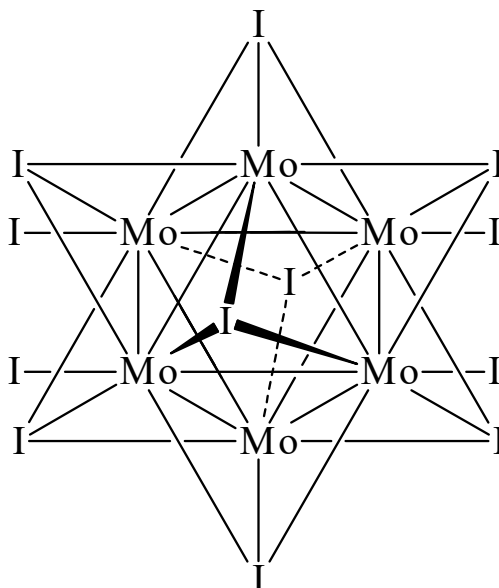




>>Entry Name: Molybdenum iodide ( $\text{Mo}_6\text{I}_{12}$ )

Synonym(s): Molybdenum(II) iodide ( $(\text{Mo}_6\text{I}_8)\text{I}_4$ ). Octa- $\mu_3$ -iodotetraiodohexamolybdenum



CAS Registry Number: 14055-74-4

Molecular Formula:  $\text{I}_{12}\text{Mo}_6$

Molecular Weight: 2098.494

Accurate Mass: 2110.286112

Percentage Composition: I 72.57%; Mo 27.43%

Source/Synthesis: Synth. e.g. by melting a mixt. of  $\text{MoCl}_2$  with  $\text{LiI}$  followed by extraction of  $\text{LiCl}$  with water

Physical Description: Black solid. Not readily hydrol.

Solubility: Insol.  $\text{H}_2\text{O}$

Other Data: Diamagnetic

>>Derivative: 'Monomer'

Synonym(s): Molybdenum(II) iodide ( $\text{MoI}_2$ )

Molecular Formula:  $\text{I}_2\text{Mo}$

Molecular Weight: 349.749

Accurate Mass: 351.714352

Percentage Composition: I 72.57%; Mo 27.43%

#### References:

Von Schäfer, H. *et al.*, *Z. Anorg. Allg. Chem.*, 1967, **353**, 281, (*struct*)

Brauer, G., *Handbuch Prap. Anorg. Chem.*, 3rd edn., Ferdinand Enke Verlag, 1975, **3**, 1539, (*synth*)

*Nouveau Traite de Chimie Minerale*, Masson, 1976, **5**, 60, (*rev*)