



>>Entry Name: Benzenesulfonamide

CAS Registry Number: 98-10-2

PhSO₂NH₂

Molecular Formula: C₆H₇NO₂S

Molecular Weight: 157.193

Accurate Mass: 157.019749

Percentage Composition: C 45.85%; H 4.49%; N 8.91%; O 20.36%; S 20.40%

Melting Point: Mp 147-148°

pKa Value: pK_{a1} 10 (20°, 0.1M KCl)

Aldrich: 10814-6

Fluka: 12589

>>Derivative: *N*-Ac

Synonym(s): *N*-Acetylbenzenesulfonamide. *N*-(Phenylsulfonyl)acetamide, 9Cl. *N*-Benzenesulfonylacetamide

CAS Registry Number: 5661-14-3

Molecular Formula: C₈H₉NO₃S

Molecular Weight: 199.23

Accurate Mass: 199.030314

Percentage Composition: C 48.23%; H 4.55%; N 7.03%; O 24.09%; S 16.09%

Use/Importance: Exhibits herbicidal antidote activity

Melting Point: Mp 121° (115-117°)

>>Derivative: *N*-Ac, K salt

CAS Registry Number: 54743-49-6

Melting Point: Mp 240 dec.°

>>Derivative: *N*-Chloro

Synonym(s): Chloramine B. *N*-Chlorobenzenesulfonamide, 9Cl. Annogen. Chlorseptal (new form). Chlorogen. Neomagnol

CAS Registry Number: 80-16-0

Molecular Formula: C₆H₆ClNO₂S

Molecular Weight: 191.638

Accurate Mass: 190.980776

Percentage Composition: C 37.61%; H 3.16%; Cl 18.50%; N 7.31%; O 16.70%; S 16.73%

Use/Importance: Antibacterial agent

>>Derivative: *N*-Chloro, Na salt

CAS Registry Number: 127-52-6

Use/Importance: Oxidising agent; used as titrant for reducing substances (e.g. Br⁽⁻⁾)

Physical Description: Cryst. + 1H₂O

Melting Point: Mp 190°

Solubility: Mod. sol. H₂O; insol. CHCl₃

Hazard & Toxicity: May decompose violently if heated above 180°

Fluka: 23265

Rare Chemicals Library: S59090-8

Sigma: C2279

>>Derivative: *N,N*-Dichloro

Synonym(s): Dichloramine B. *N,N*-Dichlorobenzenesulfonamide, 9Cl

CAS Registry Number: 473-29-0

Molecular Formula: C₆H₅Cl₂NO₂S

Molecular Weight: 226.082

Accurate Mass: 224.941803

Percentage Composition: C 31.88%; H 2.23%; Cl 31.36%; N 6.20%; O 14.15%; S 14.18%