

BC-800, BC-802 Premium Acrylic Plastic

Acrylic plastic is a colorless plastic commonly used to make light guides for plastic scintillators.

BC-800 is UVT Acrylic Ultraviolet Transmitting and **BC-802** is UVA Ultraviolet Absorbing. Both are cast from decolorized methyl methacrylate monomer. The difference is no ultraviolet absorbing additives are present in **BC-800** but are present in **BC-802**.

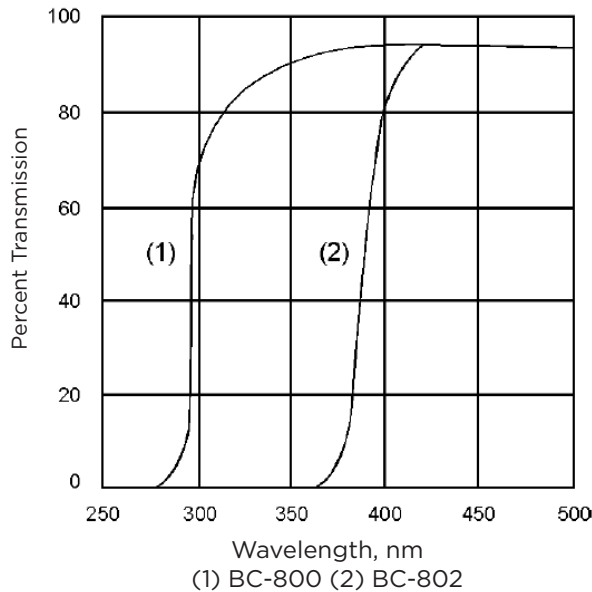
BC-800 is useful as a radiator for Cerenkov radiation, and is the recommended light guide material for scintillators having emission spectra in the near UV. These include thallium activated sodium iodide and BC-418, BC-420, and BC-422 plastic scintillators.

BC-802 is the recommended light guide material for scintillators having emission spectra in the “blue” i.e. 420 nm. (For near UV emission, use BC-800).

Both are available in cast sheets and rods having size tolerances typical of the commercial acrylic products.



Transmittance of 2.54 cm thick Acrylic -



General Technical Data -

Density [g/cc]	1.19
Transmittance of Wavelength*	<370nm (at 2.54cm thick acrylic)
Coefficient of Thermal Expansion	$7.4 \times 10^{-5} / ^\circ\text{C}$
Refractive index	1.49
Softening Point	96°C

*Applies only to BC-800

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Saint-Gobain Crystals

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