



Phosphor Information Leaflet

GENERAL

Name	Gadolinium aluminium tetraborate chromium
Chemical formula	$GdAl_3(BO_3)_4:Cr^{3+}$
Application areas	Laser gain media

OPTICAL PROPERTIES

Excitation maxima @ 720 nm em.	423 nm (2.93 eV); 598 nm (2.07 eV)
Emission maximum @ 420 nm exc.	683 nm (1.81 eV); 730 nm (1.70 eV)
Centroid wavelength	763 nm
Full width @ half emission maximum	line
Lumen equivalent	4 lm/W _{opt.}
CIE1931 chromaticity coordinates (x, y)	0.715; 0.284
Band edge of host lattice	
Reflection @ 420 nm	15 %
Decay time $\tau_{1/e}$	

PHYSICAL PROPERTIES

Body colour	green
Density	4.35 g/cm ³
Refractive index (at λ)	1.76
Mineral type	huntite
Crystal system	trigonal
Space group (#)	R32 h (155)

