



**CAS Registry Number:** 4358-63-8  
**Molecular Formula:** C<sub>12</sub>H<sub>10</sub>O<sub>3</sub>S  
**Molecular Weight:** 234.275  
**Accurate Mass:** 234.035065  
**Percentage Composition:** C 61.52%; H 4.30%; O 20.49%; S 13.69%  
**Melting Point:** Mp 34-35°

>>Derivative: Fluoride

**CAS Registry Number:** 368-43-4  
**Molecular Formula:** C<sub>6</sub>H<sub>5</sub>FO<sub>2</sub>S  
**Molecular Weight:** 160.169  
**Accurate Mass:** 159.999428  
**Percentage Composition:** C 44.99%; H 3.15%; F 11.86%; O 19.98%; S 20.02%  
**Use/Importance:** Sulfonylating agent  
**Boiling Point:** Bp 207-208°  
**Refractive Index:** n<sub>D</sub><sup>20</sup> 1.4920

**Aldrich:** 28233-2

>>Derivative: Chloride

**CAS Registry Number:** 98-09-9  
**Molecular Formula:** C<sub>6</sub>H<sub>5</sub>ClO<sub>2</sub>S  
**Molecular Weight:** 176.623  
**Accurate Mass:** 175.969877  
**Percentage Composition:** C 40.80%; H 2.85%; Cl 20.07%; O 18.12%; S 18.16%  
**Use/Importance:** Reagent for prep. of benzenesulfonates and for Hinsberg's separation of primary, secondary and tertiary amines  
**Melting Point:** Mp 14.5°  
**Boiling Point:** Bp<sub>0.05</sub> 61°. Bp 251-252°. Bp<sub>10</sub> 120°  
**Density:** d<sub>15</sub><sup>15</sup> 1.384

**Hazard & Toxicity:** Violent reaction with DMSO. Explodes after prolonged storage in glass. Corrosive and irritating to all tissues

**Aldrich:** 10811-1

**Fluka:** 12630

**Sigma:** B0637

>>Derivative: Amide

*see* Benzenesulfonamide, [LVZ97-I](#)

>>Derivative: Anilide

**Synonym(s):** *N*-Phenylbenzenesulfonamide, 9Cl. Benzenesulfonanilide

**CAS Registry Number:** 1678-25-7  
**Molecular Formula:** C<sub>12</sub>H<sub>11</sub>NO<sub>2</sub>S  
**Molecular Weight:** 233.29  
**Accurate Mass:** 233.051049  
**Percentage Composition:** C 61.78%; H 4.75%; N 6.00%; O 13.72%; S 13.75%  
**Melting Point:** Mp 110°  
**pKa Value:** pK<sub>a1</sub> 8.31 (20°, 0.1M KCl)

**Rare Chemicals Library:** S81545-4

>>Derivative: 2-Phenylhydrazide

**CAS Registry Number:** 6596-69-6

**Molecular Formula:** C<sub>12</sub>H<sub>12</sub>N<sub>2</sub>O<sub>2</sub>S  
**Molecular Weight:** 248.305  
**Accurate Mass:** 248.061948  
**Percentage Composition:** C 58.05%; H 4.87%; N 11.28%; O 12.89%; S 12.91%  
**Use/Importance:** Used as 2% EtOH soln. for pptn. separation and gravimetric detn. of Se  
**Physical Description:** Cryst.  
**Melting Point:** Mp 148-150 dec.°  
**Solubility:** Sol. EtOH