



# Phosphor Information Leaflet

## GENERAL

Name	Strontium magnesium disilicate lead
Chemical formula	$\text{Sr}_2\text{MgSi}_2\text{O}_7:\text{Pb}^{2+}$
Application areas	Tanning lamps

## OPTICAL PROPERTIES

Excitation maxima @	202 nm (6.1 eV), 250 nm (5.0 eV)
Emission maximum @ 450 nm exc.	362 nm (3.4 eV)
Centroid wavelength	393 nm (3.2 eV)
Full width @ half emission maximum	61 nm
Lumen equivalent	33 lm/W <sub>opt.</sub>
CIE1931 chromaticity coordinates (x, y)	0.206, 0.067
Band edge of host lattice	
Reflection @ 254 nm	10 %
Decay time $\tau_{1/e}$	-

## PHYSICAL PROPERTIES

Body colour	White
Density	3.7 g/cm <sup>3</sup>
Refractive index (at $\lambda$ )	
Mineral type	Melilite
Crystal system	Tetragonal
Space group (#)	P-42 <sub>1</sub> m (113)

