



>>Entry Name: Methyl vinyl sulfide, 8CI

Synonym(s): (Methylthio)ethene, 9CI. Ethenyl methyl sulfide. Methyl vinyl thioether

CAS Registry Number: 1822-74-8

$\text{H}_2\text{C}=\text{CHSMe}$

Molecular Formula: $\text{C}_3\text{H}_6\text{S}$

Molecular Weight: 74.146

Accurate Mass: 74.01902

Percentage Composition: C 48.60%; H 8.16%; S 43.25%

Boiling Point: Bp 69°

Solubility: Sol. EtOH, Me_2CO , CHCl_3

Density: d^{20}_D 0.9026

Refractive Index: n^{20}_D 1.4837

Other Data: Undergoes radical copolym. with vinyl monomers. Q/e values for copolym., Q 0.42, e -1.66

>>Derivative: S-Oxide

Synonym(s): (Methylsulfinyl)ethene, 9CI. Methyl vinyl sulfoxide, 8CI

CAS Registry Number: 10258-86-3

Molecular Formula: $\text{C}_3\text{H}_6\text{OS}$

Molecular Weight: 90.146

Accurate Mass: 90.013935

Percentage Composition: C 39.97%; H 6.71%; O 17.75%; S 35.57%

Boiling Point: Bp₆ 58.5-59°

Density: d^{20} 1.087

Refractive Index: n^{20}_D 1.4951

Other Data: Undergoes radical homopolym. and copolym.

>>Derivative: S-Oxide, (S-)

CAS Registry Number: 144712-65-2

Optical Rotation: $[\alpha]_D$ +229 (c, 0.41 in CHCl_3) (100% ee)

>>Derivative: S,S-Dioxide

Synonym(s): (Methylsulfonyl)ethene, 9CI. Methyl vinyl sulfone, 8CI

CAS Registry Number: 3680-02-2

Molecular Formula: $\text{C}_3\text{H}_6\text{O}_2\text{S}$

Molecular Weight: 106.145

Accurate Mass: 106.00885

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

Physical Description: Oil

Boiling Point: Bp₂₄ 122-124°. Bp₁₇ 105-107°

Solubility: Sol. EtOH, Me_2CO

Density: d^{20} 1.212

Refractive Index: n^{20}_D 1.4636

Other Data: Undergoes anionic polym.

Hazard & Toxicity: Skin and severe eye irritant. LD₅₀ (rat, orl) 570 mg/kg. LD₅₀ (rbt, skn) 32 mg/kg

Aldrich: 24719-7

References: