

# Phosphor Information Leaflet

## GENERAL

Name	Terbium borate
Chemical formula	TbBO <sub>3</sub>
Application areas	-

## OPTICAL PROPERTIES

Excitation maxima @ 542 nm	283 nm (4.38 eV); 353 nm (3.51 eV); 376 nm (3.3 eV)
Emission maximum @ 353 nm exc.	541 nm (2.29 eV)
Centroid wavelength	559 nm (2.22 eV)
Full width @ half emission maximum	lines
Lumen equivalent	512 lm/W <sub>opt.</sub>
CIE1931 chromaticity coordinates (x, y)	0.347; 0.600
Band edge of host lattice	
Reflection @ 353 nm	74 %
Decay time $\tau_{1/e}$	350 $\mu$ s

## PHYSICAL PROPERTIES

Body colour	white
Density	6.47 g/cm <sup>3</sup>
Refractive index (at $\lambda$ )	
Mineral type	
Crystal system	hexagonal
Space group (#)	<i>P6<sub>3</sub>/m</i> (176)

