

BC-430

Red-emitting Premium Plastic Scintillator

BC-430 emits in the red region which makes it ideal for use with silicon photodiodes and red-enhanced photomultiplier tubes.

This premium plastic scintillator is available as sheets, rods and thin films in the same range of sizes as all other SGCD organic scintillators.

Scintillation Properties –

Light Output, %Anthracene	45
Rise Time, ns	3.2
Decay Time, ns	16.8
Pulse Width, FWHM, ns	17.7
Wavelength of Maximum Emission, nm	580

Atomic Composition –

No. of H Atoms per cc	5.23×10^{22}
No. of C Atoms per cc	4.72×10^{22}
Ratio H:C Atoms	1.108
No. of Electrons per cc	3.36×10^{23}

General Technical Data –

Base	Polyvinyltoluene
Density	1.032 g/cc
Refractive Index	1.58
Coefficient of Linear Expansion	7.8×10^{-5} , below 67°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 +2°C. Independent of temperature from -60°C to +20°C
Softening Point	70°C



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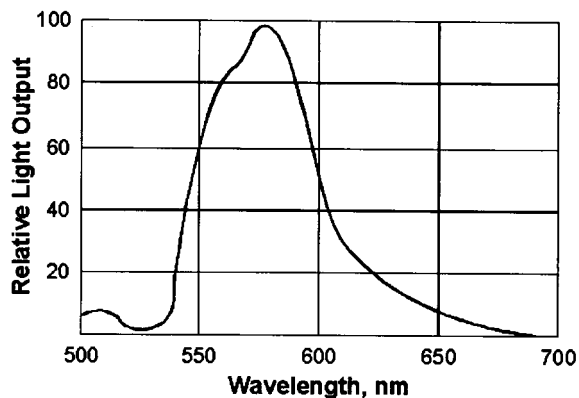
China

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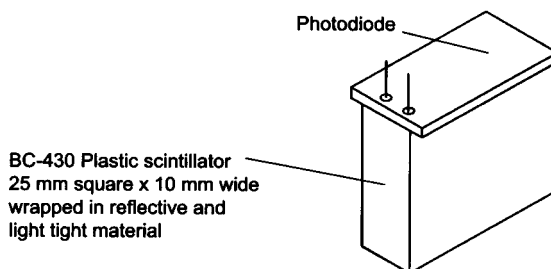
www.detectors.saint-gobain.com

BC-430 Red-emitting Plastic Scintillator

Emission Spectrum –



Application Example –



1CmX2.5CmX2.5Cm BC-430 (580nm)
1CmX2Cm PIN DIODE

