



>>Entry Name: 2,5-Dihydro-3-methylthiophene

Synonym(s): Isoprene cyclic sulfide

CAS Registry Number: 42855-50-5

Structure by analogy with 2,3-Dihydro-2-methylthiophene, [GWP71-C](#)

Molecular Formula: C₅H₈S

Molecular Weight: 100.184

Accurate Mass: 100.03467

Percentage Composition: C 59.94%; H 8.05%; S 32.01%

Physical Description: Liq.

Boiling Point: Bp 147.5°

Refractive Index: n_D²⁰ 1.5196

>>Derivative: S-Oxide

CAS Registry Number: 16061-68-0

Molecular Formula: C₅H₈OS

Molecular Weight: 116.184

Accurate Mass: 116.029585

Percentage Composition: C 51.69%; H 6.94%; O 13.77%; S 27.60%

Boiling Point: Bp 147.5°

Refractive Index: n_D²⁰ 1.5192

Other Data: Racemate

>>Derivative: S,S-Dioxide

CAS Registry Number: 1193-10-8

Molecular Formula: C₅H₈O₂S

Molecular Weight: 132.183

Accurate Mass: 132.0245

Percentage Composition: C 45.43%; H 6.10%; O 24.21%; S 24.26%

Physical Description: Thick plates (MeOH)

Melting Point: Mp 63.5-64°

Rare Chemicals Library: S42766-7

References:

Birch, S.F. *et al.*, *J.C.S.*, 1951, 3411, (*synth, oxide*)

Org. Synth., Coll. Vol., 3, 1955, 499, (*deriv, synth*)

Krug, R.C. *et al.*, *J.O.C.*, 1962, **27**, 95; 1305, (*synth*)

Krech, D.W. *et al.*, *J.O.C.*, 1967, **32**, 4057, (*synth, props, oxide*)

McIntosh, J.M. *et al.*, *J.O.C.*, 1974, **39**, 202, (*synth*)