## Cleaning and Care of Baader Planetarium AstroSolar™ Material

We strongly recommend that you store your filter in a tight enclosure (such as a Tupperware or Rubbermaid box), with a little desiccant bag added. It will prolong the life of your filter considerably if you give it the same careful treatment that you would for an expensive Zeiss-SolarGlass-filter or other very expensive piece of solar equipment. Similarly, protect any unused filter material so that it is in new condition when you need it.

Fingerprints on a metallized surface are to be avoided under all circumstances. They have the same consequence on AstroSolar<sup>™</sup> Film as putting fingerprints onto a telescope mirror. Since your AstroSolar<sup>™</sup> filter will be open to dirt and dust, the coating may require gentle "dusting" after extended exposure. If the dust is loose, you may be able to blow it off with compressed air or an air bulb, both available in camera stores. Hopefully, this air dusting is all that your filter will ever require.

Although we don't really advocate more aggressive cleaning, the coating on AstroSolar<sup>™</sup> Film is harder than regular aluminum coatings applied on mirror surfaces. It can be cleaned with **Baader Optical Wonder<sup>™</sup> Cleaning Fluid** (part of the Astro-Physics Optical Cleaning System – OPTCS, see note below) or a solution of mild dish soap and distilled water. Use our **Lint-Free Professional Optical Cleaning Wipes** (see note below) or obtain sterilized cotton wool (as used for eye application), available in pharmacies. Normal cotton wool as used for cosmetic purposes should NOT be used!

Use careful, gentle strokes. For each stroke, a new, <u>clean</u> portion of the **Lint-Free Wipe** or the cotton is to be used - wetted with the **Optical Wonder**<sup>™</sup> or home-made cleaning solution. This helps to avoid scratches in the metal surface due to dust grains already picked up by the wipe or the cotton.

Of course, any such cleaning operation is still a threat to the optical coating - be it a telescope mirror or AstroSolar<sup>™</sup> Safety Film. The important difference is that a damaged mirror won't harm your eyes – damage to any type of solar filter can cause irreversible eye injury. Check the cleaning result by holding the cleaned filter up to the Sun. If scratches or pinholes show up, exceeding a combined uncoated area of 4 square mm, the film is regarded as unsafe and must be destroyed. No single pinhole should exceed 0.5 mm in diameter. Tiny pinholes can be covered with a black felt-tip marker. We recommend using the marker on the inside surface of the film in order to preserve the esthetic appearance of your filter.

Be sure to check the integrity of the filter cell as well, especially if you have a home made filter cell. If in **doubt, replace the filter!** After all, AstroSolar<sup>™</sup> Film is priced so affordably that purchasing a new piece of film every few years or so is relatively painless. If you have the feeling that the performance of your solar filter has suffered over the years, and that the above cleaning procedure hasn't restored the performance, then we suggest that you use a new piece of film and have a fresh and clean solar filter.

We are pleased to offer this diffraction-limited film product at a reasonable price. Remember: if the filter becomes very dirty or is damaged in any way, we encourage you to replace it, rather than risk your precious eyesight.

NOTE: Several years ago, we offered Astro-Physics Optical Cleaning System (part # OPTCS), which included the Baader Optical Wonder<sup>™</sup> Cleaning Fluid and lint-free wipes. Unfortunately, we are no longer able to offer this cleaning kit because of regulations related to the shipping of flammable liquids from Germany to the U.S. We refer to them in these instructions because some people may still have some to use.

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