

上海伊卡生物技术有限公司

2-MERCAPTOETHANOL

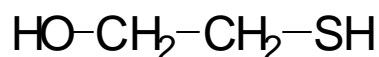
SProd. No. M0208

CAS NUMBER: 60-24-2

SYNONYMS: beta-mercaptoethanol; 2-ME; β -ME; 2-thioethanol; 2-hydroxyethylmercaptan; 1-ethane-2-thiol; thioglycol

PHYSICAL DESCRIPTION:

Appearance: clear colorless to very faint yellow liquid
Molecular formula: C_2H_6OS
Molecular weight: 78.13
Boiling point: 157-158°C with decomposition at 742 torr¹
Density: 1.114 g/mL at 20°C¹, 1.1196 g/mL at 25°C²



The liquid has a concentration of 14.3 M (moles/L).

STORAGE / STABILITY AS SUPPLIED:

The bulk product decomposes slowly in air. If kept sealed at room temperature, 2-mercaptoethanol will remain >99% (by GC) for up to three years. Bottles opened frequently may decline at 2% per year.³

SOLUBILITY / STABILITY OF SOLUTIONS:

2-Mercaptoethanol (2-ME) is miscible in water in all proportions, and miscible in alcohol, ether and benzene.^{1,2} The product typically gives clear solutions when diluted 1:1 in water or diluted 2:1 in 1 M Tris buffer.

Solutions of 2-ME containing even trace levels (nanomolar) of some metal salts, especially copper(II) or cobalt(II), are unstable at pH > 5 and progressively less stable at higher pH values. Most buffers (especially phosphate) contain enough metal salts to lead to substantial loss of -SH within 1-2 days. EDTA helps to stabilize solutions.