

Appearance

Clear spheres, fibers, powder, or bulk glass which exhibit blue fluorescence.

Chemical Composition

Silica (SiO₂)

Aluminum Oxide (Al₂O₃)

Calcium Oxide (CaO)

Magnesium Oxide (MgO)

Sodium Oxide (Na₂O)

Iron Oxide (Fe₂O₃)

Rare Earth Oxide

Physical Properties

Specific Gravity 2.60 (g/cm³)

Excitation 365 nm

Emission Blue

Softening Temperature (T_d) 607 ± 10 °C

Glass Transition Temperature 550 ± 10 °C

Coefficient of Thermal Expansion $95 \pm 10 \times 10^{-7}$ /°C (30 - 300 °C)

Compression Strength 29 kg/mm² (41,200 psi) Vickers Hardness 550 kg/mm² (782,000 psi)

Mohs Hardness 6 - 7

Applications

Typical applications of GL1818 include medical imaging, biomedical diagnostics and research, testing media, tracing and art glass enamels.

Technical information, recommendations, and other statements contained in this document or provided by MO SCI personnel are based on tests or experience that MO SCI believes are reliable, but the accuracy or completeness of such information is not guaranteed. Such information is intended for persons with knowledge and technical skills sufficient to assess and apply their own informed judgment to the information.