

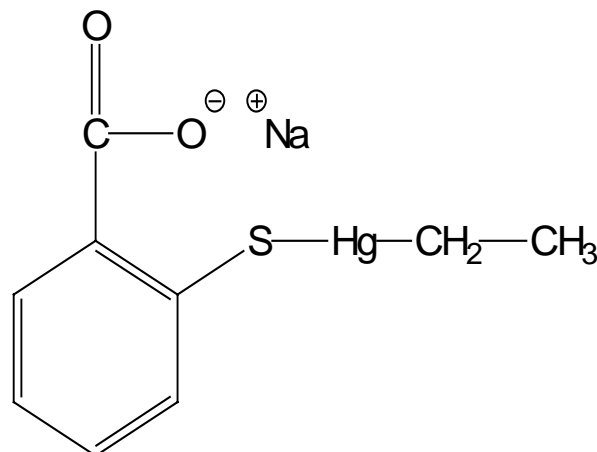
## Product Information

### THIMEROSAL Sigma Prod. No. T5125

**CAS NUMBER:** 54-64-8

**SYNONYM:** ((O-Carboxyphenyl)thio) ethylmercury sodium salt; Elcide 75; Elicide; Ethyl(2-mercaptobenzoato-S)mercury sodium salt;

O-(Ethylmercurithio) benzoic acid sodium salt;  
Ethylmercurithiosalicylic acid sodium salt;  
Ethylmerkurithiosalicylan Sodny (Czech); Ethyl (sodium O-mercaptobenzoato)mercury; Mercuriothiolate; Mercury, Ethyl(2-Mercaptobenzoate-S)-, sodium salt; Merfamin; Merthiolate; Merthiolate salt; Merthiolate sodium; Mertorgan; Merzonin; Merzonin sodium; Merzonin, sodium salt; SET; Sodium Ethylmercuric Thiosalicylate; Sodium O-(ethylmercurithio)benzoate; Sodium Ethylmercurithiosalicylate; Sodium Merthiolate; Thimerosalate; Thimerosol; Thimersalate; Thiomerosal; Thiomersal; Thiomersalate



### PHYSICAL PROPERTIES:

Appearance: White or white with a light yellow cast powder

Molecular formula: C<sub>9</sub>H<sub>9</sub>HgO<sub>2</sub>SNa

Formula weight: 404.8 (anhydrous)

### STABILITY / STORAGE AS SUPPLIED:

Thimerosal should be stored at room temperature protected from light. It is reportedly stable in air but not in sunlight.<sup>1</sup> Material that had been stored for two and one-half years still gave a single peak when it was evaluated by HPLC.

### SOLUBILITY / SOLUTION STABILITY:

One gram of thimerosal dissolves in about 1 mL of water and in about 8 mL of alcohol.<sup>1</sup> The rate of oxidation of thimerosal in solution is greatly increased by traces of copper ions. In slightly acidic solution thimerosal may be precipitated as the corresponding acid which undergoes slow decomposition with the formation of insoluble products. Sodium chloride has been shown to adversely affect its stability. The antibacterial activity of thimerosal solutions is reduced by the addition of disodium EDTA and sodium thiosulfate.<sup>2</sup>

**THIMEROSAL**  
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**APPLICATIONS:**

Thimerosal is an antibacterial and antifungal mercurial compound used as a preservative in biological products.

**REFERENCES:**

1. *The Merck Index*, 12th ed., p. 1590, #9451 (1996).
2. *Martindale The Extra Pharmacopoeia*, 30th ed., 804 (1993).

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