



SPECIAL COMPONENTS

[LYSO](#)[BGO](#)

BGO

Scratch & Dig: 80/50

Bismuth germinate BGO ($\text{Bi}_4\text{Ge}_3\text{O}_{12}$), is the crystalline form of an inorganic oxide with cubic eulytine structure, colorless, transparent and insoluble in water. When exposed to the irradiation of high energy particles or other sources, such as gamma-rays, X-rays, it emits a green fluorescent light with a peak wavelength of 480nm. With its high stopping power, high scintillation efficiency, good energy resolution and non-hygroscopic, BGO is a good scintillation material and has been found a wide range of application in high energy physics, nuclear physics, space physics, nuclear medicine, geological exploration and other industries.

Density (g.cm-3)	7.13
Radiation length(cm)	1.12
Decay constant(us)	0.3
Emission peak(nm)	480
Light yield(%NaI:Tl)	8
Melting point(°C)	1050
Hardness(Mho)	5
refractive Index	2.15
Hygroscopicity	none
Cleavage	none

