



CRYSTAL MATERIALS INDEX

Thallium doped Sodium Iodide

NaI(Tl)

Properties	Value
Cleavage Planes	(100)
Decay Constant (ns)	230
Density (g.cm-3)	3.7
Emission Spectral Range (nm)	325-525
Gamma and X-ray absorption coefficients (cm-1)	0.29 at 660keV 5.5 at 100KeV
Melting Point (K)	924
Peak Scintillation Wavelength (nm)	410
Photons/MeV	40000
Radiation Length (cm)	2.59
Refractive Index at peak emission	1.8
Solubility (g/100g H ₂ O @ 300K)	184.2
Stability	Very Hygroscopic
Structure	BCC
Therman Conductivity (W·m-1·K-1) @ 300K	3.47
Transmission Range (nm)	250-350

Crystals are available in a wide range of standard sizes and configurations either as separate crystals or in complete assemblies. Maximum light transfer is achieved by employing a high efficiency reflector chosen to suit the particular application for which the crystal is required. Materials used are selected to ensure low background count.

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