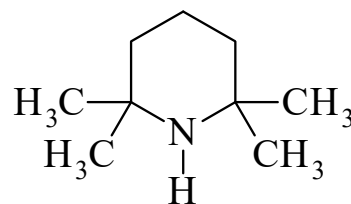




>>Entry Name: 2,2,6,6-Tetramethylpiperidine, 9CI

Synonym(s): Tmp



CAS Registry Number: 768-66-1

Molecular Formula: C₉H₁₉N

Molecular Weight: 141.256

Accurate Mass: 141.151749

Percentage Composition: C 76.53%; H 13.56%; N 9.92%

Use/Importance: Coordinating ligand for stabilisation of main-group compounds with low coordination numbers. Li salt is a hindered base useful in organic synth.

Boiling Point: Bp 155.5-156.5°

pKa Value: pK_a 11.07 (25°)

Refractive Index: n_D²⁰ 1.4455

Other Data: Steam-volatile. Ir spectrum shows no NH band

Hazard & Toxicity: LD₅₀ (mus, orl) 220 mg/kg

Aldrich: 11575-4

Fluka: 87900

Sigma: T9264

>>Derivative: Hydrate

Physical Description: Needles

Melting Point: Mp 28°

>>Derivative: Hydrochloride

Physical Description: Prisms (Et₂O/EtOH)

Other Data: Subl. >220°

>>Derivative: Hydrobromide

CAS Registry Number: 935-21-7

Physical Description: Cryst. (EtOH)

Other Data: Subl. without melting

>>Derivative: *N*-Benzoyl

CAS Registry Number: 74601-40-4

Molecular Formula: C₁₆H₂₃NO

Molecular Weight: 245.364

Accurate Mass: 245.177964

Percentage Composition: C 78.32%; H 9.45%; N 5.71%; O 6.52%

Physical Description: Plates (EtOH)

Melting Point: Mp 41-42°

>>Derivative: *N*-Amino

CAS Registry Number: 6130-92-3

Molecular Formula: C₉H₂₀N₂

Molecular Weight: 156.27

Accurate Mass: 156.162648

Percentage Composition: C 69.17%; H 12.90%; N 17.93%

Use/Importance: Radical source

Physical Description: Liq.

Boiling Point: Bp₂₀ 80-83°

Hazard & Toxicity: LD₅₀ (mus, orl) 261 mg/kg