



Phosphor Information Leaflet

GENERAL

Name	Magnesium tungstate
Chemical formula	MgWO ₄
Application areas	Scintillator

OPTICAL PROPERTIES

Excitation maxima @ 615 nm em.	263 nm (4.71 eV), 296 nm (4.19 eV)
Emission maximum @ 465 nm exc.	490 nm (2.53 eV)
Centroid wavelength	517 nm (2.40 eV)
Full width @ half emission maximum	142 nm
Lumen equivalent	290 lm/W _{VIS}
CIE1931 chromaticity coordinates (x, y)	0.255, 0.354
Band edge of host lattice	4.2 eV
Reflection @ 254 nm	9%
Decay time $\tau_{1/e}$	40 μ s (Exc. 296 nm, Em. 480 nm)

PHYSICAL PROPERTIES

Body colour	White-yellowish
Density	6.6 g/cm ³
Refractive index (at λ 589 nm)	1.52
Mineral type	Huanzalaite
Crystal system	Monoclinic
Space group (#)	P12/c1 (13)

