



Phosphor Information Leaflet

GENERAL

Name	Lanthanum magnesium hexaaluminate cerium
Chemical formula	$\text{LaMgAl}_{11}\text{O}_{19}:\text{Ce}^{3+}$
Application areas	FL Lamps for cosmetic or medical purposes
Optical transition	$[\text{Xe}]4f^1(^2F_{5/2})-[\text{Xe}]5d^1$

OPTICAL PROPERTIES

Excitation maxima @	162 nm (7.65 eV), 274 nm (4.53 eV)
Emission maximum @ 160 nm exc.	345 nm (3.59 eV)
Centroid wavelength	361 nm (3.43 eV)
Full width @ half emission maximum	56 nm
Lumen equivalent	0
CIE1931 chromaticity coordinates (x, y)	Not applicable
Band edge of host lattice	~7.5 eV
Reflection @ 254 nm	20%

PHYSICAL PROPERTIES

Body colour	White
Density	4.26 g/cm ³
Refractive index (at λ)	
Mineral type	Magnetoplumbite
Crystal system	Hexagonal
Space group (#)	P 63/m m c (194)

