

# BC-531

## Liquid Scintillator

This scintillator provides a combination of properties of particular value to the research physicist. These are:

- Chemical compatibility with nearly all plastics
- High light output
- High flash point
- Moderate cost

BC-531 is particularly suited for intermediate sized detectors in which the containers are fabricated with common plastic materials such as PVC and acrylics. The scintillator provides over twice the light output of mineral oil based liquids having similar plastic compatibility.

### Scintillation Properties –

Light Output, % Anthracene .....	59
Wavelength of maximum emission, nm .....	425
Decay time, principal component, ns .....	3.5
Bulk Light Attenuation, m .....	3.5, minimum

### Atomic Composition –

No. of H Atoms per cc .....	$6.27 \times 10^{22}$
No. of C Atoms per cc .....	$3.84 \times 10^{22}$
H:C Ratio .....	1.63
No. of electrons per cc .....	$2.93 \times 10^{23}$

### General Technical Data –

Density (20°C) .....	0.87 g/cc
Refractive Index .....	1.47
Flash Point .....	93°C

Scintillation Products  
Organic Scintillators



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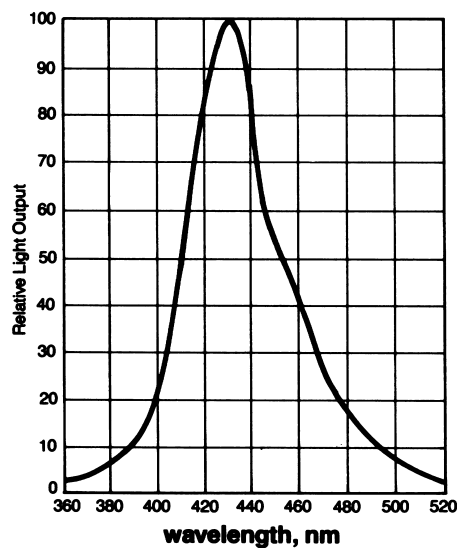
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Emission Spectrum –



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