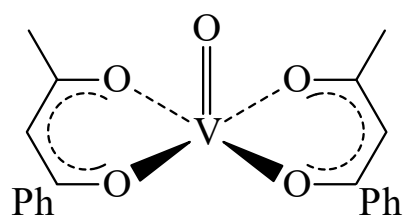




>>Entry Name: Oxobis(1-phenyl-1,3-butanedionato-*O,O'*)vanadium(IV), ¹¹Cl

Synonym(s): Oxobis(benzoylacetonato)vanadium(IV)



cis-form

CAS Registry Number: 14767-37-4

Molecular Formula: C₂₀H₁₈O₅V

Molecular Weight: 389.301

Accurate Mass: 389.059387

Percentage Composition: C 61.71%; H 4.66%; O 20.55%; V 13.09%

Source/Synthesis: Synth. from VO(SO₄).5H₂O and HL in aq. EtOH

Use/Importance: Used as a cathode in Li batteries and as oxidation catalyst for cyclohexane and in epoxidation of alkenes

Hazard & Toxicity: May be cytotoxic

Other: Gelest AKV897

>>Variant: *cis-form*

CAS Registry Number: 60133-41-7

Molecular Formula: C₂₀H₁₈O₅V

Molecular Weight: 389.301

Accurate Mass: 389.059387

Percentage Composition: C 61.71%; H 4.66%; O 20.55%; V 13.09%

Source/Synthesis: Synth. by mixing aq. VO(SO₄) with HL in EtOH

Physical Description: Green cryst.

>>Variant: *trans-form*

CAS Registry Number: 38213-67-1

Molecular Formula: C₂₀H₁₈O₅V

Molecular Weight: 389.301

Accurate Mass: 389.059387

Percentage Composition: C 61.71%; H 4.66%; O 20.55%; V 13.09%

Source/Synthesis: Synth. by mixing aq. solns. of VOSO₄ and HL or NaL and adjusting to pH 5 with NaOH

References:

Hon, P.K. *et al.*, *J. Chem. Phys.*, 1966, **43**, 1323; 3111, (*cryst struct*)

Ger. Pat., 1972, 2 221 650; *CA*, **78**, 29598x, (*epoxidation, use*)

Stewart, C.P. *et al.*, *J.C.S. Dalton*, 1972, 1661, (*epr, trans-form*)

Hill, J.O. *et al.*, *Annu. Rep. Inhalation Toxicol. Res. Inst. (Lovelace Biomed. Environ. Res. Inst.)*, 1978, 406; *CA*, **93**, 1786t, (*toxicol*)

Simpson, G.D. *et al.*, *Inorg. Chem.*, 1978, **17**, 2424, (*epr, cis-form*)

Japan. Pat., 1982, 57 187 879; *CA*, **98**, 115795d, (*use*)

Wan, X. *et al.*, *Shiyou Huagong*, 1985, **14**, 75; *CA*, **103**, 59977x, (*use*)