How to make your own objective solar filter for binoculars, camera or telescope

What you need:

- Baader AstroSolar[™] Safety Film
- two sheets of white stiff cardboard
- one pair of scissors
- some pieces of "Kleenex-Tissue"
- double-sided adhesive tape
- glue
- Cut two equal sized rings of stiff cardboard. The inner diameter to be the same as the full aperture of the telescope-lens (or mirror), the outer diameter to be 10cm (~4") larger.
- Cover one full face of each cardboard-ring with double sticky film or "Double-Tape". Cleanly cut any inner and outer excess of film, so that only the two cardboard faces are covered with sticky tape.
- 3. Stretch out a square piece of "Kleenex-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 stretched out flat without ripples.
- 4. Cut a square piece of AstroSolar Film a little larger than the outer diameter of the stiff cardboard rings.
- 5. For cutting keep AstroSolar Film always protected between two sheets of white paper. This "sandwich" with both sides paper and the film inbetween can easily be cut without producing cheases or fingerprints on the film.
- Gently place AstroSolar Film onto the flat Kleenex-tissue and secure the four corners with tape – but do not stretch it!
- 7. AstroSolar Film must not be put under stress tension to retain it's precision optical property.
- Hold one cardboard ring with the sticky side down 10 millimeter above the film and let it fall down onto the film, so that the ring touches the film all around at the same time.













 Turn around the cardboard ring with the film covered side facing upward and lay it back onto the Kleenex. Stick the second cardboard ring against it. Now you have created a round film-holder with AstroSolar Film cleanly and securely fastened without cheases and ripples – but most of all: without stressing the film!





10. Now put a 50mm (2") wide stripe of strong cardboard around the telescope dew cap or front end and tape the ends with double-tape. Repeate this procedure 3 times with double-tape between each layer to produce a stiff 50mm high cardboard cylinder to precisely fit onto your telescope.







11. At last glue the AstroSolar film holder onto the 50mm cylinder while the cylinder is still mounted onto the front end of your telescope.









Your homemade solar filter is ready! Store it properly!





