



Phosphor Information Leaflet

GENERAL

Name	Aluminium metaphosphate manganese
Chemical formula	$\text{Al}(\text{PO}_3)_3:\text{Mn}^{2+}$
Application areas	Optical marker

OPTICAL PROPERTIES

Excitation maxima @ 628 nm em.	313 nm (3.96 eV), 342 nm (3.63 eV), 363 nm (3.42 eV), 407 nm (3.05 eV), 441 nm (2.81 eV), 537 nm (2.31 eV)
Emission maximum @ 362 nm exc.	627 nm (1.98 eV)
Centroid wavelength	642 nm (1.93 eV)
Full width @ half emission maximum	87 nm
Lumen equivalent	200 lm/W _{VIS}
CIE1931 chromaticity coordinates (x, y)	0.603, 0.359
Band edge of host lattice	161 nm (7.7 eV)
Reflection @ 363 nm	92 %
Decay time $\tau_{1/e}$	-

PHYSICAL PROPERTIES

Body colour	-
Density	2.71 - 2.78 g/cm ³
Refractive index (at λ)	-
Mineral type	-
Crystal system	Cubic
Space group (#)	I-43d (220)

