



Appearance

Low temperature sealing glass with gray color in powder form.

Chemical Composition

Zinc oxide (ZnO)
Bismuth oxide (Bi₂O₃)
Zinc oxide (ZnO)
Boron oxide (B₂O₃)
Aluminum oxide (Al₂O₃)
Silicon oxide (SiO₂)

Physical Properties

Specific Gravity	4.6 (g/cm ³)
Glass Transition Temperature (by dilatometry)	490 ± 10 °C
Softening Temperature (T _d)	521 ± 10 °C
Coefficient of Thermal Expansion	6.0 – 7.8 x 10 ⁻⁶ /°C (100 - 400 °C)

Recommended Firing Conditions

Ramp to 560 - 590 °C and hold for 1 - 2 hours.
Heating or cooling rate: 3 to 10 °C/min

Applications

Operational Temperature: up to 400 °C

The typical application of GL2017 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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