



>>Entry Name: Oxo[sulfato(2-)-O]vanadium(IV), 11Cl

Synonym(s): Vanadyl sulfate

CAS Registry Number: 27774-13-6

Related CAS Registry Numbers(s): 16229-43-9

VO(SO₄)

Molecular Formula: O₅SV

Molecular Weight: 163.005

Accurate Mass: 162.890607

Percentage Composition: O 49.08%; S 19.67%; V 31.25%

Source/Synthesis: Synth. by dehydrating VOSO₄·5H₂O. Manuf. by reducing a soln. of V₂O₅ in H₂SO₄ with H₂C₂O₄

Use/Importance: Has a v. wide range of uses from catalysis to flue-gas scrubbing

Physical Description: Tetragonal (α-form) or prismatic (β-form) blue cryst.

Solubility: Sol. H₂O (α-form); insol. H₂O (β-form)

>>Derivative: Monohydrate

>>Derivative: Trihydrate

References:

Longo, J.M. *et al.*, *J. Solid State Chem.*, 1970, **1**, 394, (*synth, cryst struct*)

East Ger. Pat., 1981, 151 923; *CA*, **97**, 25859c, (*manuf*)

Stranford, G.T. *et al.*, *J. Solid State Chem.*, 1985, **56**, 394, (*Raman*)

Boghosian, S. *et al.*, *Acta Chem. Scand.*, 1995, **49**, 703-708, (*cryst struct, ir, Raman, bibl*)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, VEZ000