



>>Entry Name: Molybdate(VI) ($\text{MoO}_4^{2(-)}$)

Related CAS Registry Numbers(s): 12054-85-2
 $[\text{MoO}_4]^{2(-)}$

Molecular Formula: $\text{MoO}_4^{2(-)}$

Molecular Weight: 159.938

Accurate Mass: 161.885066

Percentage Composition: Mo 59.99%; O 40.01%

>>Derivative: Di-H compd.

>>Derivative: Di-Li salt

>>Derivative: Di-Na salt

>>Derivative: Di-K salt

>>Derivative: Di-Rb salt

>>Derivative: Di-Cs salt

>>Derivative: Mg salt

>>Derivative: Ca salt

>>Derivative: Sr salt

>>Derivative: Ba salt

>>Derivative: Di- NH_4 salt

Synonym(s): Ammonium molybdate(VI) ($(\text{NH}_4)_2\text{MoO}_4$)

CAS Registry Number: 13106-76-8

Source/Synthesis: Obt. by dissolving MoO_3 in aq. NH_3 soln. followed by cryst.

Use/Importance: Commercially available. Source of water-soluble molybdenum e.g. in the prep. of catalysts. Calcination produces MoO_3 and NH_3 . Used in fertiliser

Physical Description: White solid

Solubility: Sol. H_2O

Other Data: Contains the $[\text{MoO}_4]^{2(-)}$ ion. Monoclinic lattice, isomorphous with $(\text{NH}_4)_2\text{CrO}_4$ and $(\text{NH}_4)_2\text{SeO}_4$. Dec. on heating. Loses NH_3 on standing in air to form polymolybdates. Reacts with H_2O_2 to give peroxymolybdates

Aldrich: 27790-8

Supelco: R40-0010

References: