

EJ-305

LIQUID SCINTILLATOR

HIGHEST LIGHT OUTPUT

EJ-305 is based on highly purified pseudocumene (1,2,4-trimethylbenzene) and has the highest light output of any liquid scintillator, 80% of anthracene. The liquid boasts excellent optical clarity with bulk technical attenuation coefficient greater than 300cm. It can be encapsulated in cells employing windows made of cast acrylic plastic. Although it has a flash point now considered flammable, it is relatively high within that category and presents a relatively low fire and toxicity hazard.

EJ-305 is available in bulk or encapsulated in the ELJEN type VM cells which consist of an aluminum body with a 6mm thick optical window and sealed under inert gas. As with any liquid scintillator, handling should be done with care regarding cleanliness and personnel protection. Storage is best done in dry conditions and moderate temperatures. EJ-305 is formulated for excellent long-term stability, and best storage is done under inert gas in sealed containers.

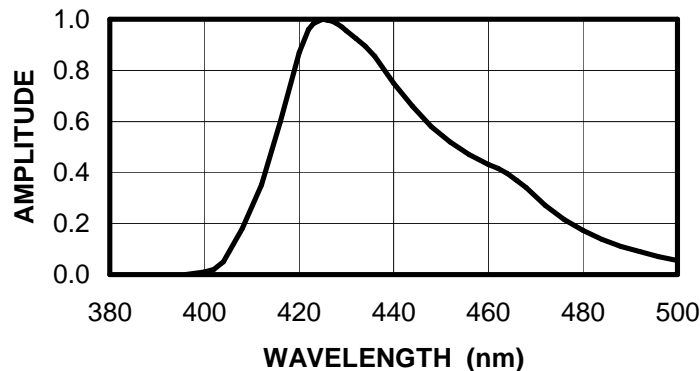
PROPERTIES

Light Output (% of Anthracene)	80%
Photons produced by a 1 MeV electron	12,000
Wavelength of Maximum Emission	425 nm
Decay Time, Short Component	2.7 ns
Bulk Light Attenuation Length	>3 meters
Specific Gravity	0.893
Refractive Index	1.505
Flash Point	45°C (113°F)
Boiling Point	169°C

ATOMIC COMPOSITION

No. of H Atoms per cm ³	5.36 x 10 ²²
No. of C Atoms per cm ³	4.03 x 10 ²²
H:C Ratio	1.33
No. of Electrons per cm ³	2.95 x 10 ²³

EJ-305 EMISSION SPECTRUM



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