



>>Entry Name: Lead silicate (PbSiO₃)

Synonym(s): Lead metasilicate (PbSiO₃)

CAS Registry Number: 10099-76-0

PbSiO₃

Molecular Formula: O₃PbSi

Molecular Weight: 283.284

Accurate Mass: 283.938299

Percentage Composition: O 16.94%; Pb 73.14%; Si 9.91%

Source/Synthesis: Phase in the PbO-SiO₂ system

Physical Description: Cryst. One stable and two metastable modifications are known

Melting Point: Mp 766°

Solubility: Insol. H₂O

Other: Gelest PBL6300

>>Variant: Mineral-form

Synonym(s): Alamosite

CAS Registry Number: 14638-09-6

Molecular Formula: O₃PbSi

Molecular Weight: 283.284

Accurate Mass: 283.938299

Percentage Composition: O 16.94%; Pb 73.14%; Si 9.91%

Source/Synthesis: Occurs at sites in Mexico, Arizona and Namibia

Physical Description: Colourless to white monoclinic cryst.

References:

Boucher, M.L. *et al.*, *Z. Kristallogr.*, 1967, **126**, 98, (*cryst struct*)

Ito, J., *Am. Mineral.*, 1968, **53**, 231, (*synth*)

Lazarev, A.N. *et al.*, *Izv. Akad. Nauk SSSR, Neorg. Mater.*, 1970, **6**, 1445; *CA*, **73**, 93062s, (*synth, ir*)

Furukawa, T. *et al.*, *J. Am. Ceram. Soc.*, 1979, **62**, 351, (*ir, Raman*)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, LDW000