

QUALITY STANDARD

Solar Cookit sets + WAPI / Haybasket

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CooKit set components + WAPI:

- 1. CooKits heet: aluminium foil glued on cardboard
- 2. 4 litre black lightweight pan
- 3. 2 or 3 litre black lightweight kettle
- 4. Cotton bag for CooKit sheet and components
- 5. 2 heat resistant plastic bags
- 6. 2 pieces of 35 cm string
- 7. 2 clothes pegs
- 8. 1 rubber or elastic band
- 9. Leaflet for end users: How to use CooKit and WAPI
- 10. Flyer Integrated Solar Cooking
- 11. WAPI (water pasteurization indicator)

CooKit set

CooKit + components

- 1. The CooKit sheet + slots and folding is exactly conform mould and manual
- 2. The surface of the CooKit is smooth and without dents, lumps or air bells under alum foil
- 3. The outside CooKit sheet has been nicely painted in colour
- 4. The binding of all edges and slots are well glued and look good
- 5. The edges of sheet are not curled or damaged
- 6. The slots are conform mould; the edges fit perfect in the slots
- 7. The edges and slots of the whole CooKit have been cut smoothly and sharp
- 8. The folded CooKit sheet resemble a nice square parcel
- 9. The CooKit set is complete, check all components + pan + WAPI
- 10. The cotton bag is of good quality cotton, is clean and well sewed and has standard size

4 - litre pan

- 11. The pan has a lit and has not been damaged
- 12. Pan + lit, kettle + lit are properly painted with blackboard paint on the outside

WAPI + kettle

- 13. WAPI: In hot water the wax in the WAPI does not leak
- 14. The fisher line has a length of minimal 35 cm
- 15. The kettle for water pasteurization is not damaged and has a lit

Insulated Hay Basket

- 1. Insulated Hay basket space inside big enough for locally used pans (4-6 lt) after insulation!!
- 2. Insulation: straw/ grass, plastic, cotton, sponge, old newspaper, rags, wool, chicken feathers etc etc....any material with insulating effect......

I Quality CooKit sheet: Cardboard / aluminium foil / plastic bags

The Solar CooKit has to be a guaranteed quality handmade durable cooking appliance conform worldwide / uniform design and standard, see manual How to manufacture.

Cardboard

- Quality outside CooKit (strong side for painting): Virgin quality
- Quality inside CooKit: (soft side for gluing alum foil): Recycled quality
- Quality wave in between strong and soft side: e-flute or e-flood?

Aluminium rolls 20 or 40 kg

Specification: Aluminium foil on paper not damaged

20 respectively 40 kg roll has be rerolled using the Metal Stand with roller (standard design with measurements available Fik.R.B.)

2 Heat resistant plastic bags

- Always 2 heat resistant plastic bags in CooKit set
- Quality: plastic bag can resist 145º Celsius (temperature cover)
- Size plastic bag big enough containing all parts of the CooKit set min 45.x 50 cm
- Plastic bags has no wholes and not damaged. If so, replace

II All CooKit production steps: Gluing – Cutting – Painting – Binding – Folding

- a. Gluing alum foil on cardboard:
- 1. Always use the metal stand to unroll the aluminium foil
- 2. There is no dust or dirt on the cardboard respectively aluminium foil
- 3. The table is always clean
- 4. Cloths material fixing aluminium foil on cardboard is clean
- 5. Virgin (strong) side of cardboard has been used.
- 6. No pressing marks on aluminium foil
- 7. No damages after gluing
- 8. No air bells between aluminium foil and cardboard
- 9. No folding lines in alum. foil
- 10. Dried sheets are flat (dried in the shadow !!)
- 11. 4 edges are flat (dried with weight on the cardboard)
- 12. Glued alum foil on cardboard is completely dry before cutting.

b. Cutting CooKit sheet using mould:

- 1. Cutting and piercing all folding lines according the standard metal mould
- 2. Outside lines, slots and folding points are conform CooKit mould
- 3. Edges and slots look sharp. (only after 30 hours drying!! and sharp knifes)
- 4. Avoid pressing with your fingers, hand on CooKit sheet
- 5. Never use scissors!

c. Painting cardboard side of CooKit sheet

- 1. Use coloured strong quality paint (red or green or yellow);
- 2. Use quality oxide shiny; this increases the cardboard quality considerable (up to 5 years)

- 3. Acryl paint is good but less strong. In this case give a 2nd layer with transparent lacquer
- 4. The paint has been stirred well.
- 5. Oxide paint needs min. 24 hours drying; 1 layer is enough (total 24 hours)
- 6. Acryl paint needs 2 layers + transparent lacquer, takes 3 hours drying. Lacquer drying takes 20 hours. Total for drying: 26 hours (and more labour)
- 7. Use 5-7 cm brushes, always clean; keep the used brushes in turpentine
- 8. Paint in the direction of the cardboard lines, and in 1 direction. The cardboard looks nicely painted and glossy / shiny

d. Binding edges and slots

- 1. The poplin binding looks nice and without torns.
- 2. The binding is nicely glued on all edges and slots.

e. Folding standard using instruction Manual How to manufacture

- 1. Folding must be in accordance with instruction Manual How to manufacture, page Thus there is *only one way* of folding.
- 2. The folding lines are 'sharp' and precise
- 3. There are no pressing marks on the alum side;
- 4. There are no false folding lines !!.

III Quality 4 liter pan + cover /lit

- Quality is light weight aluminium from market / factory
- Size of cooking pan not less than 3.8 litre max 4 litre
- Preferably without handles (to decrease the size for the hay basket
- Pan and lit properly painted with blackboard paint
- Pan and / or lit are not damaged; otherwise replace

IV Cotton bag for CooKit sheet and components

- Bag has been manufactured from strong quality cotton, not bleached and clean cotton
- Size of cotton bag: min 50 x 50 cm
- For Promotion: print name organisation / village on cotton bag
- The cotton bag looks attractive for end users
- Cotton bag has been sewed on sewing machine

V WAter Pasteurization Indicator (WAPI)

- WAPI is made from empty BIC ball point
- The standard small whole in the BIC has been avoided in the WAPI
- The WAPI has the size of maximum of 7 cm
- WAPI looks nice, lined and attractive
- WAPI: In hot water the wax in the WAPI does not leak
- The fisher line has a length of minimal 35 cm
- There 3 stainless steel washers: 2 at both ends to turn WAPI upside down after use.
 1 around the plastic tube to keep the line fixed to the WAPI
- The kettle for water pasteurization not damaged and has a lit

VI General quality points for insulated hay basket

- The plain basket can be produced by locally available bamboo, dried grass etc. etc.
- Use local traditional ways of making hay baskets and adapt to the function of keeping a pan
- Even an empty nylon bag used for grains can be appropriate for making cheap insulated basket.
- The size of the **Insulated** hay basket is **inside** appropriate to keep a pan 4 7 litres; for HH 6 persons: 4 litre pan; for HH of 10 people up to 10 litre pan.
- There is not 1 standard model for Insulated hay baskets; there are many options but there general principles:
 - 1.Layers of wool, cloth, cotton, grass, banana leaves, straw, chicken feathers, sponge..... all is possible as long as it insulates for at least 3 to 4 hours.
 - 2.In between the layers newspaper, plastic.
 - 3.At the bottom and on the top a pillow with same insulation material
 - The insulation material has been covered by preferably good quality cotton.