

Appearance

Sealing glass light yellow colored in powder form

Chemical Composition (by weight)

Bismuth oxide (Bi ₂ O ₃)	11.27 - 15.27 %
Silver oxide (Ag ₂ O)	36.25 - 56.25 %
Phosphorous oxide (P ₂ O ₅)	30.48 - 50.48 %

Physical Properties

Specific Gravity	4.4 (g/cm ³)
Glass Transition Temperature	213 ± 10 °C
Softening Temperature (T _d)	230 ± 10 °C
Crystallization Temperature (DSC)	360 ± 10 °C
Coefficient of Thermal Expansion	16.7 x 10 ⁻⁶ /°C (40 - 150 °C)

Recommended Firing Conditions

Ramp to between 250 °C and 350 °C and hold for 1 to 2 hours.
Heating or cooling rate: 3 to 10 °C/min

Applications

Operational Temperature: up to 350 °C

The typical application of GL1728 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.