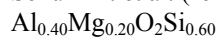
 $hP24$ (180)  $P6_222 - kfe$ **MgAl<sub>2</sub>Si<sub>3</sub>O<sub>10</sub>** [1]

Structural features: (Si,Al)O<sub>4</sub> tetrahedra share vertices to form a 3D-framework with twisted chains; Mg in narrow channels of hexagonal cross-section parallel to [001] (all sites split). Filled-up derivative of SiO<sub>2</sub> β-quartz.

Schulz H. et al. (1971) [1]

 $a = 0.5182, c = 0.536 \text{ nm}, c/a = 1.034, V = 0.1246 \text{ nm}^3, Z = 3$ 

site	Wyck.	sym.	<i>x</i>	<i>y</i>	<i>z</i>	occ.	atomic environment
O1	12 <i>k</i>	1	0.409	0.225	0.12067	0.5	
M2	6 <i>f</i>	2..	$\frac{1}{2}$	0	0.014	0.5	
Mg3	6 <i>e</i>	2..	0	0	0.12767	0.1	

$$\text{M2} = 0.6\text{Si} + 0.4\text{Al}$$

Experimental: single crystal, diffractometer, X-rays,  $R = 0.055$ 

Remarks: We assigned an approximate value to the Al/Si ratio of site M2 based on the nominal composition. Short interatomic distances for partly occupied site(s). Refinement with all atoms in ideal positions gave  $R = 0.065$ . In table 5 of [1] the *x*-coordinate of former site (Si,Al) is misprinted as 0 instead of  $\frac{1}{2}$  (agreement with Wyckoff position 6*f*).

References: [1] Schulz H., Hoffmann W., Muchow G.M. (1971), Z. Kristallogr. 134, 1-27.