



Phosphor Information Leaflet

GENERAL

Name	Zinc oxide zinc
Chemical formula	ZnO:Zn ²⁺
Application areas	Vacuum fluorescent displays

OPTICAL PROPERTIES

Excitation maxima @ 510 nm em	338 nm (\pm 3.66 eV) and 382 nm (\pm 3.25 eV)
Emission maximum @ 382 nm exc.	510 nm (2.43 eV)
Centroid wavelength	531 nm (2.34 eV)
Full width @ half emission maximum	113 nm
Lumen equivalent	367 lm/W
CIE1931 chromaticity coordinates (x, y)	0.259, 0.449
Band edge of host lattice	387 nm (3.2 eV)
Reflection @ 254 nm	5%
Decay time 1/e	\approx 1.8 μ s

PHYSICAL PROPERTIES

Body colour	Pale green
Density	5.61 g/cm ³
Refractive index (n_D)	2.0041
Mineral type	Rock salt
Crystal system	Cubic
Space group (#)	Fm-3m (225)

