MO SCI, LLC ☒ mo-sci@mo-sci.com ☐ 573-364-2338

Appearance

Low temperature sealing glass with gray color in powder form.

Chemical Composition

Zinc oxide (ZnO)

Bismuth oxide (Bi_2O_3)

Zinc oxide (ZnO)

Boron oxide (B_2O_3)

Aluminum oxide (Al_2O_3)

Silicon oxide (SiO_2)

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.