



>>Entry Name: Dioctyl sulfide

Synonym(s): 1,1'-Thiobisoctane, 9Cl. Octyl sulfide, 8Cl

CAS Registry Number: 2690-08-6

Type of Compound Code(s): PA3150 PS7700

$\text{H}_3\text{C}(\text{CH}_2)_7\text{S}(\text{CH}_2)_7\text{CH}_3$

Molecular Formula: $\text{C}_{16}\text{H}_{34}\text{S}$

Molecular Weight: 258.511

Accurate Mass: 258.23812

Percentage Composition: C 74.34%; H 13.26%; S 12.40%

Use/Importance: Used in extraction-separation of Pd

Physical Description: Liq. with strong odour

Boiling Point: Bp₁₀ 180°. Bp₄ 160-162°

Aldrich: O-700-7

Fluka: 42440

>>Derivative: S-Oxide

Synonym(s): 1,1'-Sulfinylbisoctane, 9Cl. Octyl sulfoxide, 8Cl. Dioctyl sulfoxide

CAS Registry Number: 1986-89-6

Type of Compound Code(s): PS7700 PA4550

Molecular Formula: $\text{C}_{16}\text{H}_{34}\text{OS}$

Molecular Weight: 274.51

Accurate Mass: 274.233035

Percentage Composition: C 70.01%; H 12.48%; O 5.83%; S 11.68%

Use/Importance: Used as C_6H_6 soln. for extraction-sepn. of Te(IV) from Se(IV) (9M HCl)

Physical Description: Cryst. (EtOH aq.)

Melting Point: Mp 71-72°

>>Derivative: S,S-Dioxide

Synonym(s): 1,1'-Sulfonylbisoctane, 9Cl. Octyl sulfone. Dioctyl sulfone

CAS Registry Number: 7726-20-7

Molecular Formula: $\text{C}_{16}\text{H}_{34}\text{O}_2\text{S}$

Molecular Weight: 290.509

Accurate Mass: 290.22795

Percentage Composition: C 66.15%; H 11.80%; O 11.01%; S 11.04%

Physical Description: Cryst.

Melting Point: Mp 78-79°

References:

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