



CRYSTAL MATERIALS INDEX

Bismuth Germanate - BGO

Properties	Value
Cleavage Planes	None
Decay Constant (ns)	300
Density (g.cm-3)	7.13
Emission Spectral Range (nm)	350-650
Gamma and X-ray absorption coefficients (cm-1)	
Melting Point (K)	1323
Peak Scintillation Wavelength (nm)	480
Photons/MeV	8500
Radiation Length (cm)	1.13
Refractive Index at peak emission	2.15
Solubility (g/100g H ₂ O @ 300K)	Insoluble
Stability	Good
Structure	Cubic
Therman Conductivity (W·m-1·K-1) @ 300K	
Transmission Range (nm)	470-7500

Bi₄Ge₃O₁₂

A relatively hard, high density, non-hydroscopic crystal with good gamma ray absorption. Often used for PET imaging and high energy physics applications as Compton shields.

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