

BC-422Q

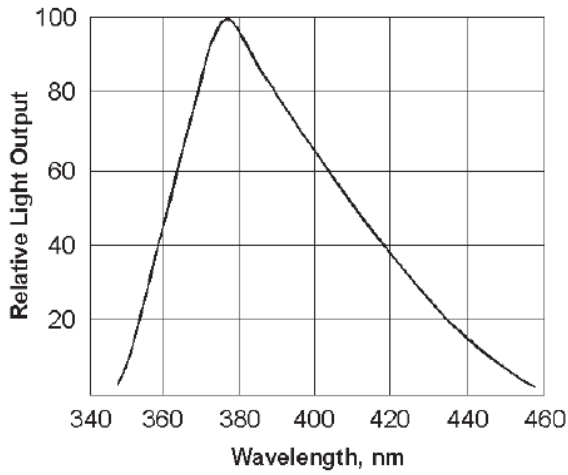
Ultra-Fast Timing Plastic Scintillators

BC-422Q premium plastic scintillator is intended for use in ultra-fast timing and ultra-fast counting applications. It is quenched with various weight percentages of benzophenone (specified at time of order) to improve timing properties. The faster timing comes at the expense of total light output, however.

	Weight % Benzophenone					
	None*	0.5	1.0	2.0	3.0	5.0
Scintillation Properties						
Light Output, %Anthracene	55	19	11	5	4	3
Rise Time, ps	350	110	105	100	100	100
Decay Time (ns)	1.6	0.7	0.7	0.7	0.7	0.7
Pulse Width, FWHM, ps	1300	360	290	260	240	220
*BC-422						

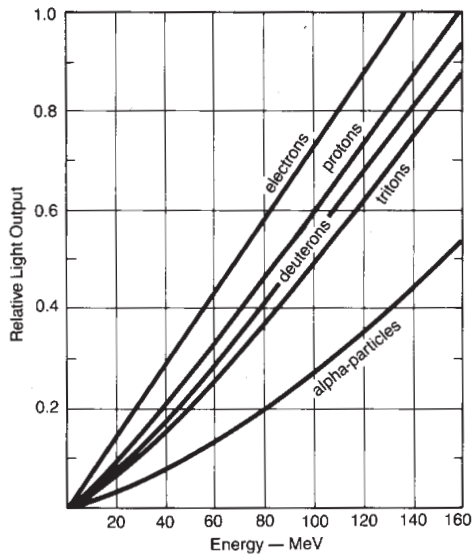
General Technical Data -	
Base	Polyvinyltoluene
Density [g/cc]	1.032
Expansion Coefficient (per°C,<67°C)	7.8X10 ⁻⁵
Refractive index	1.58
Softening Point	70°C
Vapor Pressure	May be used in vacuum
Solubility	Soluble in aromatic solvents, chlorinated solvents, acetone, etc. Unaffected by water, dilute acids, lower alcohols, alkalis and pure silicone fluids or grease.
Light Output	At +60°C = 95% of that at+20°C. Independent of temperature from -60°C to +20°C

Emission Spectra

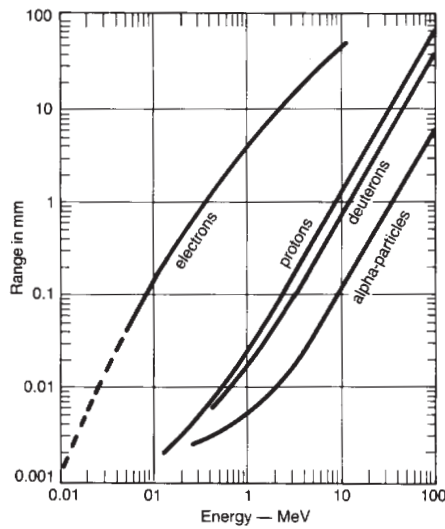


Atomic Particles Response

Premium Plastic Scintillator Response to Atomic Particles



Range of Atomic Particles in Premium Plastic Scintillator



Manufacturer reserves the right to alter specifications.

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