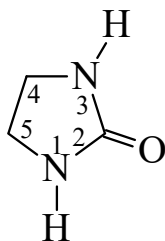




>>Entry Name: 2-Imidazolidinone, 9CI, 8CI

Synonym(s): Ethyleneurea. Tetrahydro-2-oxoglyoxaline



CAS Registry Number: 120-93-4

Related CAS Registry Numbers(s): 121325-67-5

Molecular Formula: C₃H₆N₂O

Molecular Weight: 86.093

Accurate Mass: 86.048013

Percentage Composition: C 41.85%; H 7.02%; N 32.54%; O 18.58%

Use/Importance: Used in the manuf. of plastics, plasticisers, lacquers and finishing agents. Many derivs. used industrially

Biological Use/Importance: Insect growth regulator, now superseded

Physical Description: Cryst. + 1/2 H₂O (H₂O), needles (CHCl₃)

Melting Point: Mp 133.7°

Boiling Point: Bp₁₆ 192°. Bp₃ 163°

Solubility: Sol. H₂O, hot EtOH, spar. sol. Et₂O

Other Data: Hemihydrate is efflorescent. There is a metastable cryst. form (transition at 80°)

Hazard & Toxicity: LD₅₀ (mus, ipr) 500 mg/kg. Exp. reprod. effects

Aldrich: I-60-1

Fluka: 3850

Sigma: I3759

>>Derivative: 1-Nitroso

CAS Registry Number: 3844-63-1

Molecular Formula: C₃H₅N₃O₂

Molecular Weight: 115.091

Accurate Mass: 115.038177

Percentage Composition: C 31.31%; H 4.38%; N 36.51%; O 27.80%

Melting Point: Mp 101.5-101.8°

Hazard & Toxicity: Exp. neoplastic agent

>>Derivative: 1,3-Di-Ac

CAS Registry Number: 5391-40-2

Molecular Formula: C₇H₁₀N₂O₃

Molecular Weight: 170.168

Accurate Mass: 170.069143

Percentage Composition: C 49.41%; H 5.92%; N 16.46%; O 28.21%

Melting Point: Mp 126.7-127.5°

Aldrich: 34078-2

>>Derivative: 1-Me

CAS Registry Number: 694-32-6

Molecular Formula: C₄H₈N₂O

Molecular Weight: 100.12

Accurate Mass: 100.063663

Percentage Composition: C 47.99%; H 8.05%; N 27.98%; O 15.98%

Physical Description: Cryst. (Ethyl acetoacetate or C₆H₆)

Melting Point: Mp 113-114°