

Appearance

Glass-ceramic sealing glass, white colored in powder form.

Chemical Composition

Calcium oxide (CaO) Strontium oxide (SrO) Aluminum oxide (Al₂O₃) Boron oxide (B₂O₃) Silicon dioxide (SiO₂)

Physical Properties

Specific Gravity	3.2 (g/cm ³)
Glass Transition Temperature	657 ± 10 °C
Softening Temperature (T _d)	701 ± 10 °C
Crystallization Temperature	863 ± 10 °C
Coefficient of Thermal Expansion (annealed glass)	9.98 ± 1 x 10 ⁻⁶ /°C (25-500 °C)
Coefficient of Thermal Expansion (crystallized)	9.70 ± 1 x 10 ⁻⁶ /°C (25-600 °C)

Recommended Firing Conditions

Ramp to 760 °C and hold for 2 hours, then ramp to 830 °C and hold for 2 hours. Heating or cooling rate: 3 to 10 °C

Applications

Operational Temperature: up to 900 °C

The typical application of GL2007 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.

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