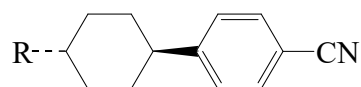




>>Entry Name: 4-(4-Alkylcyclohexyl)benzonitriles



Related CAS Registry Numbers(s): 66230-67-9 72928-54-2

General Statement: All compds. descr. here are *trans*-isomers

Use/Importance: A family of compds. showing liq. cryst. behaviour

>>Variant: 4-(4-Propylcyclohexyl)benzonitrile

Synonym(s): 1-(4-Cyanophenyl)-4-propylcyclohexane

CAS Registry Number: 61203-99-4

Molecular Formula: C₁₆H₂₁N

Molecular Weight: 227.349

Accurate Mass: 227.167399

Percentage Composition: C 84.53%; H 9.31%; N 6.16%

Melting Point: Mp 36°

>>Variant: 4-(4-Butylcyclohexyl)benzonitrile

Synonym(s): 1-Butyl-4-(4-cyanophenyl)cyclohexane

CAS Registry Number: 61204-00-0

Molecular Formula: C₁₇H₂₃N

Molecular Weight: 241.375

Accurate Mass: 241.183049

Percentage Composition: C 84.59%; H 9.60%; N 5.80%

Melting Point: Mp 41°

>>Variant: 4-(4-Pentylcyclohexyl)benzonitrile

Synonym(s): 1-(4-Cyanophenyl)-4-pentylcyclohexane

CAS Registry Number: 61204-01-1

Extra CAS Registry Numbers(s): 62788-05-0

Molecular Formula: C₁₈H₂₅N

Molecular Weight: 255.402

Accurate Mass: 255.198699

Percentage Composition: C 84.65%; H 9.87%; N 5.48%

Melting Point: Mp 31°

>>Variant: 4-(4-Hexylcyclohexyl)benzonitrile

Synonym(s): 1-(4-Cyanophenyl)-4-hexylcyclohexane

CAS Registry Number: 61204-02-2

Molecular Formula: C₁₉H₂₇N

Molecular Weight: 269.429

Accurate Mass: 269.214349

Percentage Composition: C 84.70%; H 10.10%; N 5.20%

Melting Point: Mp 42°

>>Variant: 4-(4-Heptylcyclohexyl)benzonitrile

Synonym(s): 1-(4-Cyanophenyl)-4-heptylcyclohexane

CAS Registry Number: 61204-03-3

Molecular Formula: C₂₀H₂₉N

Molecular Weight: 283.456

Accurate Mass: 283.229999

Percentage Composition: C 84.75%; H 10.31%; N 4.94%

Melting Point: Mp 30°

References:

Eidenschink, R. *et al.*, *Angew. Chem., Int. Ed.*, 1977, **16**, 100, (*synth*)

Bezborodov, V.S. *et al.*, *Zh. Org. Khim.*, 1983, **19**, 1669-1674; *J. Org. Chem. USSR (Engl. Transl.)*, 1983, **19**, 1479-1483, (*synth*)