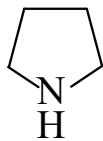




>>Entry Name: Pyrrolidine, 9CI, 8CI

ENTRY UNDER REVIEW

Synonym(s): Tetrahydropyrrole. Tetramethyleneimine. Azacyclopentane. FEMA 3523



CAS Registry Number: 123-75-1

Molecular Formula: C₄H₉N

Molecular Weight: 71.122

Accurate Mass: 71.073499

Percentage Composition: C 67.55%; H 12.75%; N 19.69%

Biological Source: Present in tobacco and carrot leaves (*Daucus carota*) (Umbelliferae). Widely distributed in trace amts., presumably as bacterial decarboxylation prod. of proline. Manuf. by catalytic reaction of NH₃ with tetrahydrofuran or butanediol

Use/Importance: Widely used org. base, used in the prep. of enamines. Reagent used in the ms detn. of the position of double bonds and of methyl branching in fatty acids

Physical Description: Liq. with odour resembling Piperidine [HJM94-U](#)

Melting Point: Fp -63°

Boiling Point: Bp 88.5-89°

Solubility: Misc. H₂O

Density: d₄²⁰ 0.8618

pKa Value: pK_a 11.31 (25°)

Other Data: Fumes in air. Strongly alkaline

Hazard & Toxicity: Highly flammable, fl. p. 3°. Skin, eye and respiratory tract irritant. LD₅₀ (rat, orl) 300 mg/kg

Aldrich: 39423-8

Fluka: 83241

Sigma: P2271

>>Derivative: Hemipicrate

Physical Description: Dark-red cryst.

Melting Point: Mp 163-164°

>>Derivative: Monopicrate

CAS Registry Number: 1689-56-1

Physical Description: Yellow needles (EtOH)

Melting Point: Mp 112°

>>Derivative: N-Formyl

>>Derivative: N-Ac

CAS Registry Number: 4030-18-6

Molecular Formula: C₆H₁₁NO

Molecular Weight: 113.159

Accurate Mass: 113.084064

Percentage Composition: C 63.69%; H 9.80%; N 12.38%; O 14.14%

Physical Description: Liq.

Boiling Point: Bp 224-225°

>>Derivative: N-Hexadecanoyl

Synonym(s): N-Hexadecanoylpyrrolidine. Hexadecanoic acid pyrrolidide. N-Palmitoylpyrrolidine. Alkaloid MQ-B₂

CAS Registry Number: 70974-48-0

Molecular Formula: C₂₀H₃₉NO

Molecular Weight: 309.534

Accurate Mass: 309.303164

Percentage Composition: C 77.61%; H 12.70%; N 4.53%; O 5.17%

Biological Source: Alkaloid from *Piper amalago*, *Ipomoea aquatica* and *Merremia quinquefolia*