



>>Entry Name: Selenium dioxide

Synonym(s): Selenium oxide (SeO₂), 11Cl. Selenious anhydride

CAS Registry Number: 7446-08-4

SeO₂

Molecular Formula: O₂Se

Molecular Weight: 110.959

Accurate Mass: 111.90635

Percentage Composition: O 28.84%; Se 71.16%

Source/Synthesis: Synth. from Se + O₂ + NO₂

Use/Importance: Commercially available reagent for allylic oxidation of olefins and acetylenes. Used in manuf. of other Se compds. Oxidant

Physical Description: White tetragonal cryst. solid, yellow liq., green vapour. Stable to light and heat

Melting Point: Mp 34°

Boiling Point: Subl. 317°

Solubility: V. sol. H₂O; sol. C₆H₆; sl. sol. most org. solvs.

Hazard & Toxicity: V. toxic, corrosive

Aldrich: 21336-5

Fluka: 84905

Sigma: S9379

References:

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Takeo, H. *et al.*, *J. Mol. Spectrosc.*, 1970, **34**, 370, (*struct*)

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