



Phosphor Information Leaflet

GENERAL

Name	Calcium disilicate europium
Chemical formula	$\text{Ca}_3\text{Si}_2\text{O}_7:\text{Eu}^{2+}$
Application areas	Product marking

OPTICAL PROPERTIES

Excitation maxima @	340 nm (3.65 eV), 470 nm (2.64 eV)
Emission maximum @ 450 nm exc.	600 nm (2.07 eV)
Centroid wavelength	615 nm (2.02 eV)
Full width @ half emission maximum	100 nm
Lumen equivalent	337 lm/W _{opt.}
CIE1931 chromaticity coordinates (x, y)	0.554, 0.440
Band edge of host lattice	8.0 eV
Reflection @ 450 nm	17 %

PHYSICAL PROPERTIES

Body colour	yellow
Density	2.98 g/cm ³
Refractive index (at λ)	
Mineral type	Rankinite
Crystal system	Monoclinic
Space group (#)	P 1 21/a 1 (#14)

