



Phosphor Information Leaflet

GENERAL

Name	Yttrium aluminium garnet gadolinium
Chemical formula	$Y_3Al_5O_{12}:Gd^{3+}$
Application areas	UV-B emitting fluorescent lamps

OPTICAL PROPERTIES

Excitation maxima @	195 nm (6.36 eV)
Emission maximum @ 160 nm exc.	314 nm (3.95 eV)
Centroid wavelength	-
Full width @ half emission maximum	Lines
Lumen equivalent	0
CIE1931 chromaticity coordinates (x, y)	0.455, 0.448
Band edge of host lattice	170 nm (7.29 eV)
Reflection @ 254 nm	60 %

PHYSICAL PROPERTIES

Body colour	White
Density	4.56 g/cm ³
Refractive index (at λ)	1.80 (589.3 nm)
Mineral type	Garnet
Crystal system	Cubic
Space group (#)	I a -3 d (230)

