



# Phosphor Information Leaflet

## GENERAL

Name	Aluminium metaphosphate chromium
Chemical formula	$\text{Al}(\text{PO}_3)_3:\text{Cr}^{3+}$
Application areas	Optical marker

## OPTICAL PROPERTIES

Excitation maxima @ 750 nm em.	293 nm (4.23 eV), 450 nm (2.76 eV), 650 nm (1.91 eV)
Emission maximum @ 450 nm exc.	781 nm (1.59 eV)
Centroid wavelength	ca. 800 nm (1.55 eV)
Full width @ half emission maximum	125 nm
Lumen equivalent	0.7 lm/W <sub>VIS</sub>
CIE1931 chromaticity coordinates (x, y)	0.721, 0.279
Band edge of host lattice	161 nm (7.7 eV)
Reflection @ 363 nm	-
Decay time $\tau_{1/e}$	-

## PHYSICAL PROPERTIES

Body colour	-
Density	2.71 - 2.78 g/cm <sup>3</sup>
Refractive index (at $\lambda$ )	-
Mineral type	-
Crystal system	Cubic
Space group (#)	I-43d (220)

