



>>Entry Name: 1-Pentadecylamine

Synonym(s): 1-Pentadecanamine, 9Cl. 1-Aminopentadecane

CAS Registry Number: 2570-26-5

$\text{H}_3\text{C}(\text{CH}_2)_{13}\text{CH}_2\text{NH}_2$

Molecular Formula: $\text{C}_{15}\text{H}_{33}\text{N}$

Molecular Weight: 227.432

Accurate Mass: 227.261299

Percentage Composition: C 79.22%; H 14.62%; N 6.16%

Physical Description: Cryst.

Melting Point: Mp 36.5° (33.5°)

Boiling Point: Bp 298-301°. Bp₁ 120.5°

pKa Value: pK_a 10.61 (25°)

Hazard & Toxicity: LD₅₀ (mus, orl) 520 mg/kg

Aldrich: P400-3

Fluka: 76590

Rare Chemicals Library: S56362-5

Sigma: P0417

>>Derivative: Hydrochloride

CAS Registry Number: 1838-05-7

Physical Description: Cryst. (EtOH)

Melting Point: Mp 199°

>>Derivative: N-Ac

Molecular Formula: $\text{C}_{17}\text{H}_{35}\text{NO}$

Molecular Weight: 269.47

Accurate Mass: 269.271864

Percentage Composition: C 75.77%; H 13.09%; N 5.20%; O 5.94%

Physical Description: Cryst. (petrol)

Melting Point: Mp 72°

>>Derivative: N-Benzyl, N-Me

Synonym(s): N-Benzyl-N-methyl-1-pentadecylamine. Piptamine

Molecular Formula: $\text{C}_{23}\text{H}_{41}\text{N}$

Molecular Weight: 331.584

Accurate Mass: 331.323899

Percentage Composition: C 83.31%; H 12.46%; N 4.22%

Biological Source: Isol. from the mushroom *Piptoporus betulinus*

Biological Use/Importance: Active against various bacteria, yeasts and fungi

Physical Description: Waxy solid

References:

Aldrich Library of 13C and 1H FT NMR Spectra, 1992, **1**, 454B, (nmr)

Aldrich Library of Infrared Spectra, 3rd edn., 1981, 167A, (ir)

Naegeli, C. *et al.*, *Helv. Chim. Acta*, 1929, **12**, 227, (synth)

Ralston, A.W. *et al.*, *Ind. Eng. Chem.*, 1940, **32**, 1093

Murr, B.L. *et al.*, *J.A.C.S.*, 1955, **77**, 1684, (synth)

Krivschich, S.Y., *Toksikol. Nov. Prom. Khim. Veshchestv*, 1968, **10**, 124; *CA*, **71**, 47807, (tox)

Schlegel, B. *et al.*, *J. Antibiot.*, 2000, **53**, 973-974, (Piptamine)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, PBA000