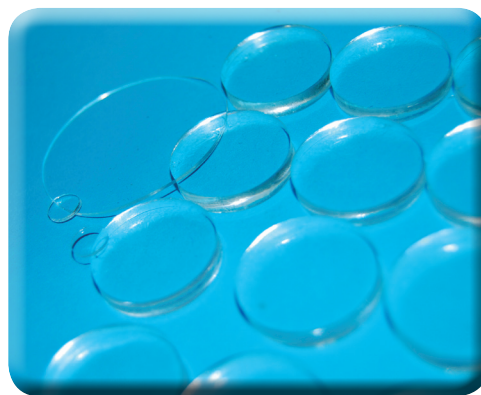


Detector Assembly Materials

Saint-Gobain Crystals can provide you with various detector assembly materials. For more detailed specifications on BC-600 and BC-622A, individual data sheets are available.

Assembly Materials Available

- Optical Cement
- Reflector Paint for Liquid Scintillator Tanks
- Silicone Optical Grease
- Optical Interface Pads
- Black Wrapping Tape
- Plastic Masking Paper
- PTFE Reflector Tape



Pictured are a various sizes of optical interface pads

BC-600 Optical Cement -

BC-600 optical cement is a clear epoxy, which sets at room temperature and has a refractive index close to that of Saint-Gobain Crystals plastic scintillators. It is therefore ideal for optically cementing plastic scintillators to light pipes or optical windows. It is not recommended for coupling scintillators to photomultiplier tubes. For that application, we recommend BC-634A or BC-630.

BC-622A Reflector Paint for Liquid Scintillator Tanks -

BC-622A reflector paint is intended for use with liquid scintillators. It is particularly useful in large steel or aluminum tanks, which require application of the paint at the research site. It is a diffuse reflector and, therefore, should not be used on the major surfaces of long, narrow tanks (total internal reflector and employed in these).

Can be removed from metal by submersing in Methanol alcohol.

BC-631 Silicone Optical Grease -

BC-631 is a silicone optical coupling compound that features excellent light transmission and low evaporation and bleed at 25°C. It has a specific gravity of 0.976 and 1.465 Index of Refraction. It is not recommended that BC-631 optical grease be used with Teflon reflector except for temporary optical coupling. We supply this single component formulation in 113 g and 453 gram jars.

Detector Assembly Materials

BC-634A Optical Interface Pad -

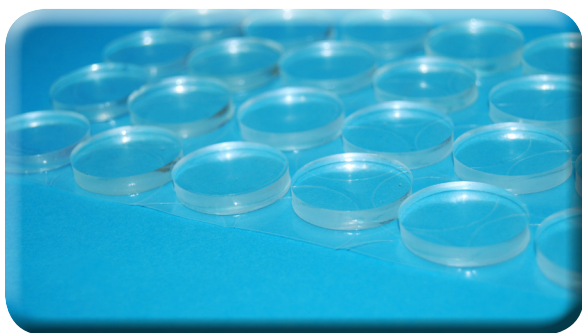
BC-634A is a self-wetting, flexible pad just hard enough to resist tearing while handling.

It is formulated for use within the temperature range of -10 to +60°C, has an index of refraction of 1.42 and an internal transmission >98% around 400nm.

If you cannot maintain sufficient interface pressure, apply a thin film of coupling grease to both sides of the interface pad.

BC-637 High Temperature Optical Interface Pad -

BC-637 interface pads are placed between the plastic and photomultiplier tube. BC-637 is rated at 200°C.



BC-638 Black Wrapping Tape -

BC-638 is a black adhesive tape 2" (50.8mm) wide by .008" (0.2mm) thick. Wrapping a plastic scintillator in one layer will give you a light-tight seal. We provide BC-638 in 36 yard (32.9m) rolls.

BC-640 Plastic Masking Paper -

This material is an adhesive-backed masking paper routinely used for protecting the surfaces of plastic scintillator during handling or storage. We supply BC-640 in rolls 12" (30.5cm) wide by 300' (91.4m) long.

BC-642 PTFE Reflector Tape -

BC-642 is a .003" (0.08 mm) thick (normal) Teflon tape and is frequently used as a reflecting material for non-hygroscopic scintillators. Three layers give you optimum reflectivity. It comes in rolls 2" (50.8mm) wide by 540" (13.7m) long.



Saint-Gobain Crystals

www.crystals.saint-gobain.com

Manufacturer reserves the right to alter specifications.

©2012-2019 Saint-Gobain Ceramics & Plastics, Inc. All rights reserved.

(08-19)