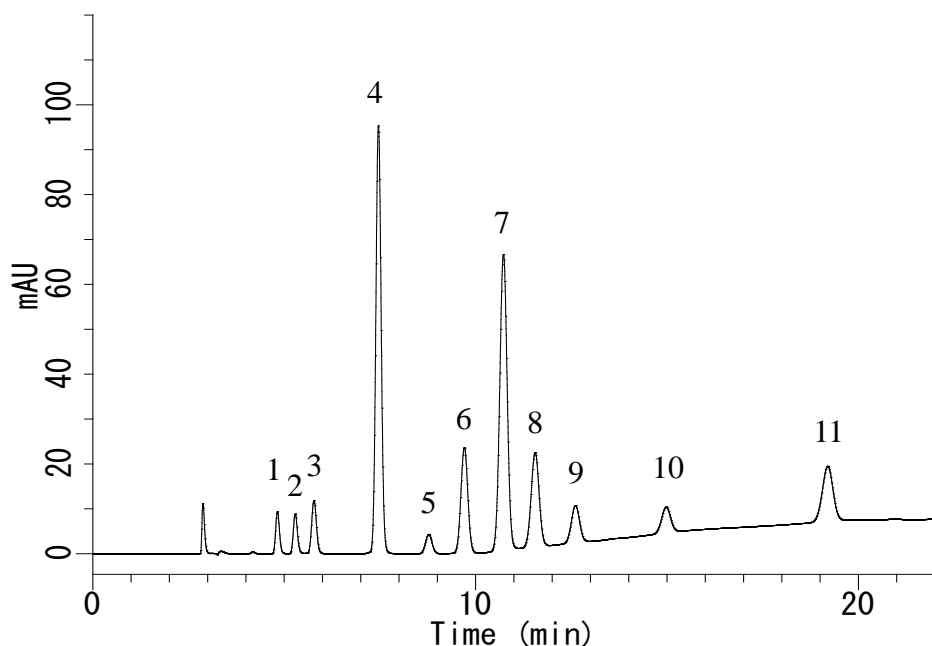


## Analysis of Organic electroluminescence materials



### Conditions

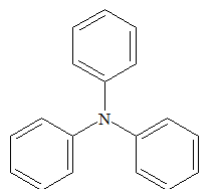
**System** : GL7700 HPLC system  
**Column** : Inertsil ODS-3V  
 (5  $\mu$  m, 250 x 4.6 mm I.D.)  
**Column Cat. No.** : 5020-01802  
**Eluent** : A) CH<sub>3</sub>CN  
 B) THF  
 A/B = 100/0 - 5 min - 100/0 - 15 min - 95/5 -  
 20 min - 95/5, v/v  
**Flow Rate** : 1.0 mL/min  
**Col. Temp.** : 40 °C  
**Detection** : UV 254 nm (UV7750 UV Detector)  
**Injection Vol.** : 5  $\mu$  L  
**Sample** : Standard

### Analyte:

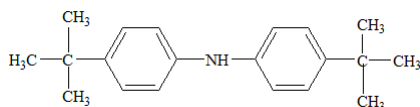
1. Triphenylamine  
 2. Bis(4-tert-butylphenyl)amine  
 3. 2-(4-Biphenyl)-5-(4-tert-butylphenyl)-1,3,4-oxadiazole  
 4. 9,10-Diphenylanthracene  
 5. Impurity  
 6. 4,4'-Bis(9H-carbazol-9-yl)biphenyl  
 7. 9,10-Di(2-naphthyl)anthracene  
 8. 1,3,5-Tri(9H-carbazol-9-yl)benzene  
 9. N,N'-Diphenyl-N,N'-di(m-tolyl)benzidine  
 10. 5,6,11,12-Tetraphenylnaphthacene  
 11. 4,4',4''-Tri-9-carbazolyltriphenylamine  
 (10  $\mu$  g/mL each)

# Analysis of Organic electroluminescence materials

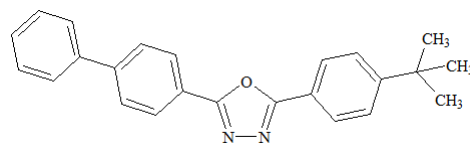
## Chemical Structure



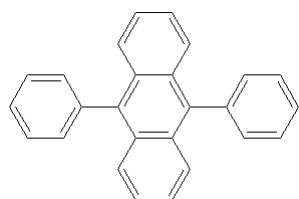
**1.** Triphenylamine



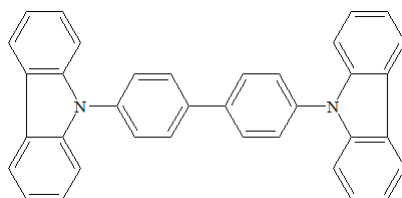
**2.** Bis(4-tert-butylphenyl)amine



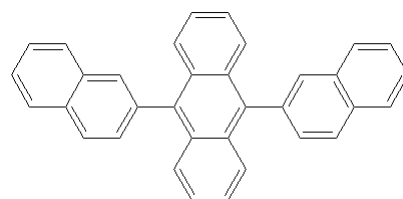
**3.** 2-(4-Biphenyl)-5-(4-tert-butylphenyl)-1,3,4-oxadiazole



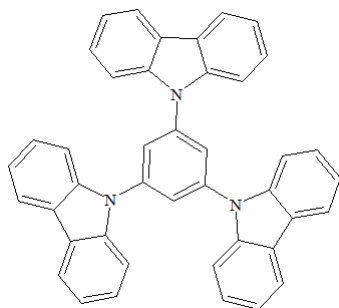
**4.** 9,10-Diphenylanthracene



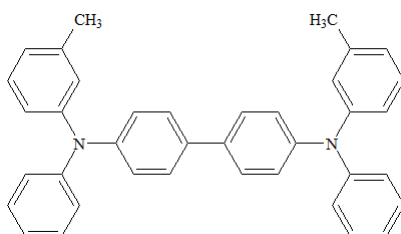
**6.** 4,4'-Bis(9H-carbazol-9-yl)biphenyl



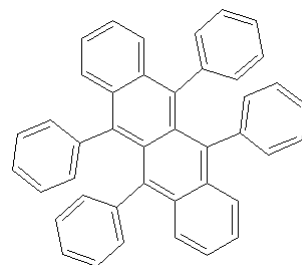
**7.** 9,10-Di(2-naphthyl)anthracene



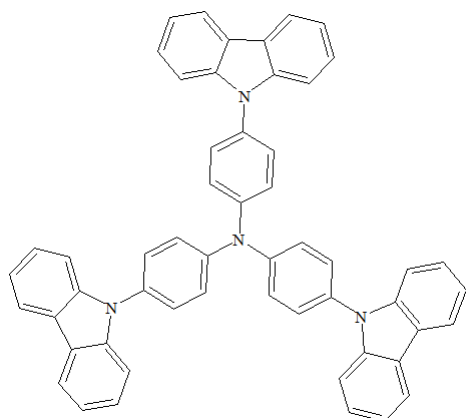
**8.** 1,3,5-Tri(9H-carbazol-9-yl)benzene



**9.** N,N'-Diphenyl-N,N'-di(m-tolyl)benzidine



**10.** 5,6,11,12-Tetraphenylnaphthacene



**11.** 4,4',4''-Tri-9-carbazolyltriphenylamine