



Phosphor Information Leaflet

GENERAL

Name	Gadolinium oxysulfide praseodymium
Chemical formula	Gd ₂ O ₂ S:Pr,Ce,F
Application areas	CT scanner

OPTICAL PROPERTIES

Excitation maxima @	254 nm (4.88 eV)
Emission maximum @ 254 nm exc.	512 nm (2.42 eV)
Centroid wavelength	588 nm (2.11 eV)
Full width @ half emission maximum	Lines
Lumen equivalent	237 lm/W
CIE1931 chromaticity coordinates (x, y)	0.241, 0.597
Band edge of host lattice	282 nm (4.39 eV)
Reflectance @ 300 nm	35%

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)

