



>>Entry Name: Lithium silicate (Li₄SiO₄)

Synonym(s): Lithium orthosilicate

CAS Registry Number: 13453-84-4

Li₄SiO₄

Molecular Formula: Li₄O₄Si

Molecular Weight: 119.847

Accurate Mass: 120.020599

Percentage Composition: Li 23.17%; O 53.40%; Si 23.43%

Use/Importance: Nuclear fusion reactor breeder material

Physical Description: Cryst.

Melting Point: Mp 1256°

References:

Krishna Murthy, M. *et al.*, *J. Am. Ceram. Soc.*, 1962, **45**, 324-329, (*ir*)

Tranqui, D. *et al.*, *Acta Cryst. B*, 1979, **35**, 2479-2487, (*cryst struct*)

Magi, M. *et al.*, *J. Phys. Chem.*, 1984, **88**, 1518-1522, (*Si-29 nmr*)

Johnson, C.E. *et al.*, *J. Nucl. Mater.*, 1987, **155-157**, 188-201, (*rev, use*)