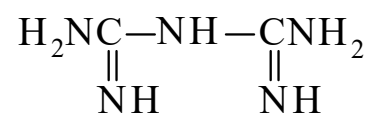




>>Entry Name: Biguanide, 8Cl

Synonym(s): Imidodicarbonimidic diamide, 9Cl. Guanylguanidine. Diguamide. (Aminoiminomethyl)guanidine



CAS Registry Number: 56-03-1

Related CAS Registry Numbers(s): 4761-93-7 19243-43-7

Molecular Formula: C<sub>2</sub>H<sub>7</sub>N<sub>5</sub>

Molecular Weight: 101.111

Accurate Mass: 101.070145

Percentage Composition: C 23.76%; H 6.98%; N 69.26%

General Statement: Not to be confused with Biguanidine [MJZ06-L](#)

Physical Description: Prisms (EtOH)

Melting Point: Mp 130°

Solubility: Sol. H<sub>2</sub>O, EtOH

pKa Value: pK<sub>a1</sub> 12.8; pK<sub>a2</sub> 3.1 (2025°, H<sub>2</sub>O 20)

Other Data: Aq. soln. reacts strongly alkaline and slowly dec. Dec. rapidly at *ca.* 142°. Forms characteristic red Cu deriv.

>>Derivative: Hydrochloride

CAS Registry Number: 38664-03-8

Physical Description: Needles

Melting Point: Mp 235°

>>Derivative: Hydrochloride (1:2)

CAS Registry Number: 25836-74-2

Physical Description: Plates

Melting Point: Mp 248°. Mp 213-214°

>>Derivative: Perchlorate (1:2)

CAS Registry Number: 78761-42-9

Melting Point: Mp 217-219°

Hazard & Toxicity: Explosive

>>Derivative: 1-*N*-Me

CAS Registry Number: 1609-00-3

Molecular Formula: C<sub>3</sub>H<sub>9</sub>N<sub>5</sub>

Molecular Weight: 115.138

Accurate Mass: 115.085795

Percentage Composition: C 31.30%; H 7.88%; N 60.83%

Physical Description: Cryst./EtOH

Melting Point: Mp 107-108°

Other Data: pK<sub>a1</sub> 2.99; pK<sub>a2</sub> 11.41 (H<sub>2</sub>O, 32°)

>>Derivative: 1-*N*-Me; hydrochloride

CAS Registry Number: 80274-85-7

Melting Point: Mp 157°

>>Derivative: 1-*N*-Me; hydrochloride (1:2)

Melting Point: Mp 213-214°

>>Derivative: 1-*N*-Di-Me

see *N,N*-Dimethylimidodicarbonimidic diamide, [FLW67-E](#)