



Mo-Sci Specialty Products, L.L.C.

A Subsidiary of MO-SCI Corporation

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GL1738 DATA SHEET

Appearance

Glass-ceramic sealing glass light gray colored in powder form

Chemical Composition by Weight Percent (wt %)

Bismuth oxide (Bi ₂ O ₃).....	37.77 - 43.77
Silica (SiO ₂).....	26.13 - 32.13
Boron oxide (B ₂ O ₃).....	15.47 - 19.47
Potassium oxide (K ₂ O).....	1.92 - 3.92
Sodium oxide (Na ₂ O).....	1.92 - 3.92
Alumina (Al ₂ O ₃).....	1.91 - 3.91
Titanium oxide (TiO ₂).....	1.91 - 3.91
Lithium oxide (Li ₂ O ₃).....	0.47 - 1.47

Physical Properties

Density.....	3.4 g/cm ³
T _g	453 ± 10°C
T _c	630 ± 10°C
T _d	530 ± 10°C
CTE _{50-400°C}	8.8 x 10 ⁻⁶ /°C (crystallized)

Recommended Firing Conditions

Ramp to between 700°C and 850°C and hold for 2 to 4 hours

Heating/cooling rate: 3 to 10°C/minute

Applications

To seal ceramics and metals

Resistant to alkali