



CAS Registry Number: 871-58-9
Extra CAS Registry Numbers(s): 110-50-9
Type of Compound Code(s): PM7350 PA2200
Molecular Formula: C₅H₁₀OS₂
Molecular Weight: 150.265
Accurate Mass: 150.017305
Percentage Composition: C 39.97%; H 6.71%; O 10.65%; S 42.68%
Use/Importance: K salt used as 2M aq. soln. for extraction-photometric detn. of Mn ($\lambda_{\max}$ 457 nm, ϵ 5500)
Physical Description: Yellow cryst. (H₂O)
Solubility: Sol. H₂O
Other Data: CAS number refers to K salt

>>**Derivative:** *O,S*-Dibutyl ester
Synonym(s): *O,S*-Dibutyl dithiocarbonate. *O,S*-Dibutyl carbonodithioate, 9CI

CAS Registry Number: 10226-07-0
Molecular Formula: C₉H₁₈OS₂
Molecular Weight: 206.373
Accurate Mass: 206.079905
Percentage Composition: C 52.38%; H 8.79%; O 7.75%; S 31.08%
Use/Importance: Used for photometric detn. of Pd ($\lambda_{\max}$ 400 nm)
Solubility: Sol. Et₂O, EtOH, Me₂CO

>>**Derivative:** *O*-Pentyl ester
Synonym(s): *O*-Pentyl dithiocarbonate. *O*-Pentyl carbonodithioate, 9CI. Amyl xanthate

CAS Registry Number: 123-97-7
Extra CAS Registry Numbers(s): 2720-73-2
Molecular Formula: C₆H₁₂OS₂
Molecular Weight: 164.292
Accurate Mass: 164.032955
Percentage Composition: C 43.86%; H 7.36%; O 9.74%; S 39.04%
Use/Importance: K salt used as flotation agent in the processing of nonferrous sulfide ores. Flotation agent for separation of minerals
Melting Point: Mp 247° (dec.) (as K salt)

>>**Derivative:** *O*-Benzyl ester
Synonym(s): *O*-Benzyl dithiocarbonate. *O*-(Phenylmethyl) carbonodithioate, 9CI. Benzylxanthic acid. Benzylxanthogenic acid

CAS Registry Number: 2720-79-8
Type of Compound Code(s): PS8300 PM7350 PA3150 PS7700
Molecular Formula: C₈H₈OS₂
Molecular Weight: 184.283
Accurate Mass: 184.001655
Percentage Composition: C 52.14%; H 4.38%; O 8.68%; S 34.80%
Use/Importance: K salt used as 1% soln. in CHCl₃ for extraction-photometric detn. of Pd ($\lambda_{\max}$ 460 nm)
Physical Description: Yellow cryst. (H₂O) (as K salt)
Solubility: K salt sol. H₂O, CHCl₃
Other Data: CAS no. refers to K salt

>>**Variant:** Oxo-form

Molecular Formula: CH₂OS₂
Molecular Weight: 94.158
Accurate Mass: 93.954705
Percentage Composition: C 12.76%; H 2.14%; O 16.99%; S 68.11%

>>**Derivative:** *S,S*-Di-Me ester
Synonym(s): *S,S*-Dimethyl dithiocarbonate. *S,S*-Dimethyl carbonodithioate, 9CI

CAS Registry Number: 868-84-8
Molecular Formula: C₃H₆OS₂
Molecular Weight: 122.212
Accurate Mass: 121.986005
Percentage Composition: C 29.48%; H 4.95%; O 13.09%; S 52.48%
Physical Description: Liq.
Boiling Point: Bp 168°. Bp₂₁ 66-67°