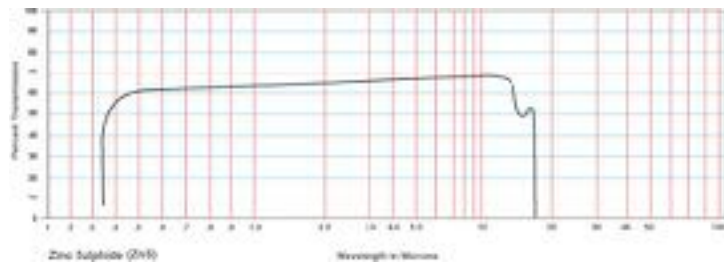
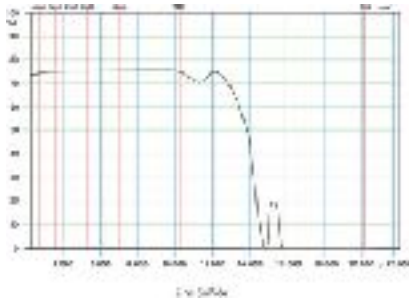


# Optical Material Zinc Sulfide (ZnS) Optical Crystals

Zinc Sulfide (ZnS) is used as a transmission window for IR spectroscopy. Zinc Sulfide (ZnS) is or has been produced under the trademarks Cleartran® and Irtran®. Cleartran® is a registered trademark of CVD Incorporated and Irtran® was a trademark of Eastman Kodak. The Kodak product was discontinued many years ago. When ordering Cleartran® ZnS, customers should specify Cleartran®.



## Optical Properties- Zinc Sulfide (ZnS) Optical Crystals

Transmission Range: 370nm to 14µm  
Refractive Index: 2.19 @ 10.5µm  
Reflection Loss: 24% at 10.6µm (2 surfaces)

## Physical Properties- Zinc Sulfide (ZnS) Optical Crystals

Melting Point:  
Hardness (Knoop): 240 kg/mm<sup>2</sup>  
Young's Modulus: 74.46 GPa  
Modulus of Rupture: 10,000 psi  
Structure: Cubic ( polycrystalline )

## Chemical Properties- Zinc Sulfide (ZnS) Optical Crystals

Solubility: Insoluble in water. Soluble in HNO<sub>3</sub>. Soluble in strong acids.

