



Phosphor Information Leaflet

GENERAL

Name	Strontium tetraborate europium
Chemical formula	SrB ₄ O ₇ :Eu ²⁺
Application	Blacklight lamps, tanning lamps

OPTICAL PROPERTIES

Excitation maxima @	275 nm (4.51 eV)
Emission maximum @ 254 nm exc.	370 nm (3.35 eV)
Centroid wavelength	371 nm (3.34 eV)
Full width @ half emission maximum	15 nm
Lumen equivalent	1 lm/W _{opt.}
CIE1931 chromaticity coordinates (x, y)	0.167, 0.016
Band edge of host lattice	9.71 eV (indirect); 11.18 eV (direct)
Reflection @ 254 nm	9 %

PHYSICAL PROPERTIES

Body colour	White
Density	4.02 g/cm ³
Particle size d ₅₀	10 μm
Mineral type	
Crystal system	Orthorhombic
Space group (#)	P m n 21 (#31)

