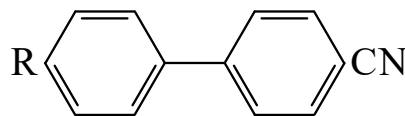




>>Entry Name: 4-Alkyl-4'-cyanobiphenyls

Synonym(s): 4'-Alkyl-[1,1'-biphenyl]-4-carbonitriles, 9CI



Related CAS Registry Numbers(s): 63748-28-7 93059-80-4 114884-45-6

Use/Importance: A family of compds. showing liquid crystal behaviour, used in liquid crystal devices

Other Data: Mp's referred to are phase transition temps.

>>Variant: 4-Cyano-4'-methylbiphenyl

Synonym(s): CB1

CAS Registry Number: 50670-50-3

Molecular Formula: C₁₄H₁₁N

Molecular Weight: 193.248

Accurate Mass: 193.089149

Percentage Composition: C 87.01%; H 5.74%; N 7.25%

Melting Point: Mp 109°

>>Variant: 4-Cyano-4'-ethylbiphenyl

Synonym(s): CB2

CAS Registry Number: 58743-75-2

Molecular Formula: C₁₅H₁₃N

Molecular Weight: 207.274

Accurate Mass: 207.104799

Percentage Composition: C 86.92%; H 6.32%; N 6.76%

Melting Point: Mp 75°

Boiling Point: Bp₃ 202-205°

>>Variant: 4-Cyano-4'-propylbiphenyl

Synonym(s): CB3

CAS Registry Number: 58743-76-3

Molecular Formula: C₁₆H₁₅N

Molecular Weight: 221.301

Accurate Mass: 221.120449

Percentage Composition: C 86.84%; H 6.83%; N 6.33%

Physical Description: Cryst.

Melting Point: Mp 53.3°. Mp 65.4° (dimorph.)

>>Variant: 4-Butyl-4'-cyanobiphenyl

Synonym(s): CB4

CAS Registry Number: 52709-83-8

Molecular Formula: C₁₇H₁₇N

Molecular Weight: 235.328

Accurate Mass: 235.136099

Percentage Composition: C 86.77%; H 7.28%; N 5.95%

Boiling Point: Bp₂ 210-212°

>>Variant: 4-Cyano-4'-pentylbiphenyl

Synonym(s): CB5

CAS Registry Number: 40817-08-1

Molecular Formula: C₁₈H₁₉N

Molecular Weight: 249.355

Accurate Mass: 249.151749

Percentage Composition: C 86.70%; H 7.68%; N 5.62%

Melting Point: Mp 22-23°

Boiling Point: Bp₃ 212-215°

Aldrich: 32851-0