

Appearance

Solid clear borosilicate glass microspheres/frit with white color in powder form.

Chemical Composition (by weight)

Silica (SiO ₂)	75 - 85 %
Boron oxide (B ₂ O ₃)	12 - 16 %
Sodium oxide (Na ₂ O)	2 - 6 %
Aluminum oxide (Al ₂ O ₃)	2 - 5 %

Physical Properties

Specific Gravity	2.2 (g/cm ³)
Bulk Density of Dry Beads	1.2 g/cm ³ (75 lb/ft ³)
pH in water @ 25 °C	7.0
Softening Temperature (T _s)	830 ± 10 °C
Index of Refraction	1.47-1.48 (n _D)
Coefficient of Thermal Expansion	32 x 10 ⁻⁷ /°C (30 - 300 °C)
Crush Strength (90% Survival) using Carver Hydraulic Press	27,210 psi

Applications

Typical applications of GL0179 beads include: calibration, high temperature spacer material for gauge control, coating, filler for plastic and etc.