



Phosphor Information Leaflet

GENERAL

Name	Zinc sulfide silver
Chemical formula	ZnS:Ag ⁺
Application areas	Cathode ray tubes, cathode ray lamps

OPTICAL PROPERTIES

Excitation maxima @	160 nm (7.8 eV), 336 nm (3.7 eV)
Emission maximum @ 160 nm exc.	450 nm (2.8 eV)
Centroid wavelength	469 nm (2.6 eV)
Full width @ half emission maximum	57 nm
Lumen equivalent	98 lm/W _{opt.}
CIE1931 chromaticity coordinates (x, y)	0.156, 0.093
Band edge of host lattice	350 nm (3.54 eV)
Reflection @ 254 nm	6 %
Decay time 1/e	< 0.1 ms

PHYSICAL PROPERTIES

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

