



## Phosphor Information Leaflet

### GENERAL

Name	Tetra strontium hepta aluminate europium dysprosium
Chemical formula	$\text{Sr}_4\text{Al}_{14}\text{O}_{25}:\text{Eu},\text{Dy}$
Application areas	Afterglow pigments, decoration paints
Optical transition	$[\text{Xe}]4f^7(^8\text{S}_{7/2}) - [\text{Xe}]4f^65d^1$

### OPTICAL PROPERTIES

Excitation maxima @	264 nm (2.53 eV), 300 nm (4.13 eV), 350 nm (3.54 eV)
Emission maximum @ 254 nm exc.	490 nm (2.53 eV)
Centroid wavelength	510 nm (2.43 eV)
Full width @ half emission maximum	65 nm
Lumen equivalent	280 lm/W <sub>opt.</sub>
CIE1931 chromaticity coordinates (x, y)	0.154, 0.386
Band edge of host lattice	6.3 eV
Reflection @ 254 nm	12 %

### PHYSICAL PROPERTIES

Body colour	Greenish
Density	3.66 g/cm <sup>3</sup>
Refractive index (at $\lambda$ )	
Mineral type	-
Crystal system	Orthorhombic
Space group (#)	Pmma (51)



