# **TECHNICAL DATA OF YOUR SOLAR DEVICE**

# Name of the solar device:

Pil Kaar

# Family

solar cooker

### **Production**:

Commercial, artisanal

**Type of solar device** (oven/parabolic/etc., accumulation and/or concentration, direct/indirect): Single mirror box cooker with additional internal reflectors, accumulation compartment.

## **General description**:

The Pil Kaar is a box cooker made of high quality materials and comes ready-to-use. The insulation is made of natural materials and is non-poisonous. It has an acrylic external reflector and internal reflectors of aluminum. The bottom is made of anodized aluminum. The glass plate is of hardened and temperature-resistant special glass. Double hinges allow easy handling. You will find also a sun tracking screen on the frame to adjust the mirror. Once painted with varnish the Pil Kaar is rain-proof. The name was given by our co-constructor who lives in the Chad, it means Sun Lobby in English language. This cooker is also used on the north pole by the French Polar Institute IPEV to melt ice and snow for scientific purposes. It is tested successfully by several universities, among them Bochum, Liège and Princeton.

**Size** (cm): 44,5 x 44,5 x 30 cm (width x depth x height)

**Opening area**: 0,245 m<sup>2</sup> (reflector and glass plate)

Weight (Kilograms): 10 kg

## Materials:

Chassis: plywood External reflector: acrylic mirror, UV-proof Internal reflectors: aluminum Bottom cook plate: dull black anodized aluminum Insulation: hemp wool mixed with chopped wood, low-emission certified Sealing: special high-temperature black silicone, heat resistant up to 250°C Adjusting rod and fixation: aluminum, CAD-CAM manufactured Frames: aluminum, CAD-CAM manufactured

#### **Temperatures**:

170°C at clear sky, air mass 1.5 and 25° environmental temperature. Even without the external reflector it reached 80°C (at 50°N), enough to pasteurize water.

**Comments**: This cooker is of high professionalism, sold and tested all over the world, especially in the eastern Chad to feed refugees from the Sudanese Darfur region.

## **Documentation available:**

Presently in German and French language only at URL <u>http://www.mueller-solartechnik.com/download/download.htm</u>

For short descriptions in English, French, German and Spanish please visit our homepage <u>http://www.mueller-solartechnik.com</u> where you can select your language and click the appropriate link to solar cookers.

By the time the solar conference in Granada takes place more information will be available.

## Available Maps:

For licensees, dealers and distributors upon request.

### Author's contact:

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### **Commercial availability** (if it is a commercial device):

Shipping worldwide. E-shop available at our homepage. Credit cards accepted via PayPal.

**Picture**/**s** of your solar device (can be pasted in this file or sent as an attachment):

