



Phosphor Information Leaflet

GENERAL

Name	Barium strontium orthosilicate europium
Chemical formula	BaSrSiO ₄ :Eu ²⁺
Application areas	Light emitting diodes

OPTICAL PROPERTIES

Excitation maxima @	397 nm (3.1eV)
Emission maximum @ 160 nm exc.	520 nm (2.4 eV)
Centroid wavelength	534 nm (2.3 eV)
Full width @ half emission maximum	60 nm
Lumen equivalent	483 lm/W _{opt.}
CIE1931 chromaticity coordinates (x, y)	0.255, 0.650
Band edge of host lattice	
Reflection @ 254 nm	10 %
Decay time $\tau_{1/e}$	680 ns

PHYSICAL PROPERTIES

Body colour	Yellow
Density	5 g/cm ³
Refractive index (at λ)	
Mineral type	Olivin
Crystal system	Orthorhombic
Space group (#)	Pnma (62)

