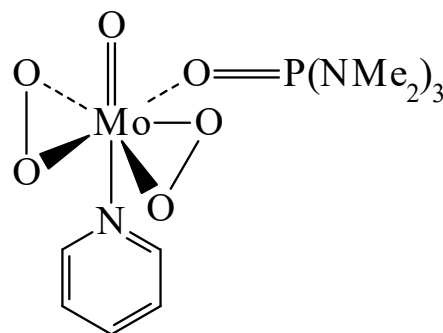




>>Entry Name: (Hexamethylphosphoric triamide-*O*)oxodiperoxy(pyridine)molybdenum(VI), 11Cl, 10Cl, 9Cl

Synonym(s): Oxodiperoxo-hexamethylphosphoramidopyridinemolybdenum(VI). MoOPH



CAS Registry Number: 23319-63-3

Molecular Formula: $C_{11}H_{23}MoN_4O_6P$

Molecular Weight: 434.24

Accurate Mass: 436.040929

Percentage Composition: C 30.43%; H 5.34%; Mo 22.09%; N 12.90%; O 22.11%; P 7.13%

Source/Synthesis: Synth. from $MoO_3 + 30\% H_2O_2 + HMPA \rightarrow MoO_5 \cdot H_2O \cdot HMPA$, followed by replacement of H_2O by Py

Use/Importance: Reagent for oxidising carbanions to corresp. hydroxy derivs.

Physical Description: Light-sensitive non-hygroscopic, yellow cryst., stored at $<0^\circ$

Solubility: Spar. sol. H_2O ; insol. Et_2O

Other Data: Ir ν_{MoO} 945, ν_{O-O} 875, 865, ν_{MoO_2} 580, 540 cm^{-1} (nujol). Dec. slowly in soln. at $>25^\circ$

Hazard & Toxicity: Care needed in contact with oxidisable materials

References:

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Le Carpentier, J.-M. *et al.*, *Acta Cryst. B*, 1972, **28**, 1278, (*cryst struct*)
Vedejs, E. *et al.*, *J.A.C.S.*, 1974, **96**, 5944, (*synth, reactions*)
Vedejs, E. *et al.*, *J.O.C.*, 1978, **43**, 188, (*synth, use*)
Blagg, J. *et al.*, *Chem. Comm.*, 1985, 619, (*use*)
Daniewski, A.R. *et al.*, *Synth. Commun.*, 1986, **16**, 535, (*synth*)
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