

# HOW TO make your own SOLAR FILTER for Cameras, Binoculars and Telescopes

planoptically correct mounting of BAADER AstroSolar™  
Solar Film in self-made filter cell



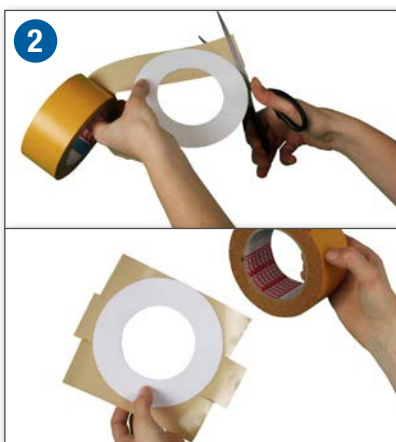
## What you need:

- Baader AstroSolar™ Safety Film
- two sheets of white stiff cardboard
- pair of scissors
- pair of dividers
- Some pieces of “Kleenex”- tissue
- double sticky tape
- Paper glue



## RESULT:

**Self-made Solar Filter**  
attached onto  
Celestron Astromaster  
70mm Refractor



1. Cut two equal sized rings out of stiff cardboard. The inner diameter should match the full aperture of the objective lens, the outer diameter should be 10cm (~4") larger.
2. Cover one full face of each cardboard-ring with double sticky tape. Cleanly cut away any inner and outer excess tape, so that only the two cardboard faces of both rings are covered with the sticky tape.
3. Stretch out a square piece of “Kleenex” or similar facial tissue flat on a hard plane surface (a table) and secure the four corners of the tissue with clear adhesive tape. The tissue must be without any wrinkles.
4. Cut a square piece of AstroSolar Safety-Film a little larger than the outer diameter of the stiff cardboard rings.  
When cutting AstroSolar Safety-Film, always keep it protected between two sheets of white paper. This paper-film-paper “sandwich” is easily cut without creasing the film or getting fingerprints on it. The latest version of AstroSolar Safety Film comes with a protective layer already on both sides.
5. Gently place the AstroSolar Safety-Film onto the flat tissue and secure the four corners with tape – but do not stretch it! Remove the paper on top of the film. If your AstroSolar film came with protective layers, gently peel away the one facing upwards at this time.  
**AstroSolar Safety-Film must not be put under tension if it is to retain its precision optical property.**

6. Hold one cardboard ring, with the sticky side down, 10 millimeters above the film and let it fall down onto the film, so that the ring touches the film all around at the same time.
7. Turn over the cardboard ring with the film covered side facing upward and lay it back onto the Kleenex. Remove the second paper or built-in protective layer, and then stick the second cardboard ring against it. You have created a round film-holder with AstroSolar Safety-Film cleanly and securely fastened without creases and wrinkles – but, most of all: without stressing the film!
8. Now put a 50mm (2") wide stripe of strong cardboard around the objective lens or telescope dew cap and tape the ends with twin-sided adhesive tape. Repeat this procedure 3 times with twin-sided tape between each layer to produce a stiff 50mm long cardboard cylinder that precisely fits onto your optical instrument.



9. Finally, glue the AstroSolar Safety-Film holder onto the 50mm cylinder while the cylinder is still mounted onto the front end of your telescope.



**Your homemade solar filter for visual and photographic use is ready! Store it properly!**

... Telescopes & Spotting Scopes

... Telelenses

... Binoculars

