

Nal(Tl) Scintillator

Thallium doped sodium iodide, Nal(Tl) scintillator, is a traditional scintillation material, with greatest light output and convenient emission range coincident with photo-multiplier tube.

We now could grow the Nal(Tl) crystal with a variety of dimensions, diameter from 25 to 150 mm, while length can be up to 300 mm, also included the 100x100x200 mm or 100x100x400 mm.

Nal(Tl) is hygroscopic and has to be encapsulated in actual applications. We now have 3 different options, like the regular aluminum housing and k-9 glass, Stainless steel housing also the titanium housing, which would be used depend on the specific application from clients.

Melting point[k]	Density (g/cm ³)	Cleavage plane	Hardness (Mho)	hygroscopic	Wavelength of emission Max[nm]	Refractive index @ emission Max	Primary decay time [ns]	Light yield [photons /keV _γ]	Photoelectron yield [%of Nal(Tl)] (for γ-rays)
924	3.67	<100>	2.10	yes	415	1.85	250	38	100

Features

Lower cost

High yield of light

**Convenient emission range
Coincident with photo-multiplier tube**



Application

Radiation detection

Geological exploration

Nuclear medicine

