



>>Entry Name: Chloromethyl phenyl sulfide, 8Cl

Synonym(s): [(Chloromethyl)thio]benzene, 9Cl. Phenylthiomethyl chloride

CAS Registry Number: 7205-91-6

PhSCH<sub>2</sub>Cl

Molecular Formula: C<sub>7</sub>H<sub>7</sub>ClS

Molecular Weight: 158.651

Accurate Mass: 157.995697

Percentage Composition: C 52.99%; H 4.45%; Cl 22.35%; S 20.21%

Boiling Point: Bp<sub>12</sub> 104°. Bp<sub>1.5</sub> 83°

Aldrich: 21663-1

Fluka: 25201

>>Derivative: S-Oxide

Synonym(s): [(Chloromethyl)sulfinyl]benzene. Chloromethyl phenyl sulfoxide

CAS Registry Number: 7205-94-9

Molecular Formula: C<sub>7</sub>H<sub>7</sub>ClOS

Molecular Weight: 174.65

Accurate Mass: 173.990612

Percentage Composition: C 48.14%; H 4.04%; Cl 20.30%; O 9.16%; S 18.36%

Use/Importance: Reagent for synth. of chloromethyl ketones and α,β-unsatd. aldehydes

Melting Point: Mp 38.5-39.5°

Boiling Point: Bp<sub>1</sub> 120-122°

Fluka: 25205

>>Derivative: S,S-Dioxide

Synonym(s): [(Chloromethyl)sulfonyl]benzene. Chloromethyl phenyl sulfone

CAS Registry Number: 7205-98-3

Molecular Formula: C<sub>7</sub>H<sub>7</sub>ClO<sub>2</sub>S

Molecular Weight: 190.65

Accurate Mass: 189.985527

Percentage Composition: C 44.10%; H 3.70%; Cl 18.60%; O 16.78%; S 16.82%

Physical Description: Cryst. (EtOH)

Melting Point: Mp 52-53° (47-49°)

Aldrich: 32460-4

Fluka: 25202

#### References:

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