



>>Entry Name: Bis(6-aminohexyl)amine

Synonym(s): *N*-(6-Aminoethyl)-1,6-hexanediamine, 9Cl. 6,6'-Diaminodihexylamine, 8Cl. Bisexamethylenetriamine. 1,8,15-Triazapentadecane

CAS Registry Number: 143-23-7

$\text{H}_2\text{N}(\text{CH}_2)_6\text{NH}(\text{CH}_2)_6\text{NH}_2$

Molecular Formula: $\text{C}_{12}\text{H}_{29}\text{N}_3$

Molecular Weight: 215.381

Accurate Mass: 215.236147

Percentage Composition: C 66.92%; H 13.57%; N 19.51%

Use/Importance: Copolymer to increase cross-linking in polyamides

Physical Description: Cryst.

Melting Point: Mp 33-36°

Boiling Point: Bp₄ 163-165°. Bp₁ 132-134°

Other Data: Hygroscopic, rapidly absorbs atmospheric CO_2

Aldrich: 42196-0

Sigma: A4082

>>Derivative: Hydrochloride (1:3)

Physical Description: Cryst.

Melting Point: Mp 250° (dec.). Mp 300-301°

>>Derivative: Picrate (1:3)

Physical Description: Cryst. (EtOH)

Melting Point: Mp 150°

>>Derivative: *N,N',N''*-Tri-Me

CAS Registry Number: 86018-07-7

Molecular Formula: $\text{C}_{15}\text{H}_{35}\text{N}_3$

Molecular Weight: 257.462

Accurate Mass: 257.283097

Percentage Composition: C 69.98%; H 13.70%; N 16.32%

Density: d 0.86

Refractive Index: n_D^{20} 1.4620

Other Data: Comly. available but props. poorly documented

Aldrich: 43170-2

References:

U.K. Pat., 1948, 597 253; *CA*, **42**, P4604i, (*synth*)

Freidlin, L.K. *et al.*, *Izv. Akad. Nauk SSSR, Otd. Khim. Nauk*, 1962, 336; *CA*, **57**, 11166c, (*synth*)

Titova, I.A. *et al.*, *Zh. Prikl. Khim. (Leningrad)*, 1972, **45**, 2054; *CA*, **78**, 52380d, (*synth*)

Levine, S. *et al.*, *J. Neuropathol. Exp. Neurol.*, 1982, **41**, 54, (*tri-N-Me*)

U.S. Pat., 1990, 4 906 783; *CA*, **113**, 60054g, (*synth, use*)