



>>Entry Name: Potassium disulfite

ENTRY UNDER REVIEW

Synonym(s): Disulfurous acid dipotassium salt, 9CI. Pyrosulfurous acid dipotassium salt, 8CI. Potassium disulfate(IV). Potassium pyrosulfite. Potassium metabisulfite. Potassium hypthionate. E224

CAS Registry Number: 16731-55-8

Related CAS Registry Numbers(s): 7773-03-7

Extra CAS Registry Numbers(s): 23134-05-6

$K_2(O_3SSO_3)$

Molecular Formula: $K_2O_5S_2$

Molecular Weight: 222.326

Accurate Mass: 221.846129

Percentage Composition: K 35.17%; O 35.98%; S 28.85%

Source/Synthesis: Synth. by saturating an aq. KOH soln. with SO_2 or by reaction of SO_2 with K_2SO_3 at high pressure

Use/Importance: Food additive; preservative. Used in photographic processing solns. Pharmaceutical aid

Physical Description: Colourless monoclinic cryst. Dec. on heating to SO_2 and K_2SO_3 ; some evidence exists for intermediate formation of $SO_2^{(-)}$

Solubility: Spar. sol. H_2O , EtOH; insol. Et_2O

Aldrich: 30840-4

Fluka: 60508

Sigma: P0685

References:

Inorg. Synth., 1946, **2**, 162, (synth)

Janzen, E.G., *J. Phys. Chem.*, 1972, **76**, 157, (thermal dec)

Jerman, Z., *Coll. Czech. Chem. Comm.*, 1974, **39**, 2911, (thermal dec)

Fieser and Fieser's Reagents for Organic Synthesis, Wiley, 1975, **5**, 563, (use)

Devarajan, V. *et al.*, *Spectrochim. Acta A*, 1977, **33**, 1041, (ir, Raman)

Meyer, B. *et al.*, *Spectrochim. Acta A*, 1979, **35**, 345, (Raman)

Chen, I.C. *et al.*, *Acta Cryst. C*, 1984, **40**, 1780, (cryst struct)

Masson, M.R., *Solubility Data Ser.*, 1986, **26**, 108, (soly)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, PLR250