



# Phosphor Information Leaflet

## GENERAL

Name	Lutetium aluminium garnet thulium
Chemical formula	$\text{Lu}_3\text{Al}_5\text{O}_{12}:\text{Tm}^{3+}$
Application areas	Luminescent marker

## OPTICAL PROPERTIES

Excitation maxima @	250 nm (4.96 eV), 356 nm (3.48 eV), 460 nm (3.70 eV), 680 nm (1.82 eV)
Emission maximum @ 254 nm exc.	354 nm (3.50 eV)
Centroid wavelength	
Full width @ half emission maximum	lines
Lumen equivalent	
CIE1931 chromaticity coordinates (x, y)	
Band edge of host lattice	160 nm (7.75 eV)
Reflection @ 254 nm	40 %

## PHYSICAL PROPERTIES

Body colour	White
Density	6.7 g/cm <sup>3</sup>
Refractive index	1.84 (589.3 nm)
Mineral type	Garnet
Crystal system	Cubic
Space group (#)	I a -3 d (230)

