



CRYSTAL MATERIALS INDEX

Caesium Iodide

Properties	Value
Apparent Elastic Limit (MPa)	5.6
Bulk Modulus (K) (GPa)	12.67
Cleavage Planes	None
Density (g.cm-3)	4.51
Dielectric Constant	5.65 at 1MHz
Elastic Coefficient C11	24.6
Elastic Coefficient C12	6.7
Elastic Coefficient C44	6.24
Hardness (knoop)	20
Melting Point (K)	894
Poisson Ratio	0.214
Reflection Loss (%)	13.6 at 10μ
Refractive Index	1.74 at 10μ
Restrahlen Peak (μ)	145.8
Shear Modulus (G) (GPa)	6.24
Solubility (g/100g H ₂ O)	44.0 at 273K
Specific Heat Capacity (J·kg·m-1·K-1)	201
Stability	Slightly Hygroscopic
Structure	Cubic
Thermal Conductivity (W·m-1·K-1)	1.1 at 298K
Thermal Expansion (K-1 at 300K)	48.3x10-6
Transmission Range (μ)	0.25-55.
Youngs Modulus (E) (GPa)	5.3

CsI

The material with the deepest known IR transmission, CsI is often used for components in wide range spectrophotometers. A soft material that is rugged and shock resistant, slightly hygroscopic. Doped with thallium, CsI(Tl) is a useful scintillator.

(All data is for information only and believed to be correct. Hilger Crystals does not accept any liability otherwise.)