

# Sun filter for the Astro Didaktik Newton Reflecting Telescope

This filter uses the AstroSolar Sun Filter made by BAADER Planetarium, Germany, with a filter factor of 1:100,000 which corresponds to an Optical Density of 5.0

## Instructions

**Step 1:** Remove the Sun Filter surround [S1] from the cardboard plate including the circle in the centre. Do not fold yet.

**Step 2:** Carefully cut the Sun Filter foil so that it fits the hexagonal shape of the Sun Filter surround and completely covers the cut out circle.

**Step 3:** Coat the back of the Sun Filter surround, apart from the tabs, with glue and carefully stick the foil onto it without creasing. It does not matter which way up the foil is.

**Step 4:** Remove the Sun Filter support [S2] from the cardboard plate. Fold along the dotted lines and place it around the end of the telescope to check the size. The ring needs to be loose enough so that it can be slipped over the end and removed again easily and tight enough not to slip off by itself. When you have the correct size stick the two ends together with sticky tape.

**Step 5:** Fold back the six tabs on the Sun Filter surround and glue them on to the support ring you have just made. The tabs should match up with and cover the six sections of the support ring

## Safety Instructions

### Follow these safety instructions at all times

1. **Never** look directly at the sun with a telescope unless you have a Sun Filter fitted. Your eyes could be irreparably damaged.
2. Check the Sun Filter carefully before each use to make sure it is not damaged in any way and that it fits securely on the end of the telescope
3. Children must be supervised by an adult when using this device.
4. Do not look through the sighting devices of the telescope to find the sun but align the telescope to the sun by moving the telescope until the shadow of the front sight exactly covers the rear sight.

The Sun Filter is now finished and you can point the telescope at the sun, to observe sunspots.