



# Phosphor Information Leaflet

## GENERAL

Name	Barium strontium ortho-silicate europium
Chemical formula	$Ba_{0.14}Sr_{1.86}SiO_4:Eu^{2+}$
Application areas	Light emitting diodes

## OPTICAL PROPERTIES

Excitation maxima @ 564 nm	390 nm (3.2 eV)
Emission maximum @ 420 nm exc.	564 nm (2.2 eV)
Centroid wavelength	582 nm (2.1 eV)
Full width @ half emission maximum	97 nm
Lumen equivalent	483 lm/W <sub>opt.</sub>
CIE1931 chromaticity coordinates (x, y)	0.443, 0.540
Band edge of host lattice	4.2 eV
Reflection @ 450 nm	29 %
Decay time $\tau_{1/e}$	0.97 $\mu$ s

## PHYSICAL PROPERTIES

Body colour	Yellow
Density	4.5 g/cm <sup>3</sup>
Refractive index (at $\lambda$ )	1.73
Mineral type	Olivine
Crystal system	Orthorhombic
Space group (#)	Pnma (62)

