



# Phosphor Information Leaflet

## GENERAL

Name	Lanthanum zirconium molybdate samarium
Chemical formula	$\text{La}_2\text{Zr}_3(\text{MoO}_4)_9:\text{Sm}^{3+}$
Application areas	

## OPTICAL PROPERTIES

Excitation maxima @ 598 nm	404 nm (3.07 eV); 418 nm (2.97 eV); 464 nm (2.67 eV); 480 nm (2.58 eV)
Emission maximum @ 404 nm exc.	560 nm (2.21 eV); 592 nm (2.09 eV); 598 nm (2.07 eV); 644 nm (1.94 eV)
Centroid wavelength	593 nm (2.09eV)
Full width @ half emission maximum	11 nm
Lumen equivalent	194 lm/W
CIE1931 chromaticity coordinates (x, y)	0.145; 0.403
Band edge of host lattice	
Decay time $\tau_{1/e}$	1030 $\mu\text{s}$

## PHYSICAL PROPERTIES

Body colour	Light yellow
Density	$\text{g/cm}^3$
Refractive index (at $\lambda$ )	
Mineral type	
Crystal system	Trigonal
Space group (#)	$\bar{R}3c$

