



MO-SCI Specialty Products, L.L.C.

A Subsidiary of MO-SCI Corporation

4040 HyPoint North

Rolla, MO 65401

Telephone: 573-364-2338

Fax: 573-364-9589

GL-0271 DATA SHEET

Appearance

Solid low alkali E-glass beads with greenish color.

Chemical Composition (by weight)

Silica (SiO ₂)	52-58%
Aluminum oxide (Al ₂ O ₃)	11~17%
Boron oxide (B ₂ O ₃)	6~7%
Calcium oxide (CaO)	18-25%
Magnesium oxide (MgO)	0.5~1.0%
Sodium oxide (Na ₂ O).....	<0.5%
Potassium oxide (K ₂ O).....	<0.02%
Iron Oxide (Fe ₂ O ₃)	<0.5%

Physical Properties

Specific Gravity	2.6 (g/cm ³)
Bulk Density of Dry Beads	1.3 g per cm ³ (77 lbs/ft ³)
pH in water @ 25°C	6.2
Softening Temperature	840-850°C
Index of Refraction	1.54-1.56 (n _D)
Coefficient of Thermal Expansion...	60x10 ⁻⁷ /°C (30-300° C)

Mechanical Properties

Hardness (Moh scale).....	7.5
Vickers Hardness (GPa)	6.4
Compressive strength (MPa)	382
Elastic Modulus (GPa)	8.5

Electrical Properties

Dielectric Constant (1MHz @20°C)	6.3
Loss Tangent (1MHz @20°C).....	1.6%

Chemical Durability

Weight loss @ 90°C for 24 h in 5% HCl 0.3 mg/cm²