



**>>Entry Name: (Methylthio)acetic acid**

**Synonym(s):** Methylmercaptoacetic acid. *S*-(Methylthio)glycolic acid. Dimethyl sulfide carboxylic acid

**CAS Registry Number:** 2444-37-3

MeSCH<sub>2</sub>COOH

**Molecular Formula:** C<sub>3</sub>H<sub>6</sub>O<sub>2</sub>S

**Molecular Weight:** 106.145

**Accurate Mass:** 106.00885

**Percentage Composition:** C 33.95%; H 5.70%; O 30.15%; S 30.21%

**Boiling Point:** Bp<sub>27</sub> 130-131°

**Density:** d<sub>20</sub><sup>20</sup> 1.223

**Refractive Index:** n<sub>D</sub><sup>20</sup> 1.4950

**Aldrich:** 35948-3

**Fluka:** 69330

**>>Derivative:** Me ester

**CAS Registry Number:** 16630-66-3

**Molecular Formula:** C<sub>4</sub>H<sub>8</sub>O<sub>2</sub>S

**Molecular Weight:** 120.172

**Accurate Mass:** 120.0245

**Percentage Composition:** C 39.98%; H 6.71%; O 26.63%; S 26.68%

**Boiling Point:** Bp<sub>11</sub> 53-55°

**Aldrich:** W50966-3

**Fluka:** 69340

**>>Derivative:** Et ester

**CAS Registry Number:** 4455-13-4

**Molecular Formula:** C<sub>5</sub>H<sub>10</sub>O<sub>2</sub>S

**Molecular Weight:** 134.199

**Accurate Mass:** 134.04015

**Percentage Composition:** C 44.75%; H 7.51%; O 23.84%; S 23.89%

**Boiling Point:** Bp<sub>25</sub> 70-72°

**Aldrich:** 20971-6

**>>Derivative:** Anilide

**CAS Registry Number:** 10156-36-2

**Molecular Formula:** C<sub>9</sub>H<sub>11</sub>NOS

**Molecular Weight:** 181.258

**Accurate Mass:** 181.056134

**Percentage Composition:** C 59.64%; H 6.12%; N 7.73%; O 8.83%; S 17.69%

**Physical Description:** Needles (Et<sub>2</sub>O/petrol)

**Melting Point:** Mp 80°

**>>Derivative:** Nitrile

**Synonym(s):** (Methylthio)acetonitrile, 9Cl. Cyano(methylthio)methane

**CAS Registry Number:** 35120-10-6

**Molecular Formula:** C<sub>3</sub>H<sub>5</sub>NS

**Molecular Weight:** 87.145

**Accurate Mass:** 87.014269

**Percentage Composition:** C 41.35%; H 5.78%; N 16.07%; S 36.80%

**Use/Importance:** Synthetic intermed.

**Physical Description:** Liq.

**Boiling Point:** Bp<sub>30</sub> 72°

**Density:** d<sub>4</sub><sup>20</sup> 1.04

**Hazard & Toxicity:** Lachrymator

**Aldrich:** 16082-2

**>>Derivative:** *S*-Oxide; Et ester

**Synonym(s):** Ethyl α-methylsulfinylacetate