



Molecular Weight: 279.381
Accurate Mass: 279.162314
Percentage Composition: C 81.68%; H 7.58%; N 5.01%; O 5.73%
Melting Point: Mp 58° (crystal-smectic transition temp.)
Boiling Point: Bp_{0.3} 135-140°
Aldrich: 33865-6

>>Variant: 4-Cyano-4'-heptyloxybiphenyl

Synonym(s): 4'-Heptyloxy-[1,1'-biphenyl]-4-carbonitrile, 9CI

CAS Registry Number: 52364-72-4
Molecular Formula: C₂₀H₂₃NO
Molecular Weight: 293.408
Accurate Mass: 293.177964
Percentage Composition: C 81.87%; H 7.90%; N 4.77%; O 5.45%
Melting Point: Mp 53.5° (crystal-smectic transition temp.)
Boiling Point: Bp_{0.1} 170°
Aldrich: 33866-4

>>Variant: 4-Cyano-4'-octyloxybiphenyl

Synonym(s): 4'-Octyloxy-[1,1'-biphenyl]-4-carbonitrile, 9CI

CAS Registry Number: 52364-73-5
Molecular Formula: C₂₁H₂₅NO
Molecular Weight: 307.435
Accurate Mass: 307.193614
Percentage Composition: C 82.04%; H 8.20%; N 4.56%; O 5.20%
Physical Description: Needles, parallepipeds, square plates or powder
Melting Point: Mp 49°. Mp 51.5° (dimorph.)
Boiling Point: Bp_{0.9} 125-135°
Aldrich: 33867-2

>>Variant: 4-Cyano-4'-nonyloxybiphenyl

Synonym(s): 4'-Nonyloxy-[1,1'-biphenyl]-4-carbonitrile, 9CI

CAS Registry Number: 58932-13-1
Molecular Formula: C₂₂H₂₇NO
Molecular Weight: 321.461
Accurate Mass: 321.209264
Percentage Composition: C 82.20%; H 8.47%; N 4.36%; O 4.98%
Melting Point: Mp 65° (crystal-smectic transition temp.)

References:

Ger. Pat., 1974, 2 356 085; *CA*, **81**, 96988z, (*synth*)
Gray, G.W. *et al.*, *Liq. Cryst. Ordered Fluids*, (Eds., Johnson J.F. *et al.*), Plenum Press, N.Y., 1974, **2**, 617, (*synth, props*)
Gray, G.W. *et al.*, *J.C.S. Perkin 2*, 1976, 97, (*synth, props*)
Hori, K. *et al.*, *Acta Cryst. C*, 1996, **52**, 1751, (*cryst struct, octyl*)