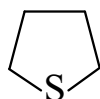




>>Entry Name: Tetrahydrothiophene, 9CI, 8CI

Synonym(s): Tetramethylene sulfide. Thiolan. Thiophane. Thiacyclopentane. Thilane



CAS Registry Number: 110-01-0

Molecular Formula: C₄H₈S

Molecular Weight: 88.173

Accurate Mass: 88.03467

Percentage Composition: C 54.49%; H 9.14%; S 36.37%

Source/Synthesis: Manuf. from Tetrahydrofuran [CST23-P](#)

Use/Importance: Odorant for natural gas

Physical Description: Mobile liq. with penetrating odour

Melting Point: Mp -96°

Boiling Point: Bp 119-122°

Solubility: Misc. most solvs. except H₂O

Density: d₄¹⁸ 0.9607

pKa Value: pK_a -5.1 (25°, H₂SO₄ aq.)

Other Data: Steam-volatile

Hazard & Toxicity: Highly flammable, fl. p. 18°. LC₅₀ (mus, ihl) 27000 mg m⁻³ (2h exposure)

Aldrich: T1560-1

Fluka: 87490

Supelco: R30-2670

>>Derivative: S-Oxide

Synonym(s): Tetrahydrothiophene S-oxide. Tetramethylene sulfoxide

CAS Registry Number: 1600-44-8

Molecular Formula: C₄H₈OS

Molecular Weight: 104.173

Accurate Mass: 104.029585

Percentage Composition: C 46.12%; H 7.74%; O 15.36%; S 30.78%

Use/Importance: Oxidising agent

Physical Description: Liq.

Boiling Point: Bp₁₂ 105-107°

Density: d₄²⁰ 1.16

pKa Value: pK_a 12.83

Hazard & Toxicity: LD₅₀ (mus, ipr) 3500 mg/kg

Aldrich: T2240-3

Fluka: 87495

>>Derivative: S,S-Dioxide

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