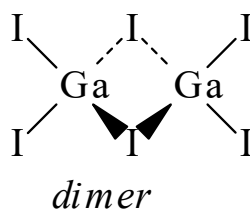




>>Entry Name: Gallium(III) iodide (GaI<sub>3</sub>)

Synonym(s): Gallium triiodide



CAS Registry Number: 13450-91-4

Molecular Formula: GaI<sub>3</sub>

Molecular Weight: 450.437

Accurate Mass: 449.638999

Percentage Composition: Ga 15.48%; I 84.52%

General Statement: Monomeric (*D*<sub>3h</sub>) in vapour, dimeric as liq. and solid

Source/Synthesis: From Ga + I<sub>2</sub> in CS<sub>2</sub>

Aldrich: 39911-6

>>Derivative: Dimer

Synonym(s): Di-μ-iodotetraiododigallium

CAS Registry Number: 18898-36-7

Molecular Formula: Ga<sub>2</sub>I<sub>6</sub>

Molecular Weight: 900.873

Accurate Mass: 899.277998

Percentage Composition: Ga 15.48%; I 84.52%

Physical Description: Pale yellow moisture-sensitive solid

Melting Point: Mp 214°

#### References:

- Corbett, J.D. *et al.*, *J.A.C.S.*, 1955, **77**, 4217, (*phase diagram*)  
Segel, S.L. *et al.*, *J. Chem. Phys.*, 1956, **25**, 578, (*nqr*)  
Greenwood, N.N. *et al.*, *J. Inorg. Nucl. Chem.*, 1957, **3**, 357, (*props*)  
Morino, Y. *et al.*, *Bull. Chem. Soc. Jpn.*, 1966, **39**, 71, (*ed*)  
Kutek, F. *et al.*, *Coll. Czech. Chem. Comm.*, 1966, **31**, 1875, (*synth*)  
Chadwick, J.R. *et al.*, *J. Inorg. Nucl. Chem.*, 1966, **28**, 1021, (*phase diagram*)  
Balls, A. *et al.*, *Trans. Faraday Soc.*, 1966, **62**, 521  
Beattie, I.R. *et al.*, *J.C.S.(A)*, 1968, 813; 1969, 2655, (*ir, Raman*)  
McGuire, C.E. *et al.*, *Inorg. Chem.*, 1973, **12**, 2450, (*pe*)  
Brauer, G., *Handbuch Prap. Anorg. Chem.*, 3rd edn., Ferdinand Enke Verlag, 1975, **2**, 854, (*synth*)  
Knip, R. *et al.*, *Angew. Chem., Int. Ed.*, 1982, **21**, 386, (*cryst struct*)