



# Phosphor Information Leaflet

## GENERAL

Name	Strontium gadolinium sulfide europium
Chemical formula	$\text{SrGa}_2\text{S}_4:\text{Eu}^{2+}$
Application areas	Electroluminescence

## OPTICAL PROPERTIES

Excitation maxima @	395 nm ( $\pm$ 3.1 eV)
Emission maximum @ 160 nm exc.	535 nm ( $\pm$ 2.3 eV)
Centroid wavelength	542 nm ( $\pm$ 2.3 eV)
Full width @ half emission maximum	48 nm
Lumen equivalent	576 lm/W <sub>opt.</sub>
CIE1931 chromaticity coordinates (x, y)	0.278, 0.685
Band edge of host lattice	282 nm ( $\pm$ 4.4 eV)
Reflection @ 254 nm	7 %
Decay time 1/e	480 ns

## PHYSICAL PROPERTIES

Body colour	Yellow
Density	3.59 g/cm <sup>3</sup>
Refractive index (at $\lambda$ )	2.3 (589 nm)
Mineral type	-
Crystal system	Orthorhombic
Space group (#)	Fddd (70)

