



>>Entry Name: Barium molybdate(VI) (BaMoO₄)

Synonym(s): Barium molybdenum oxide (BaMoO₄)

CAS Registry Number: 7787-37-3

BaMoO₄

Molecular Formula: BaMoO₄

Molecular Weight: 297.265

Accurate Mass: 299.790298

Percentage Composition: Ba 46.20%; Mo 32.27%; O 21.53%

General Statement: Contains the tetrahedral [MoO₄]²⁽⁻⁾ ion. Scheelite type lattice

Source/Synthesis: Obt. by combining aq. solns. of sodium or ammonium molybdate and a sol. barium salt or by heating mixed solid oxides

Physical Description: White solid. Reduced by H₂ on heating to give red BaMoO₃. Reacts with O₂ at 800-1200° to give yellow Ba₂MoO₅. Electrical conductor

Melting Point: Mp 1480°

Solubility: Insol. H₂O

References:

Frevel, L.K. *et al.*, *Ind. Eng. Chem., Anal. Ed.*, 1946, **18**, 43, (*struct*)

Bertaut, P. *et al.*, *C. R. Hebd. Seances Acad. Sci.*, 1954, **238**, 2173, (*struct*)