



>>Entry Name: Lead(II) bromide (PbBr₂), 9CI

Synonym(s): Lead dibromide

CAS Registry Number: 10031-22-8

Related CAS Registry Numbers(s): 30913-92-9

PbBr₂

Molecular Formula: Br₂Pb

Molecular Weight: 367.008

Accurate Mass: 365.853299

Percentage Composition: Br 43.54%; Pb 56.46%

Source/Synthesis: Synth. from PbO or PbCO₃ + HBr. Can also be formed directly from Pb + Br₂

Use/Importance: Used as a photopolym. catalyst, a welding flux, in photoduplication processes, and in ir-transmitting glasses

Physical Description: White cryst.

Melting Point: Mp 373°

Boiling Point: Bp 916°

Solubility: Sol. H₂O. Insol. EtOH

Hazard & Toxicity: Toxic

Aldrich: 21114-1

Fluka: 15321

References:

Doell, W. *et al.*, *Z. Anorg. Allg. Chem.*, 1939, **241**, 239, (*cryst struct*)

Hadni, A. *et al.*, *Spectrochim. Acta A*, 1968, **24**, 1167, (*ir*)

Andersson, A. *et al.*, *Acta Chem. Scand.*, 1970, **24**, 2670, (*cryst struct, hydrate*)

Willemsen, B., *J. Inorg. Nucl. Chem.*, 1971, **33**, 3963, (*Raman*)

Danev, G. *et al.*, *Izv. Otd. Khim. Nauki (Bulg. Akad. Nauk.)*, 1974, **7**, 71; *CA*, **81**, 57684c, (*synth*)

Ganz, G.J. *et al.*, *J. Phys. Chem. Ref. Data*, 1977, **6**, 409, (*props, molten*)

Kirk-Othmer Encycl. Chem. Technol., 3rd edn., Wiley, 1978, **14**, 163

Demidov, A.V. *et al.*, *Zh. Strukt. Khim.*, 1983, **24**, 9; *CA*, **98**, 167378q, (*struct, gaseous*)

Sharma, S. *et al.*, *Z. Naturforsch., A*, 1987, **42**, 1313, (*Pb-207 nmr*)