



>>Entry Name: Potassium thiosulfate (K₂S₂O₃)

Synonym(s): Thiosulfuric acid, dipotassium salt, 8Cl

CAS Registry Number: 10294-66-3

K₂S₂O₃

Molecular Formula: K₂O₃S₂

Molecular Weight: 190.327

Accurate Mass: 189.856299

Percentage Composition: K 41.09%; O 25.22%; S 33.70%

Source/Synthesis: Obt. by evaporating to dryness at 80°, saturated aq. solns. of the hydrate

Use/Importance: Corrosion inhibitor; constit. of fertiliser mixtures, component of flue gas scrubbing solns.

Physical Description: Colourless powder; hygroscopic

Solubility: Sol. H₂O

Other Data: Dec. on heating to form K₂S_n (*n* = 3,4,5) which, in air, are oxidised to K₂SO₄

Fluka: 60602

>>Derivative: Hydrate (3:1)

CAS Registry Number: 26219-70-5

Molecular Formula: H₂K₆O₁₀S₆

Molecular Weight: 588.996

Accurate Mass: 587.579462

Percentage Composition: H 0.34%; K 39.83%; O 27.16%; S 32.67%

Source/Synthesis: Cryst. from hot aq. solns. containing K₂S₂O₃

Physical Description: Colourless cryst. (H₂O)

References:

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