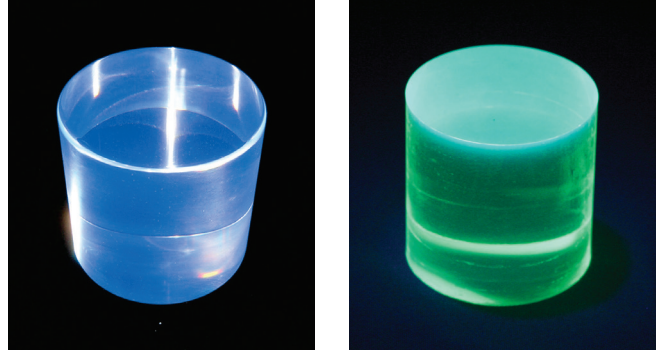


PSD PLASTIC SCINTILATOR EJ-276 & EJ-276G

EJ-276 pulse-shape discriminating (PSD) plastic scintillator enables the separation of gamma and fast neutron signals on the basis of their timing characteristics. This scintillator replaces all versions of EJ-299-33 and EJ-299-34 PSD scintillators and embodies the following improvements:

- Excellent physical hardness, equal to or superior to that of standard plastic scintillators
- Long-term stability of scintillation and optical characteristics
- Basic PSD properties increased to being comparable to the best liquid scintillators

EJ-276G with green fluorescence is also available for use with solid state sensors.



PROPERTIES		EJ-276	EJ-276G
Light Output (% Anthracene)		56	52
Scintillation Efficiency (photons/1 MeV e ⁻)		8,600	8,000
Wavelength of Maximum Emission (nm)		425	490
H Atoms per cm ³ (×10 ²²)		4.53	4.53
C Atoms per cm ³ (×10 ²²)		4.89	4.89
Electrons per cm ³ (×10 ²³)		3.52	3.52
Density (g/cm ³)		1.096	1.096
Approx. Mean Decay Times of First 3 Components (ns)	Gamma Excitation	13, 35, 270	—
	Neutron Excitation	13, 59, 460	—

CHEMICAL COMPATIBILITY

Attacked By: Aromatic solvents, Chlorinated solvents, Ketones, Solvent bonding cements, etc.

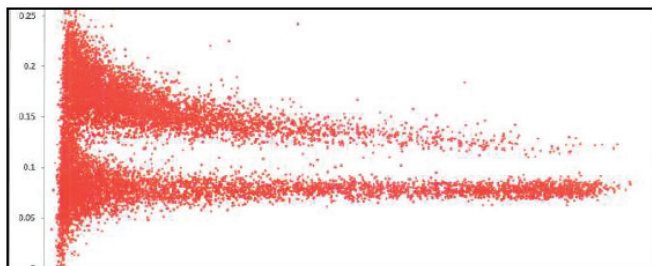
Stable In: Water, Dilute acids and alkalis, Lower alcohols, Silicone greases.

It is safe to use most epoxies with this scintillator.

Available Sizes

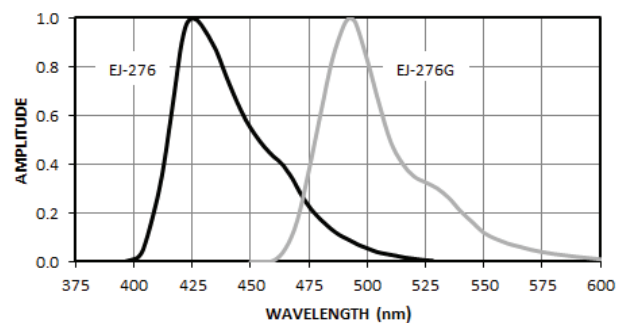
Cylinders up to 127 mm diameter x 200 mm long and plates up to 25 mm thick x 250 mm x 250 mm can be supplied. Precision imaging arrays with square pixels with cross sections as small as 0.75 mm can also be supplied.

PSD SCATTER CHART, AmBe



SCINTILLATOR SIZE: 127 mm DIA × 51 mm THICK

EJ-276 & EJ-276G EMISSION SPECTRUM



Revision Date: October 2017



ELJEN TECHNOLOGY

1300 W. Broadway, Sweetwater, TX 79556

www.eljentechnology.com • eljen@eljentechnology.com

Toll Free (USA): (888)-800-8771 • Tel: (325)-235-4276 • Fax: (325) 235-0701

