

Zinc Sulfide Clear Grade (ZnS)

Custom sizes and specifications are available

CRYSTALLOGRAPHIC	
Syngony	Cubic
OPTICAL	
Refractive Index at $n_{0.4678}$	2.44915
Refractive Index at $n_{10.0}$	2.20084
Thermal Coefficient of Refractive Index at 0.6328 microns	5.43×10^{-5}
Spectral Range, Microns	0.37 - 14
THERMAL	
Thermal Linear Expansion, deg C ⁻¹	6.5×10^{-6}
Thermal Conductivity, W/(m * deg C)	27.2
Specific Heat Capacity, J/(kg * deg C)	0.515×10^3
MECHANICAL	
Density, g/cm ³ at 20 deg C	4.09
Young Modulus E , Pa	7.45×10^{10}
Vickers Microhardness, Pa	1.47×10^7
Poisson Ratio	0.28
CHEMICAL	
Molecular Weight	97.43
Solubility	
in water, gram/100cm ³	65×10^{-6}
in acids	soluble

Refr. Index n vs. Wavelength λ	
WAVELENGTH, MICRONS	REFRACTIVE INDEX
0.4047	2.54515
0.4358	2.48918
0.4800	2.43691
0.5461	2.388838
0.6678	2.34033
0.7800	2.31619
0.8943	2.30183
1.0140	2.29165
2.0581	2.26442
3.000	2.25772
4.000	2.25231
5.000	2.24661
8.000	2.22334
9.000	2.21290
10.000	2.20084
12.000	2.17101
13.000	2.15252

Transmittance τ (λ) vs. Wavelength λ



ZnS Cleartran® is a registered trademark of Morton International, Inc.

For Reference Only

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