



# Phosphor Information Leaflet

## GENERAL

Name	Yttrium phosphate neodymium
Chemical formula	$\text{YPO}_4:\text{Nd}^{3+}$
Application areas	VUV radiation sources for water, waver, surface and air purification

## OPTICAL PROPERTIES

Excitation maxima @	186 nm (6,67 eV), 165 nm (7,52 eV), 155 nm (8,00 eV)
Emission maximum @ 160 nm exc.	190 nm (6.53 eV), 241 nm (5.14 eV), 278 nm (4.46 eV)
Centroid wavelength	235 nm (5.28 eV)
Full width @ half emission maximum	10 nm
Lumen equivalent	-
CIE1931 chromaticity coordinates (x, y)	-
Band edge of host lattice	155 nm (8.0 eV)
Reflection @ 254 nm	93 %
Decay time 1/e	9 ns

## PHYSICAL PROPERTIES

Body colour	White
Density	4.17 g/cm <sup>3</sup>
Refractive index (at $\lambda$ )	1.76 (589 nm)
Mineral type	Xenotime
Crystal system	Tetragonal
Space group (#)	I 41/a m d Z (141)

