



>>Entry Name: Ethylamine, 8CI

ENTRY UNDER REVIEW

Synonym(s): Ethanamine, 9CI

CAS Registry Number: 75-04-7

Related CAS Registry Numbers(s): 16999-99-8

$\text{H}_3\text{CCH}_2\text{NH}_2$

Molecular Formula: $\text{C}_2\text{H}_7\text{N}$

Molecular Weight: 45.084

Accurate Mass: 45.057849

Percentage Composition: C 53.28%; H 15.65%; N 31.07%

Biological Source: Found in foods, drink, tobacco smoke. Also prod. by marine algae, *Clostridium* spp., *Candida albicans*, *Brevibacterium linens* and *Streptococcus lactis*.

Manuf. by catalytic amination of ethanol with ammonia

Use/Importance: Used in manuf. of resins, rubber, herbicides, etc.

Physical Description: Flammable gas with ammoniacal odour

Melting Point: Fp -80°

Boiling Point: Bp 16.6°

Solubility: Misc. EtOH, Et₂O, H₂O, salted out by NaOH

pKa Value: $\text{p}K_{\text{a}}$ 10.7

Hazard & Toxicity: Extremely flammable, fl. p. $<-18^\circ$, autoignition temp. 580° . Skin, respiratory tract and severe eye irritant. High vapour conc. may affect CNS. LD₅₀ (rat, orl) 400 mg/kg. LD₅₀ (rbt, skn) 390 mg/kg. OES: long-term 10 ppm

Aldrich: 47120-8

Fluka: 2950

Sigma: E6017

>>Derivative: Hydrochloride

CAS Registry Number: 557-66-4

Physical Description: Cryst. (EtOH aq.)

Solubility: Sol. H₂O, EtOH; sl. sol. CHCl₃, Me₂CO; prac. insol. Et₂O

Aldrich: 23283-1

Fluka: 2970

>>Derivative: Hydrobromide

CAS Registry Number: 593-55-5

Physical Description: Needles or plates (EtOH)

Melting Point: Mp 159.5°

>>Derivative: Hydroiodide

CAS Registry Number: 506-58-1

Physical Description: Hygroscopic needles (H₂O)

Melting Point: Mp 188.5°

Solubility: Sol. H₂O, EtOH, spar. sol. Et₂O, CHCl₃

>>Derivative: N-Ac

see N-Ethylacetamide, [CTW36-R](#)

>>Derivative: N-Methanesulfonyl

see Methanesulfonic acid, [DCJ42-Z](#)

>>Derivative: N-(4-Methylbenzenesulfonyl)

see 4-Methylbenzenesulfonamide, [MJK47-B](#)