**Appearance**

Glass-ceramic sealing glass light grey colored in powder form.

**Chemical Composition (by weight)**

- Bismuth oxide (Bi₂O₃) 46 - 52 %
- Silica (SiO₂) 17 - 23 %
- Boron oxide (B₂O₃) 15 - 21 %
- Alumina (Al₂O₃) 2 - 4 %
- Sodium oxide (Na₂O) 2 - 4 %
- Potassium oxide (K₂O) 2 - 4 %
- Titanium oxide (TiO₂) 2 - 4 %
- Lithium oxide (Li₂O) 0.5 - 1.5 %

**Physical Properties**

- Specific Gravity 3.7 (g/cm³)
- Glass Transition Temperature 440 ± 10 °C
- Crystallization Temperature 610 ± 10 °C
- Softening Temperature (T_d) 500 ± 10 °C
- Coefficient of Thermal Expansion 9.5 x 10⁻⁶ /°C (50 - 450 °C)

**Recommended Firing Conditions**

Ramp to between 650 and 850 °C and hold for 2 to 4 hours.
Heating or cooling rate: 3 to 10 °C/min

**Applications**

Operational Temperature: up to 600 °C

The typical application of GL1724 sealing glass is to seal ceramics and metals at high temperatures. GL1724 glass is resistant to alkali. 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.