



>>Entry Name: Ethylenebisdithiocarbamic acid, 8Cl

ENTRY UNDER REVIEW

Synonym(s): 1,2-Ethanedithiolbiscarbamodithioic acid, 9Cl. Tetrathioethanedithiocarbamic acid

CAS Registry Number: 111-54-6

Related CAS Registry Numbers(s): 6197-45-1 10039-34-6

$\text{HSC(S)NHCH}_2\text{CH}_2\text{NHC(S)SH}$

Molecular Formula: $\text{C}_4\text{H}_8\text{N}_2\text{S}_4$

Molecular Weight: 212.385

Accurate Mass: 211.957028

Percentage Composition: C 22.62%; H 3.80%; N 13.19%; S 60.39%

General Statement: Parent acid very unstable, not characterised

Use/Importance: Derivs. are used as marine pesticides and as fungicides

Other Data: Dec. to CS_2 and ethylenethiourea

Hazard & Toxicity: Salts are toxic

>>Derivative: Di-Na salt

Synonym(s): Nabam, BSI, ISO. Parzate. Dithiane D-14. Nafun IPO

CAS Registry Number: 142-59-6

Molecular Formula: $\text{C}_4\text{H}_6\text{N}_2\text{Na}_2\text{S}_4$

Molecular Weight: 256.348

Accurate Mass: 255.920912

Percentage Composition: C 18.74%; H 2.36%; N 10.93%; Na 17.94%; S 50.04%

Biological Use/Importance: Agricultural fungicide

Physical Description: Cryst. + $6\text{H}_2\text{O}$

Hazard & Toxicity: LD_{50} (rat, orl) 395 mg/kg. Exp. reprod. and teratogenic effects

>>Derivative: Di- NH_4 salt

Synonym(s): Ambis

CAS Registry Number: 3566-10-7

Molecular Formula: $\text{C}_4\text{H}_{14}\text{N}_4\text{S}_4$

Molecular Weight: 246.445

Accurate Mass: 246.010126

Percentage Composition: C 19.49%; H 5.73%; N 22.73%; S 52.05%

Use/Importance: Used for extraction-photometric detn. of Ni (λ_{max} 385 nm, ϵ 36500)

Hazard & Toxicity: LD_{50} (rat, orl) 395 mg/kg

>>Derivative: Di-Me ester

CAS Registry Number: 20721-48-6

Molecular Formula: $\text{C}_6\text{H}_{12}\text{N}_2\text{S}_4$

Molecular Weight: 240.438

Accurate Mass: 239.988328

Percentage Composition: C 29.97%; H 5.03%; N 11.65%; S 53.35%

Physical Description: Light yellow needles (EtOH)

Melting Point: Mp 105-107°

Hazard & Toxicity: Forms an explosive dust

>>Derivative: Dibenzyl ester

CAS Registry Number: 28249-26-5

Molecular Formula: $\text{C}_{18}\text{H}_{20}\text{N}_2\text{S}_4$

Molecular Weight: 392.633

Accurate Mass: 392.050928

Percentage Composition: C 55.06%; H 5.13%; N 7.13%; S 32.67%

Biological Use/Importance: Possesses herbicidal activity

Physical Description: Cryst. (EtOH)

Melting Point: Mp 114-116° (128-129°)

References: