



>>Entry Name: Germane

Synonym(s): Germanium hydride (GeH₄). Monogermane. Germanium tetrahydride

CAS Registry Number: 7782-65-2

GeH₄ (*T_d*)

Molecular Formula: GeH₄

Molecular Weight: 76.642

Accurate Mass: 77.952477

Percentage Composition: Ge 94.74%; H 5.26%

Physical Description: Colourless gas

Melting Point: Mp −165°

Boiling Point: Bp −88.5°

Solubility: Insol. H₂O; sol. aq. NH₃, aq. NaOCl; sl. sol. hot HCl

Density: d^{−142} 1.523

Other Data: Dec. at 230°

Hazard & Toxicity: Flammable in air; haemolytic

Aldrich: 46302-7

References:

Oxton, I.A., *J. Mol. Struct.*, 1977, **41**, 195, (*cryst struct, ir*)

Emons, H.H. *et al.*, *Z. Chem.*, 1983, **23**, 349, (*synth*)

Mackay, K.M. *et al.*, *J.C.S. Dalton*, 1984, 133, (*Ge-73 nmr*)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, GEI100