



Phosphor Information Leaflet

GENERAL

Name	Aluminium phosphate chromium
Chemical formula	AlPO ₄ :Cr ³⁺
Application areas	Optical marker

OPTICAL PROPERTIES

Excitation maxima @ 695 nm em.	253 nm (4.90 eV), 403 nm (3.08 eV), 557 nm (2.23 eV)
Emission maximum @ 403 nm exc.	695 nm (1.59 eV)
Centroid wavelength	729 nm (1.70 eV)
Full width @ half emission maximum	line
Lumen equivalent	4 lm/W _{VIS}
CIE1931 chromaticity coordinates (x, y)	0.725, 0.276
Band edge of host lattice	220 nm (5.5 eV)
Reflection @ 403 nm	90 %
Decay time τ _{1/e}	-

PHYSICAL PROPERTIES

Body colour	Greenish white
Density	2.3 g/cm ³
Refractive index (at λ)	-
Mineral type	-
Crystal system	Orthorhombic
Space group (#)	C222 ₁ (20)

