



>>Entry Name: Kyanite

Synonym(s): Cyanite. Diothene. Aluminium oxide silicate ($\text{Al}_2\text{O}(\text{SiO}_4)$)

CAS Registry Number: 1302-76-7

Related CAS Registry Numbers(s): 12141-46-7 58425-86-8 159995-97-8

Extra CAS Registry Numbers(s): 1335-30-4

Al_2SiO_5

Molecular Formula: $\text{Al}_2\text{O}_5\text{Si}$

Molecular Weight: 162.046

Accurate Mass: 161.91458

Percentage Composition: Al 33.30%; O 49.37%; Si 17.33%

Source/Synthesis: Mineral found in USA, India, Kenya, Romania, Australia and elsewhere

Physical Description: Usually blue long bladed cryst. colour often varies in single cryst.; also white, grey, green, yellow, pink or nearly black

Other Data: See also Andalusite [HMR53-B](#)

References:

Holm, J.L. *et al.*, *Am. Mineral.*, 1966, **51**, 1608, (*thermodyn props*)

Winter, J.K. *et al.*, *Am. Mineral.*, 1979, **64**, 573, (*cryst struct*)

Smith, K.A. *et al.*, *Am. Mineral.*, 1983, **68**, 1206, (*Si-29 nmr*)

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

Javes, N. *et al.*, *J.A.C.S.*, 1985, **107**, 6769, (*Si-29 nmr*)

Lippmaa, E. *et al.*, *J.A.C.S.*, 1986, **108**, 1730, (*Al-27 nmr*)

Lewis, R.J., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, AHF500