

# BC-525

## Gd Loaded Mineral Oil Based Liquid Scintillators

This scintillator, with its mineral oil component, has higher light transmission and higher flash point than traditional gadolinium loaded liquids. Both of these features recommend it highly for neutron spectrometry and neutrino research. It is also more suitable for use in large tanks containing acrylic plastic components.

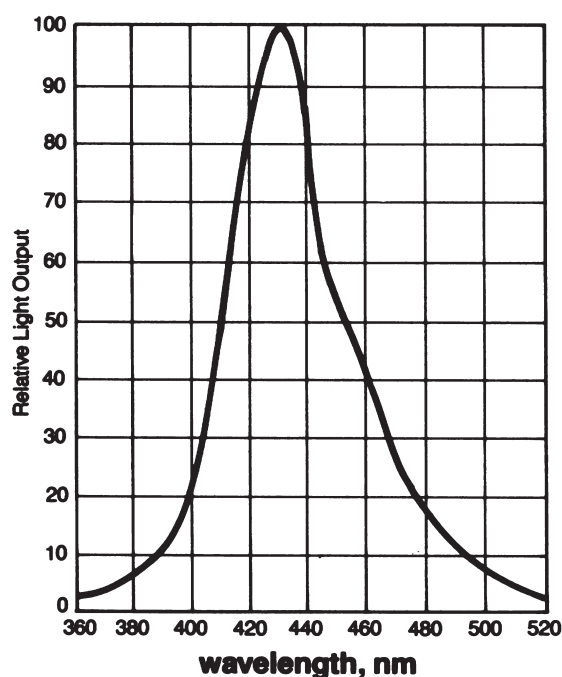
BC-525 is available with gadolinium concentrations up to 0.5% by weight. It is the result of a long term development program and possesses the two important properties of high light transmission and long term chemical stability.

Scintillation Properties	
Light Output, %Anthracene	55
Wavelength of Maximum Emission, nm	425
Decay Time, short component, ns	3.8
Bulk Light Attenuation, meters	>4.5
Atomic Composition	
No. of H Atoms per cc ( $\times 10^{22}$ )	6.00
No. of C Atoms per cc ( $\times 10^{22}$ )	3.85
Ratio H:C Atoms	1.56
No of Electrons per cc ( $\times 10^{22}$ )	29.9

### General Technical Data -

Density	0.88 g/cc
Refractive index	1.49
Flash Point	81°C
Gadolinium Content	0.5%, w/w

Emission Spectrum



# BC-525 Gd Loaded, Mineral Oil Based Liquid Scintillator



**Saint-Gobain Crystals**

[www.crystals.saint-gobain.com](http://www.crystals.saint-gobain.com)

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