

ZnS für VIS und IR-Bereich

ZnS for VIS and IR-range

Formula	ZnS					
Growth method	Chemical Vapor Deposition					
Max. sizes, (mm)	Ø180					
Transmission range, (µm) (Thickness 10 mm)	0.4 - 12.5					
Structure	cubic					
Density (g/cm ³)	4.09					
Melting point (°C)	1830					
Hardness (Mohs)	4.5					
Thermal expansion coefficient (10 ⁻⁶ /K)	6.5 @ 293K					
Thermal conductivity (W m ⁻¹ K ⁻¹)	27.2					
Specific heat capacity (J kg ⁻¹ K ⁻¹)	0.53					
Solubility in water (g/100 cm ³)	insoluble					
Solubility in acids	unessential					
Solubility in organic solvents	insoluble					
Wavelength (µm)	0.5	0.7	1.0	10	11	12
Refractive index	2.419	2.332	2.292	2.201	2.186	2.161
Absorption coefficient (cm ⁻¹)	0.001 at 2.7 µm 0.2 at 10 µm					

Transmission spectrum:

