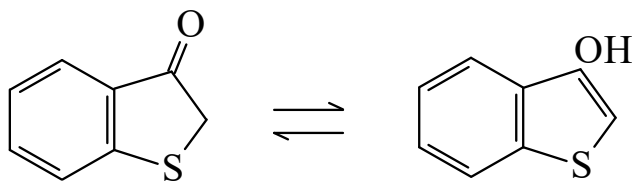




>>Entry Name: **Benzo[*b*]thiophen-3(2*H*)-one**, 9CI

Synonym(s): 3-Keto-2,3-dihydrothianaphthene. 1-Thianaphthen-3-one. 3(2*H*)-Thianaphthenone. **Thioindoxyl**†. 3-Hydroxybenzo[*b*]thiophene. Benzo[*b*]thiophene-3-ol, 9CI



CAS Registry Number: 130-03-0

Related CAS Registry Numbers(s): 520-72-9

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: Oxo-form predominates

Physical Description: Needles (H₂O)

Melting Point: Mp 71°

Other Data: Readily oxidised to Thioindigo [CTC30-P](#)

>>Derivative: *S,S*-Dioxide

CAS Registry Number: 1127-35-1

Molecular Formula: C₈H₆O₃S

Molecular Weight: 182.2

Accurate Mass: 182.003765

Percentage Composition: C 52.74%; H 3.32%; O 26.34%; S 17.60%

Physical Description: Cryst. (EtOH)

Melting Point: Mp 136-137°

>>Variant: Oxo-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: Hydrazone, *S,S*-dioxide

Molecular Formula: C₈H₈N₂O₂S

Molecular Weight: 196.229

Accurate Mass: 196.030648

Percentage Composition: C 48.97%; H 4.11%; N 14.28%; O 16.31%; S 16.34%

Physical Description: Needles (EtOH)

Melting Point: Mp 188-189°

>>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: Ac

CAS Registry Number: 24434-82-0

Molecular Formula: C₁₀H₈O₂S

Molecular Weight: 192.238

Accurate Mass: 192.0245

Percentage Composition: C 62.48%; H 4.19%; O 16.65%; S 16.68%

Physical Description: Yellow oil

Boiling Point: Bp₁₈ 165°