



# Hyperion Solar Film Sheets

This is a precut sheet of Hyperion Solar Film that is safe for direct solar viewing. It allows only .001% of sunlight to pass through it therefore has a neutral density of 5. The image is yellowish-orange. It can be used under magnification and is therefore safe to use with any telescope, refractor, binoculars, view finder, camera, video camera, or spotting scope. It can also be used to view the sun with the naked eye. Use it for direct viewing or to make your own eclipse viewers and solar filters. Only one layer is needed and can be cut with scissors or a sharp razor. The material is .002" thick and is very sturdy and easy to work with. Special tip for owners of large aperture reflecting telescopes: When covering an 8" or larger Newtonian or Schmidt-Cassegrain telescope for solar observation it is recommended that you produce an off-axis filter.

**PLEASE OBSERVE THE FOLLOWING SAFETY PRECAUTIONS WITH EACH AND EVERY SOLAR OBSERVATION! Failure to do so could result in Permanent Blindness or other serious damage to your eyes!**

Before using your solar filter, check the filter's fit and integrity. If your filter is damaged in any way, it must be replaced. DO NOT use if the Hyperion Solar Film material has any holes or the cell is weakened and will not stay on optical device.

- Slide the filter on and off your optical device and be sure that it won't get knocked off by accident or get blown off by a gust of wind.
- We recommend that you tape the filter onto the optical device for added safety.
- Make sure the filter cell and cylinder is still securely glued together.
- Hold the filter up to the sky and look for any pinholes in the filter cell itself or light leakage where the filter cell and cylinder are glued together.

**NEVER** use the filter material at the eyepiece or anywhere else in the telescope's optical path. The intensely concentrated light energy at the eyepiece will burn up the filter in less than a second. (Do you remember burning leaves with a magnifying glass as a child?) The filter will **ONLY** work when attached to the **FRONT** aperture of a refractor objective, in **FRONT** of the Schmidt plate (SchmidtCassegrain telescope) or in **FRONT** of the tube of a Newtonian telescope. .

Be sure that the viewfinder of your telescope is properly covered, either with a solar filter made as described above or with the original dust cover. Unprotected views through your finder scope would have the same catastrophic consequences for your eyes as a look through the main telescope itself!

A filter made of Hyperion Solar Film material is relatively resistant to breakage in comparison to a glass filter. However, care should be taken with sharp pointed objects. Punctured or damaged Hyperion Solar Film should be thrown away and replaced.

Emphasize the importance of safety to those observing with you, especially children. Using Hyperion Solar Film improperly can endanger their eyesight. Never leave the optical device outside unattended during the daytime!