

# BC-505 Liquid Scintillator

BC-505 is formulated to provide the best overall performance of any liquid scintillator. It has the highest light output of any liquid and excellent light transmission. Its high flash point (making it safer to use and transport than xylene or toluene based scintillators) renders it particularly suitable for use in large volume detectors such as anti-Compton and anti-coincidence shields and high energy neutron detectors.

## Scintillation Properties –

|  |     |
|--|-----|
| Light Output, %Anthracene .....          | 80  |
| Wavelength of Maximum Emission, nm ..... | 425 |
| Decay Time, ns .....                     | 2.5 |

## Atomic Composition –

|                               |                       |
|-------------------------------|-----------------------|
| No. of H Atoms per cc .....   | $5.36 \times 10^{22}$ |
| No. of C Atoms per cc .....   | $4.03 \times 10^{22}$ |
| Ratio of H:C Atoms .....      | 1.331                 |
| No. of Electrons per cc ..... | $2.95 \times 10^{23}$ |

## General Technical Data –

|                        |            |
|------------------------|------------|
| Density (20°C) .....   | 0.877 g/cc |
| Refractive Index ..... | 1.505      |
| Flash Point .....      | 48°C       |

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Emission Spectrum –

