

Appearance

13-93 bioactive glass with white color in powder form.

Chemical Composition (by weight)

Silica (SiO ₂)	50 - 56 %
Calcium oxide (CaO)	17 - 23 %
Phosphorous pentoxide (P ₂ O ₅)	3 - 5 %
Sodium oxide (Na ₂ O)	5 - 7 %
Potassium oxide (K ₂ O)	10 - 14 %
Magnesium oxide (MgO)	4 - 6 %

Heavy Metals (by ICP) (ASTM F1538 Spec)

As	< 3 ppm
Cd	< 5 ppm
Hg	< 5 ppm
Pb	< 30 ppm
Total (as lead)	< 50 ppm

Physical Properties

Specific Gravity	2.66 (g/cm ³)
Softening Temperature (T _d)	625 ± 10 °C
Melting Temperature	1300 ± 10 °C
Coefficient of Thermal Expansion	10.6 x 10 ⁻⁶ /°C (30 - 300 °C)
Index of Refraction	1.55 (n _D)

Applications

Typical applications of GL0811 include: bone grafting biomaterials, repair of periodontal defects, cranial and maxillofacial repair, wound care, blood loss control, stimulation of vascular regeneration, nerve repair.