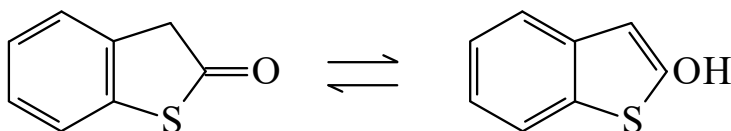




>>Entry Name: Benzo[*b*]thiophen-2(3*H*)-one, 9CI

Synonym(s): Thiooxindole (obsol.)[‡]. 2-Hydroxybenzo[*b*]thiophene. Benzo[*b*]thiophen-2-ol



CAS Registry Number: 496-31-1

Molecular Formula: C₈H₆OS

Molecular Weight: 150.201

Accurate Mass: 150.013935

Percentage Composition: C 63.97%; H 4.03%; O 10.65%; S 21.35%

General Statement: The synonym thiooxindole more commonly applied to 1*H*-Indole-2-thiol [FXX08-Y](#)

Physical Description: Cryst. (EtOH)

Melting Point: Mp 43-45°

>>Variant: *OH*-form

Molecular Formula: C₈H₆OS

Molecular Weight: 150.201

Accurate Mass: 150.013935

Percentage Composition: C 63.97%; H 4.03%; O 10.65%; S 21.35%

>>Derivative: Me ether

Synonym(s): 2-Methoxybenzo[*b*]thiophene, 9CI

CAS Registry Number: 19354-32-6

Molecular Formula: C₉H₈OS

Molecular Weight: 164.228

Accurate Mass: 164.029585

Percentage Composition: C 65.82%; H 4.91%; O 9.74%; S 19.53%

Physical Description: Cryst. (MeOH)

Melting Point: Mp 41-42°

>>Derivative: *tert*-Butyl ether

Synonym(s): 2-*tert*-Butoxybenzo[*b*]thiophene, 9CI

CAS Registry Number: 40584-41-6

Molecular Formula: C₁₂H₁₄OS

Molecular Weight: 206.308

Accurate Mass: 206.076535

Percentage Composition: C 69.86%; H 6.84%; O 7.76%; S 15.54%

Physical Description: Cryst. (petrol)

Melting Point: Mp 33-34°

Boiling Point: Bp_{0.15} 74-79°

References:

Stacy, G.W. *et al.*, *J.O.C.*, 1965, **30**, 4074

Dickinson, R.P. *et al.*, *J.C.S.(C)*, 1970, 1926

Vesterager, N.O. *et al.*, *Tetrahedron*, 1973, **29**, 321

Watanabe, M. *et al.*, *J. Het. Chem.*, 1991, **28**, 173

Bordwell, F.G. *et al.*, *J.O.C.*, 1991, **56**, 4218, (*synth*, *pmr*)