

Appearance

S53P4 bioactive glass with white color in powder form.

Chemical Composition (by weight)

Silica (SiO ₂)	50 - 56 %
Calcium oxide (CaO)	18 - 22 %
Phosphorous pentoxide (P ₂ O ₅)	3 - 5 %
Sodium oxide (Na ₂ O)	21 - 25 %

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	2.4 (g/cm ³)
Softening Temperature (T _d)	590 ± 10 °C
Crystallization Temperature	795 ± 10 °C
Coefficient of Thermal Expansion	13 x 10 ⁻⁶ /°C (30 - 300 °C)

Applications

Typical applications of GL0804 include: bone grafting biomaterials, repair of periodontal defects, cranial and maxillofacial repair, wound care, blood loss control, stimulation of vascular regeneration, and nerve repair.