

EJ-315 DEUTERATED LIQUID SCINTILLATOR

EJ-315 is based on highly purified deuterated benzene and is useful for fast neutron research. A particularly highly enriched deuterated benzene is employed achieve the very high D:H ratio of 141:1. A non-deuterated version, EJ-315P, based on normal benzene, is also available for comparison studies.

EJ-315 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. Because of the toxic nature of benzene, it is strongly recommended that the liquids be ordered in the encapsulated form so you need only to mount your phototubes in order to put the scintillator into service.

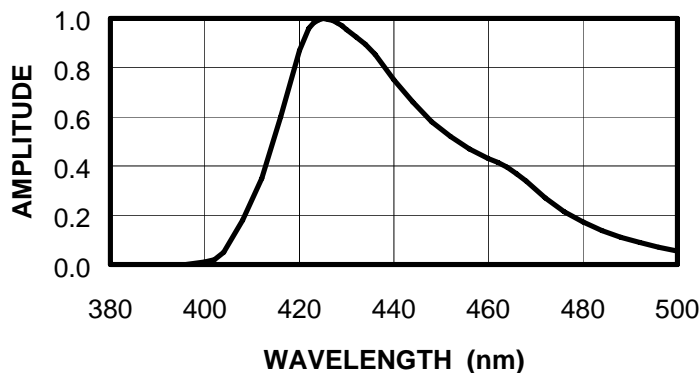
PROPERTIES

Light Output (% of Anthracene)	60%
Photons produced by a 1 MeV electron	9,200
Wavelength of Maximum Emission	425 nm
Decay Time, Short Component	3.5 ns
Bulk Light Attenuation Length	>3 meters
Specific Gravity	0.954
Refractive Index	1.498
Flash Point	-11°C (12°F)
Boiling Range	79°C

ATOMIC COMPOSITION

No. of D Atoms per cm ³	4.06×10^{22}
No. of H Atoms per cm ³	2.87×10^{20}
No. of C Atoms per cm ³	4.10×10^{22}
D:H. Ratio	141
No. of Electrons per cm ³	2.87×10^{23}

EJ-315 EMISSION SPECTRUM



ELJEN TECHNOLOGY
PO Box 870, 300 Crane Street
Sweetwater TX 79556 USA

Tel: (325) 235-4276 or (888) 800-8771
Fax: (325) 235-0701
Website: www.eljentechnology.com