



>>Entry Name: Formamidine, 8Cl

Synonym(s): Methanimidamide, 9Cl

CAS Registry Number: 463-52-5

Related CAS Registry Numbers(s): 77269-36-4 77269-37-5

$\text{H}_2\text{NCH}=\text{NH}$

Molecular Formula:  $\text{CH}_4\text{N}_2$

Molecular Weight: 44.056

Accurate Mass: 44.037448

Percentage Composition: C 27.26%; H 9.15%; N 63.59%

General Statement: Known only as salts

>>Derivative: Hydrochloride

CAS Registry Number: 6313-33-3

Physical Description: Solid

Melting Point: Mp 78°. Mp 80°

Other Data: Deliquescent

Aldrich: 26860-7

Fluka: 47700

Sigma: F1144

>>Derivative: Acetate salt

CAS Registry Number: 3473-63-0

Extra CAS Registry Numbers(s): 40730-94-7

Physical Description: Cryst. (EtOH)

Melting Point: Mp 162-164°

Other Data: Not hygroscopic

Aldrich: F1580-3

Sigma: F8126

>>Derivative: Nitrate

Physical Description: Needles (EtOH)

Melting Point: Mp 89°

>>Derivative: Sulfate salt (2:1)

Physical Description: Cryst. (MeOH)

Melting Point: Mp 156-158°

>>Derivative: *N*'-tert-Butyl, *N,N*-Di-Me

CAS Registry Number: 23314-06-9

Molecular Formula:  $\text{C}_7\text{H}_{16}\text{N}_2$

Molecular Weight: 128.217

Accurate Mass: 128.131348

Percentage Composition: C 65.57%; H 12.58%; N 21.85%

Boiling Point: Bp 137-140°

Density: d 0.81

Refractive Index:  $n_D^{20}$  1.4450

Aldrich: 29906-5

#### References:

*Aldrich Library of  $^{13}\text{C}$  and  $^1\text{H}$  FT NMR Spectra*, 1992, **1**, 1325A, (*nmr*)

*Aldrich Library of FT-IR Spectra*, 1st edn., 1985, **1**, 815B, (*ir*)

Brown, D.J., *J. Appl. Chem.*, 1952, **2**, 202, (*synth*)

Shirai, K. *et al.*, *J.O.C.*, 1958, **23**, 100, (*synth*)

Mares-Guia, M., *Arch. Biochem. Biophys.*, 1968, **127**, 317, (*biochem*)

Wilson, J.D. *et al.*, *J.O.C.*, 1971, **36**, 1613, (*derivs, synth, pmr*)

*Org. Synth., Coll. Vol.*, 5, 1973, 582, (*synth*)

Havel, J.J. *et al.*, *Synth. Commun.*, 1974, **4**, 389, (*synth*)