



Phosphor Information Leaflet

GENERAL

Name	Barium magnesium aluminate chromium
Chemical formula	BaMgAl ₁₀ O ₁₇ :Cr ³⁺
Application areas	NIR marker

OPTICAL PROPERTIES

Excitation maximum @	192 nm (6.5 eV)
Emission maximum @ 192 nm exc.	694 nm (1.8 eV)
Centroid wavelength	707 nm (1.8 eV)
Full width @ half emission maximum	11 nm
Lumen equivalent	9 lm/W _{opt.}
CIE1931 chromaticity coordinates (x, y)	0.693, 0.307
Band edge of host lattice	180 nm (6.9 eV)
Reflection @ 254 nm	70 %
Decay time $\tau_{1/e}$	>1 ms

PHYSICAL PROPERTIES

Body colour	Greenish-white
Density	3.5 g/cm ³
Refractive index (at λ)	1.77
Mineral type	β -Alumina
Crystal system	Hexagonal
Space group (#)	P 63/m m c

