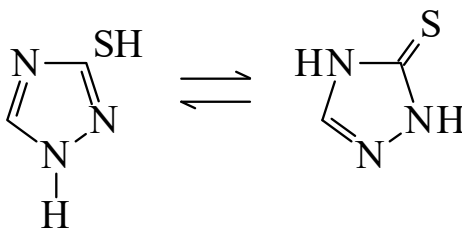




>>Entry Name: 1,2-Dihydro-3*H*-1,2,4-triazole-3-thione, 9Cl

Synonym(s): *s*-Triazole-3-thiol, 8Cl. 3-Mercapto-1,2,4-triazole



CAS Registry Number: 3179-31-5

Related CAS Registry Numbers(s): 40159-47-5

Molecular Formula: C₂H₃N₃S

Molecular Weight: 101.132

Accurate Mass: 101.004767

Percentage Composition: C 23.75%; H 2.99%; N 41.55%; S 31.71%

General Statement: Thione-form is most probable. Other tautomers possible

Melting Point: Mp 214-216°

Hazard & Toxicity: LD₅₀ (mus, ipr) 1400 mg/kg

Aldrich: 10455-8

Fluka: 63870

Sigma: M4412

>>Derivative: K salt

CAS Registry Number: 39751-89-8

Use/Importance: Used as 0.05*M* aq. soln. for photometric detn. of Rh(*III*) (λ_{max} 300 nm, ϵ 32000), Pt(*IV*), Pd(*II*)

Physical Description: Cryst.

Solubility: Sol. H₂O, acids

>>Variant: 4*H*-form

Molecular Formula: C₂H₃N₃S

Molecular Weight: 101.132

Accurate Mass: 101.004767

Percentage Composition: C 23.75%; H 2.99%; N 41.55%; S 31.71%

>>Derivative: 4-Amino

Synonym(s): 4-Amino-2,4-dihydro-3*H*-1,2,4-triazole-3-thione, 9Cl. 4-Amino-4*H*-1,2,4-triazole-3-thiol, 8Cl. 4-Amino-3-mercapto-4*H*-1,2,4-triazole

CAS Registry Number: 4343-75-3

Molecular Formula: C₂H₄N₄S

Molecular Weight: 116.146

Accurate Mass: 116.015666

Percentage Composition: C 20.68%; H 3.47%; N 48.24%; S 27.61%

Physical Description: Needles (1-propanol)

Melting Point: Mp 166-167°

>>Variant: Thione-form

Molecular Formula: C₂H₃N₃S

Molecular Weight: 101.132

Accurate Mass: 101.004767

Percentage Composition: C 23.75%; H 2.99%; N 41.55%; S 31.71%

>>Derivative: *N*²-Me

CAS Registry Number: 32362-75-7

Extra CAS Registry Numbers(s): 29983-22-0

Molecular Formula: C₃H₅N₃S

Molecular Weight: 115.159

Accurate Mass: 115.020417

Percentage Composition: C 31.29%; H 4.38%; N 36.49%; S 27.85%

Physical Description: Needles (toluene)

Melting Point: Mp 183°