

# Phosphor Information Leaflet

## GENERAL

Name	Gadolinium borate thulium
Chemical formula	GdBO <sub>3</sub> :Tm
Application areas	Plasma displays

## OPTICAL PROPERTIES

Excitation maxima @ 312 nm	179 nm (6.9 eV), 276 nm (4.5 eV)
Emission maximum @ 177 nm exc.	314 nm (3.9 eV), 361 nm (3.4 eV), 457 nm (2.7 eV)
Centroid wavelength	-
Full width @ half emission maximum	lines
Lumen equivalent	106 lm/W <sub>opt.</sub>
CIE1931 chromaticity coordinates (x, y)	0.233; 0.162
Band edge of host lattice	-
Reflection @ 177 nm	-
Decay time $\tau_{1/e}$	-

## PHYSICAL PROPERTIES

Body colour	white
Density	5.69 g/cm <sup>3</sup>
Refractive index	1.8
Mineral type	perovskites
Crystal system	hexagonal
Space group (#)	P6 <sub>3</sub> /mmc (194)

