



Phosphor Information Leaflet

GENERAL

Name	Zinc sulfide copper
Chemical formula	ZnS: Cu^{2+}
Application areas	CRT phosphor

OPTICAL PROPERTIES

Excitation maxima @	341 nm (3.6 eV), 397 nm (3.1 eV)
Emission maximum @ 160 nm exc.	534 nm (2.3 eV)
Centroid wavelength	543 nm (2.3 eV)
Full width @ half emission maximum	75 nm
Lumen equivalent	516 lm/W _{opt.}
CIE1931 chromaticity coordinates (x, y)	0.310, 0.619
Band edge of host lattice	350 nm (3.54 eV)
Reflection @ 254 nm	7 %
Decay time 1/e	-

PHYSICAL PROPERTIES

Body colour	White yellowish
Density	4.1 g/cm ³
Refractive index (at λ)	-
Mineral type	Sphalerit, Adamantane
Crystal system	Cubic
Space group (#)	F-43m (216)

