MO-SCI CORPORATION
mo-sci@mo-sci.com
573-364-2338

Appearance

Sealing glass is white colored and is in powder form.

Chemical Composition

Silica (SiO_2)

Potassium oxide (K_2O)

Sodium oxide (Na_2O)

Titanium dioxide (TiO_2)

Calcium oxide (CaO)

Magnesium oxide (MgO)

Alumina (Al_2O_3)

Physical Properties

Specific Gravity	2.7 (g/cm^3)
Glass Transition Temperature	475 ± 10 °C
Softening Temperature (T_d)	506 ± 10 °C
Coefficient of Thermal Expansion	15.9 x 10^{-6} /°C (50 - 400 °C)
Dielectric Constant (1kHz, RT)	8.76
Loss Tangent (1kHz, RT)	0.0028

Recommended Firing Conditions

Ramp to 690 °C and hold for 0.5 to 1 hour
Heating or cooling rate: 3 to 10 °C/min

Applications

Operational Temperature: up to 520 °C

The typical application of GL1886 sealing glass is to seal ceramics and metals at high temperatures. Common applications of sealing glass include: solid oxide fuel cells (SOFCs), solar cells, sodium ion batteries, high-temperature sensors, and other sealing, bonding, or coating applications.