



# Phosphor Information Leaflet

## GENERAL

Name	Potassium silicon fluoride manganese
Chemical formula	$K_2GeF_6:Mn^{4+}$
Application areas	Light emitting diodes

## OPTICAL PROPERTIES

Excitation maxima @ 631 nm monitored	470 nm (2.72 eV)
Emission maximum @ 470 nm exc.	631 nm (1.96 eV)
Centroid wavelength	630 nm (1,97 eV)
Full width @ half emission maximum	3 nm
Lumen equivalent	192 lm/W
CIE1931 chromaticity coordinates (x, y)	0.6896, 0.3096
Band edge of host lattice	5.6 eV
Reflection @ 254 nm	8%
Decay time $\tau_{1/e}$	~ 6.5 ms

## PHYSICAL PROPERTIES

Body colour	Yellow
Density	3.46 g/cm <sup>3</sup>
Refractive index (at $\lambda$ )	
Mineral type	
Crystal system	Trigonal
Space group (#)	P-3m1 (164)



