

EJ-204 PLASTIC SCINTILLATOR

In addition to providing the highest scintillation efficiency of any plastic scintillator, EJ-204 delivers the excellent combination of high speed and good attenuation length. It is thus particularly well suited for high-performance detector systems for nuclear and high energy physics research.

It's emission wavelength near 400 nm couples ideally with alkali phototubes while still being long enough to be effectively used with UVT light guides.

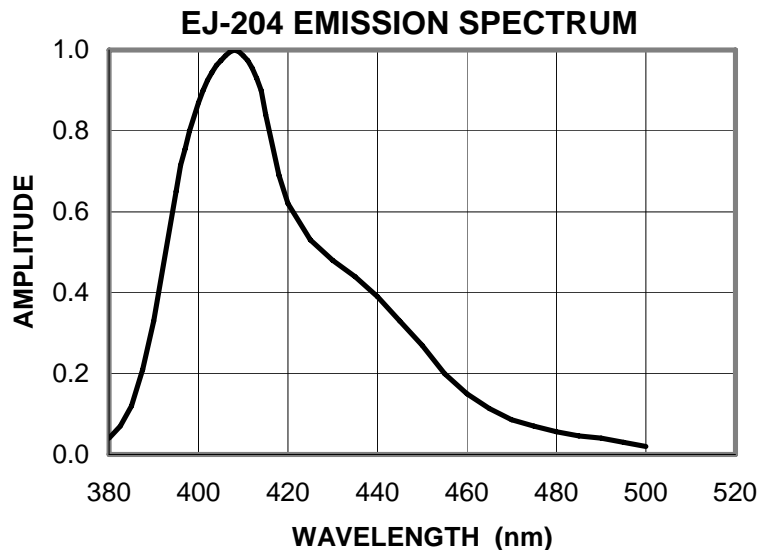
Physical and Scintillation Constants:

Light Output, % Anthracene	68
Scintillation Efficiency, photons/1 MeV e ⁻	10,400
Wavelength of Max. Emission, nm	408
Rise Time, ns	0.7
Decay Time, ns	1.8
Pulse Width, FWHM, ns	2.2
No. of H Atoms per cm ³ , x 10 ²²	5.15
No. of C Atoms per cm ³ , x 10 ²²	4.68
No. of Electrons per cm ³ , x 10 ²³	3.33
Density, g/cc:	1.023

Polymer Base: Polyvinyltoluene
Refractive Index: 1.58
Vapor Pressure: Is vacuum-compatible
Coefficient of Linear Expansion: 7.8×10^{-5} below +67°C

Light Output vs. Temperature:
 At +60°C, L.O. = 95% of that at +20°C
 No change from +20°C to -60°C

Chemical Compatibility: Is attacked by aromatic solvents, chlorinated solvents, ketones, solvent bonding cements, etc. It is stable in water, dilute acids and alkalis, lower alcohols and silicone greases. It is safe to use most epoxies and "super glues" with EJ-204.



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