



>>Entry Name: Molybdic acid (H₂MoO₄), 9Cl, 8Cl

Synonym(s): Dihydrogen molybdate (MoO₄²⁽⁻⁾), 10Cl

CAS Registry Number: 7782-91-4

Related CAS Registry Numbers(s): 11099-00-6 14259-85-9

MoO₂(OH)₂

Molecular Formula: H₂MoO₄

Molecular Weight: 161.953

Accurate Mass: 163.900716

Physical Description: Amphoteric solid of variable composition

Aldrich: 23208-4

Fluka: 69858

Sigma: M2549

>>Derivative: Monohydrate

Synonym(s): Molybdenum(VI) oxide dihydrate. Molybdic acid monohydrate

Molecular Formula: H₄MoO₅

Molecular Weight: 179.969

Accurate Mass: 181.911281

Percentage Composition: H 2.24%; Mo 53.31%; O 44.45%

Physical Description: Yellow cryst.

Other Data: The extra molecule of H₂O is situated between the [MoO₅(OH₂)]_n layers

References:

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **2**, 1292A, (ir)

Seshaiah, U.V. *et al.*, *J. Indian Chem. Soc.*, 1962, **39**, 93, (props)

Glemser, O. *et al.*, *Ber. Bunsen-Ges. Phys. Chem.*, 1966, **70**, 1129, (formn)

Buntin, A.P. *et al.*, *Zh. Prikl. Khim. (Leningrad)*, 1967, **40**, 722; *J. Appl. Chem. USSR (Engl. Transl.)*, 1967, **40**, 702, (synth, reactions)

Krebs, B., *Acta Cryst. B*, 1972, **28**, 2222, (struct)

Saidkhmedov, U.A. *et al.*, *CA*, 1973, **78**, 167914, (synth)

Böschén, I. *et al.*, *Acta Cryst. B*, 1974, **30**, 1795, (cryst struct)

Wagner, C.D. *et al.*, *Anal. Chem.*, 1980, **52**, 1445, (pe)

Cruywagen, J.J., *Inorg. Chem.*, 1980, **19**, 552

Jarman, R.H. *et al.*, *J. Solid State Chem.*, 1981, **39**, 387, (props, pmr)

Tytko, K.H., *Z. Anorg. Allg. Chem.*, 1987, **555**, 98, (struct, rev)