



## Phosphor Information Leaflet

### GENERAL

Name	Strontium dodecaaluminate praseodymium
Chemical formula	$\text{SrAl}_{12}\text{O}_{19}:\text{Pr}^{3+},\text{Na}^{+}$
Application areas	Security marking

### OPTICAL PROPERTIES

Excitation maxima @	197 nm (6.29 eV), 443 nm (2.80 eV), 466 nm (2.66 eV), 485 nm (2.56 eV)
Emission maximum @ 466 nm exc.	621 nm (2.00 eV)
Centroid wavelength	642 nm (1.93 eV)
Full width @ half emission maximum	Line
Lumen equivalent	178 lm/W
CIE1931 chromaticity coordinates (x, y)	0.570, 0.420
Band edge of host lattice	7.8 eV
Reflection @ 466 nm	95%

### PHYSICAL PROPERTIES

Body colour	White
Density	3.93 g/cm <sup>3</sup>
Refractive index (at $\lambda$ )	
Mineral type	Pseudo magnetoplumbite
Crystal system	Hexagonal
Space group (#)	P 63/m m c (#194)

