



PO Box 217
 Leander, TX 78646-0217
 USA
 800-621-9598
www.glemco.com
sales@glemco.com

Steatite L-5 Material Notes

Subcategory: Ceramic; Oxide, Aluminum

Key Words: Soapstone, talc, $H_2Mg_3(SiO_3)_4$

Material Notes: Information below is typical for commercially available 96% alumina. A wide variation of properties is possible.

Physical Properties	Metric	English	Comments
Water Absorption	0 – 0.03%	0 - .03 %	
Mechanical Properties			
Hardness, Mohs	7.5	7.5	
Tensile Strength, Ultimate	70 MPa	10200 psi	
Flexural Strength	140 MPa	20300 psi	
Compressive Yield Strength	590 MPa	85600 psi	
Poisson's Ratio	0.22	0.22	
Fracture Toughness	4.5 MPa-m ^{1/2}	4.1 ksi-in ^{1/2}	
Shear Modulus	130 GPa	18900 ksi	
Electrical Properties			
Dielectric Constant	6.3	6.3	1 MHz, 25°C (77°F)
Dielectric Strength	9.4 kV/mm	239 kV/in	
Dielectric Loss Index	0.007	0.007	1 MHz, 25°C (77°F)
Thermal Properties			
CTE, linear 500°C	7 µm/m-°C	3.89 µin/in-°F	25-600°C (77 – 110°C)
CTE, linear 1000°C	8 µm/m-°C	4.44 µin/in-°F	20-1000°C
Descriptive Properties			
Color	Tan		