



Phosphor Information Leaflet

GENERAL

Name	Yttrium phosphate praseodymium
Chemical formula	YPO ₄ :Pr ³⁺
Application areas	UV Lamps for disinfection purposes

OPTICAL PROPERTIES

Excitation maxima @	153 nm (8.12 eV), 188 nm (6.61 eV), 227 nm (5.47 eV)
Emission maximum @ 160 nm exc.	235 nm (5.28 eV)
Centroid wavelength	249 nm (4.98 eV)
Full width @ half emission maximum	20 nm
Lumen equivalent	-
CIE1931 chromaticity coordinates (x, y)	-
Band edge of host lattice	155 nm (8.00 eV)
Reflection @ 254 nm	20 %

PHYSICAL PROPERTIES

Body colour	Pale green
Density	4.17 g/cm ³
Refractive index (at λ)	1.66 (515 nm)
Mineral type	Xenotime
Crystal system	Tetragonal
Space group (#)	I 41/a m d Z (141)

