



## CRYSTAL MATERIALS INDEX

# Potassium Iodide

| Properties  | Value                       |
|---|-----------------------------|
| Absorption Coefficient (cm <sup>-1</sup> )                    | 4.5x10 <sup>-3</sup> at 20μ |
| Apparent Elastic Limit (MPa)                                  | -                           |
| Bulk Modulus (K) (GPa)  | 12                          |
| Cleavage Planes   | (100)                       |
| Density (g.cm <sup>-3</sup> )                                 | 3.12                        |
| Dielectric Constant   | 4.94 at 2MHz                |
| Elastic Coefficient C11                                       | 27.4                        |
| Elastic Coefficient C12                                       | 4.3                         |
| Elastic Coefficient C44                                       | 3.7                         |
| Hardness (knoop)  | 5                           |
| Melting Point (K)   | 955                         |
| Poisson Ratio   | 0.3                         |
| Reflection Loss (%)   | 10.6 at 10μ                 |
| Refractive Index  | 1.62 at 10μ                 |
| Reststrahlen Peak (μ)   | 82                          |
| Shear Modulus (G) (GPa)                                       | 6.2                         |
| Solubility (g/100g H <sub>2</sub> O)                          | 127.5 at 273K               |
| Specific Heat Capacity (J·kg <sup>-1</sup> ·K <sup>-1</sup> ) | 313                         |
| Stability   | Slightly Hygroscopic        |
| Structure   | FCC                         |
| Thermal Conductivity (W·m <sup>-1</sup> ·K <sup>-1</sup> )    | 2.1 at 300K                 |
| Thermal Expansion (K <sup>-1</sup> at 300K)                   | 43x10 <sup>-6</sup>         |
| Transmission Range (μ)  | 0.38-42                     |
| Youngs Modulus (E) (GPa)                                      | 31.49                       |

## KI

Potassium Iodide has few specific applications but is useful in the very deep IR.

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