



Phosphor Information Leaflet

GENERAL

Name	Gadolinium oxysulfide terbium
Chemical formula	Gd ₂ O ₂ S:Tb ³⁺
Application areas	x-ray films

OPTICAL PROPERTIES

Excitation maxima @	275 nm (4.51 eV)
Emission maximum @ 254 nm exc.	546 nm (2.27 eV)
Centroid wavelength	555 nm (2.23 eV)
Full width @ half emission maximum	Line
Lumen equivalent	483 lm/W _{opt.}
CIE1931 chromaticity coordinates (x, y)	0.358, 0.571
Band edge of host lattice	282 nm (4.39 eV)
Reflection @ 254 nm	6 %

PHYSICAL PROPERTIES

Body colour	White
Density	7.34 g/cm ³
Refractive index (at λ)	2.3
Mineral type	
Crystal system	Trigonal / rhombohedral
Space group (#)	P -3 m 1 (#164)

