

Electro solar cooker – technical specifications and photographs

The source or production of the materials used in the E solar cooker is as follows (status May 2012):

External casing	Hard pavatex coated with galvanised sheet metal
Lid	Wood covered with aluminium offset folio and sprayed
Cooker interior (tub)	Offset aluminium folio painted black
Insulation	4 kg raw cotton fibres, untreated, ca. 3.quality
Solar panels	2x5 Watt
Batteries	12 V, 5 Ah, service-free lead batteries
Charging control and conversion	Built-in protection against overloading or discharge
Fuse	For interruption in longer periods of non-use
Life	Cooker 5-10 years, Lamps ca. 2 years, Batteries ca. 2 years. The batteries can be easily replaced by our staff..
Recycling	Currently, sustainable disposal of batteries is not possible in Madagascar. We collect them in a container and ship them back to Wimmis in Switzerland for recycling

Development in Madagascar



Our talented electrician, Astina, prepares an accumulator. The accumulators should last 2 to 3 years and can easily be replaced by our electrician. Used or defective accumulators have to be disposed of in Switzerland



3 accumulators à 2400 mAh, with 4 volts. The built-in charging regulator serves to protect against overload or discharge.



Christian builds the body of the cooker in the metal workshop and in the joinery. Almost unbreakable safety glass is used.



The cooker is primed



Individual parts are sprayed





The accumulator is attached to the underside



A word of thanks to ADES Switzerland is inscribed



This is the electricity panel with the fuse (left), 2 plugs for light and radio and a USB point to charge mobile telephones

The two photo-voltaic panels each have a 5 watt strength. That is sufficient to generate 15 hours of light (i.e. the requirement for 3 to 4 days)



The first tests, for which there is not a lot of time

The cooker is ready for shipping