



# Phosphor Information Leaflet

## GENERAL

Name	Lithium strontium silicate europium
Chemical formula	$\text{Li}_2\text{SrSiO}_4:\text{Eu}^{2+}$
Application areas	Light emitting diodes

## OPTICAL PROPERTIES

Excitation maxima @	310 nm (4.0 eV), 405 nm (3.1 eV)
Emission maximum @ 405 nm exc.	580 nm (2.1 eV)
Centroid wavelength	606 nm (2.0 eV)
Full width @ half emission maximum	100 nm
Lumen equivalent	388 lm/W <sub>opt.</sub>
CIE1931 chromaticity coordinates (x, y)	0.513, 0.482
Band edge of host lattice	7.7 eV
Reflection @ 254 nm	26 %
Decay time $\tau_{1/e}$	~ 0.8 $\mu\text{s}$ ( $\text{Eu}^{2+}$ )

## PHYSICAL PROPERTIES

Body colour	Yellow
Density	3.54 g/cm <sup>3</sup>
Refractive index (at $\lambda$ )	
Mineral type	
Crystal system	Trigonal
Space group (#)	$P3_121$ (152)

