



>>Entry Name: Pyrophyllite

CAS Registry Number: 12269-78-2

$\text{Al}_2\text{Si}_4\text{O}_{10}(\text{OH})_2$

Molecular Formula: $\text{Al}_2\text{H}_2\text{O}_{12}\text{Si}_4$

Molecular Weight: 360.314

Accurate Mass: 359.825416

Percentage Composition: Al 14.98%; H 0.56%; O 53.28%; Si 31.18%

Source/Synthesis: Mineral

Use/Importance: Used in pigments, ceramics, binders and adsorbents

Physical Description: White to grey solid

References:

Hassanein, M. *et al.*, *Z. Anorg. Allg. Chem.*, 1968, **356**, 321, (*reactions*)

Van Olphen, H. *et al.*, *Introduction to Clay Colloid Chemistry*, 2nd Ed., Wiley, 1977, 63

Lippmaa, E. *et al.*, *J.A.C.S.*, 1980, **102**, 4889, (*Si-29 nmr*)

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

Sanz, J. *et al.*, *J.A.C.S.*, 1984, **106**, 4790, (*Si-29, Al-27 nmr*)

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

Kinsey, R.A. *et al.*, *Am. Mineral.*, 1985, **70**, 537, (*Al-27, Si-29 nmr*)