MO-SCI CORPORATION
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## Appearance

Compliant (viscous) sealing glass white colored in powder form.

## Chemical Composition (by weight)

| | |
|---|---|
| Boron oxide ($B_2O_3$) | 33 - 43 % |
| Barium oxide (BaO) | 18 - 28 % |
| Strontium oxide (SrO) | 3 - 7 % |
| Silica ($SiO_2$) | 20 - 30 % |
| Calcium oxide (CaO) | 3 - 7 % |
| Alumina ($Al_2O_3$) | 2 - 6 % |

## Physical Properties

| | |
|---|---|
| Specific Gravity | 3.2 ($g/cm^3$) |
| Glass Transition Temperature | 617 ± 10 °C |
| Softening Temperature ($T_d$) | 638 ± 10 ° C |
| Coefficient of Thermal Expansion | 9.4 x $10^{-6}$ /°C (50 - 500 °C) |

## Recommended Firing Conditions

Ramp to between 850 and 900 °C and hold for 1 hour.
Heating or cooling rate: 3 to 10 °C/min

## Applications

Operational Temperature: up to 900 °C

The typical application of GL1835 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.