



Phosphor Information Leaflet

GENERAL

Name	Yttrium oxy ortho-silicate terbium
Chemical formula	$\text{Y}_2\text{SiO}_5:\text{Tb}^{3+}$
Application areas	

OPTICAL PROPERTIES

Excitation maxima @ 542 nm	298 nm (4.16 eV)
Emission maximum @ 290 nm exc.	540 nm (2.30 eV)
Centroid wavelength	562 nm (2.21 eV)
Full width @ half emission maximum	lines
Lumen equivalent	473 lm/W _{opt.}
CIE1931 chromaticity coordinates (x, y)	0.338; 0.587
Band edge of host lattice	6.4 eV
Reflection @ 290 nm	-
Decay time $\tau_{1/e}$	ms

PHYSICAL PROPERTIES

Body colour	white
Density	4.4 g/cm ³
Refractive index	1.8 (@ 682 nm)
Mineral type	
Crystal system	monoclinic
Space group (#)	

