>>**Entry Name: 2-Aminoethanethiol**
Synonym(s): 2-Aminoethyl mercaptan. 2-Mercaptoethylamine. Thioethanolamine. Cysteamine, BAN, USAN. **Mercaptamine,** INN. Cysteinamine. Becaptan. Lambratene. Mercamin. Merkamin. Riacon. NSC 25116

CAS Registry Number: 60-23-1
Related CAS Registry Numbers(s): 17612-91-8 20739-39-3 58607-68-4

$HSCH_2CH_2NH_2$

Molecular Formula: C_2H_7NS
Molecular Weight: 77.15
Accurate Mass: 77.029919
Percentage Composition: C 31.14%; H 9.14%; N 18.16%; S 41.56%
Use/Importance: Radioprotective agent, also used as antidote to paracetamol poisoning. Antiurolithic agent. Antineoplastic props. Prolactin inhibitor. Masking agent in chelatometric titration of Ca, Mg, Mn. Used as 4% MeOH soln. of hydrochloride
Physical Description: Cryst. (EtOH)
Melting Point: Mp 99-100°
Solubility: Sol. MeOH, EtOH; spar. sol. H_2O
pKa Value: pK_{a1} 8.19; pK_{a2} 10.75 (25°)
Calculated Log P Data: Log P –0.25 (calc)
Hazard & Toxicity: LD_{50} (mus, orl) 625 mg/kg

Fluka: 30070
Sigma: M9768

>>**Derivative:** Hydrochloride

CAS Registry Number: 156-57-0
Melting Point: Mp 70.2-70.7°
Hazard & Toxicity: LD_{50} (mus, orl) 1352 mg/kg

Aldrich: 12292-0
Fluka: 30080
Sigma: M8526

>>**Derivative:** *N*-Ac
Synonym(s): *N*-(2-Mercaptoethyl)acetamide

CAS Registry Number: 1190-73-4
Molecular Formula: C_4H_9NOS
Molecular Weight: 119.187
Accurate Mass: 119.040484
Percentage Composition: C 40.31%; H 7.61%; N 11.75%; O 13.42%; S 26.90%
Boiling Point: Bp_7 138-140°. $Bp_{0.9}$ 100°

Aldrich: 36334-0

>>**Derivative:** *S*-Ac
Synonym(s): *S*-(2-Aminoethyl) ethanethioate, 9CI

CAS Registry Number: 6197-31-5
Molecular Formula: C_4H_9NOS
Molecular Weight: 119.187
Accurate Mass: 119.040484
Percentage Composition: C 40.31%; H 7.61%; N 11.75%; O 13.42%; S 26.90%
Physical Description: Cryst. (DMF/Et_2O) (as hydrochloride)
Melting Point: Mp 145° (hydrochloride)

>>**Derivative:** *N,S*-Di-Ac
Synonym(s): *S*-[2-(Acetylamino)ethyl] ethanethioate, 9CI

CAS Registry Number: 1420-88-8
Melting Point: Mp 28-30°
Boiling Point: $Bp_{0.85}$ 140-142°
pKa Value: pK_a 9.38 (25°, H_2O)