



Appearance

Ultra-low temperature sealing glass is white in color and is in powder form.

Chemical Composition

Tin fluoride (SnF₂)

Tin oxide (SnO)

Phosphorus oxide (P₂O₅)

Physical Properties

Specific Gravity	3.68 (g/cm ³)
Glass Transition Temperature (measured by dilatometry)	97 ± 10 °C
Softening Temperature (T _d)	119 ± 10 °C
Coefficient of Thermal Expansion	20 x 10 ⁻⁶ /°C (25 - 90 °C)

Recommended Firing Conditions

Ramp to 250 °C and hold for 1 to 2 hours.

Heating or cooling rate: 3 to 10 °C/min

Applications

Operational Temperature: up to 80 °C

The typical application of GL1648 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.