

UNHCR Environmentally Friendly Procurement

KITCHEN SET

Providing material assistance to forcibly displaced populations is fundamental to UNHCR's protection mandate. In an emergency, kitchen sets are one of the main essential items that UNHCR distributes as part of the assistance to the affected populations. The kitchen set contains cooking and serving utensils suitable for a household of 5 people. UNHCR procures more than 800 thousand kitchen sets annually¹.

END USERS

UNHCR is mandated to protect and assist refugees, forcibly displaced communities, and stateless people. The product with this specification will be used by the people we serve, primarily in emergencies. The end users include people of all ages ranging from infants to older persons, persons with disabilities, and pregnant women. Therefore, the supplier needs to understand and study the needs of forcibly displaced populations, especially in emergencies, to ensure an innovative and sustainable product design that is user-centered.

SUSTAINABLE SUPPLY CHAIN

For UNHCR to fulfill its mandate, it is imperative to minimize the environmental footprint of humanitarian assistance. Our approach to a sustainable end-to-end supply chain includes planning, sourcing, material, manufacturing processes, procurement, delivery, and lifecycle management of goods.

A holistic assessment of sustainable products includes but is not limited to, the following criteria:

- The product design follows Universal Design principles that are user-friendly and accessible².
- Manufacturing processes take into consideration the protection of the environment and respect for social standards³.
- Products are made from sustainable materials, and through sustainable mechanisms.
- Packaging is made from sustainable material, ideally with a second-life purpose.
- All unnecessary single-use plastic is removed⁴.
- Packaging, palletizing, and load ability of transport units are optimized.
- Products are recyclable.
- A life cycle analysis, including GHG emission factors, is performed for all products.
- The geographical distribution of the supplier base is diversified to ensure the proximity of product delivery.

PREFERENCE

In addition to the cost effectiveness, preference will be given to a product that is most user-friendly and has the highest overall sustainability elements that satisfy technical specifications. The suppliers offering products that meet these criteria will be approached for a sustainability evaluation ahead of the final tendering process. Please see the Sustainability Procurement Indicators from the United Nations Global Market that we comply with.

1 <https://www.unhcr.org/media/introduction-unhcr-procurement-2022>

2 <https://universaldesign.ie/what-is-universal-design/the-7-principles/>

3 Suppliers to demonstrate the application of ISO 14001:2015: Environmental managing systems, ISO 9001:2015: Quality Management systems, ISO 26000: Guidance on social responsibility

4 <https://www.unep.org/resources/report/single-use-plastics-roadmap-sustainability>

Item Application Sample



General Information and Description

The kitchen set consists of cooking and serving utensils suitable for a family of 5 people. All the items should be made of stainless steel⁵ in line with minimum quality standards included in the specification.

Note: The above images are for reference purposes only.

⁵ <https://greensteelworld.com/>

Kitchen Set Composition

Each kitchen set includes the following items:

- 1 x 7-litre cooking pot;
- 1 x 2.5-litre frying pan, which is used as a lid for 7 litre cooking pot;
- 1 x detachable handle for the 2.5 litre frying pan;
- 1 x 5-litre cooking pot with a lid;
- 5 x 1-litre bowls;
- 5 x 0.75-litre plates;
- 5 x cups;
- 5 x tablespoons;
- 5 x table forks;
- 5 x table knives;
- 1 x kitchen knife;
- 2 x serving spoons;
- 1 x serving ladle;
- 1 x scouring pad.

Design of the Items

Manufacturers and suppliers are invited to provide items with designs that improve the performance of kitchen sets and lead to the most compact packing of kitchen sets.

Estimated Weight and Volume

Estimated gross weight: Approximately 6.8 kg
Estimated gross volume: Approximately 0.015 m³

Expected Life Span and Shelf Life

Expected shelf life: minimum 10 years.
The cardboard packaging has a shelf life of 4 years.
Expected lifespan: minimum 2 years

Material Specifications

Material: Stainless steel. Preferably green steel.

Minimum quality standards for the material:

All the items of the kitchen sets should be made of stainless steel. Two types of stainless steel are allowed:

- Stainless steel type 1.4016, equivalent to American grade 340 (according to ISO 15510:2010),
- Stainless steel type 1.4301, equivalent to American grade 304 (according to ISO 15510:2010).

Chemical composition:

Chemical composition of stainless steel as per EN 10088-1.

Acceptability limits:

- Minimum chromium content: 16 %
- Possible added elements: Ta, Nb, Zr, Mo, Ti, Al, Cu with the following maximum contents:
- 1 p 100 for Ta, Nb, Zr
- 4 p 100 for Mo, Ti, Al, Cu

Food grade requirement:

Stainless steel which is used to produce kitchen sets should be suitable for being in contact with foodstuffs. Food grade to be certified in conformity with EU regulations No. 1935/2004 or equivalent, and with Information Notice No. 2004-64. Suitability of materials to be in contact with foodstuffs.

Radiative content:

The manufacturer of the kitchen set must ensure that if the raw material for the kitchen sets used radioactive content it must be below the values provided in tables 1 and 2 of the IAEA Safety Standards Series Safety Guide No RS 601.7 "APPLICATION OF THE CONCEPTS OF EXCLUSION, EXEMPTION AND CLEARANCE".

The supplier must certify that the items manufactured were checked for radiation prior to shipment and were found within the allowed level of radioactivity. A certificate will have to be issued by the supplier.

Finishing:

All the items in the kitchen set must be washed and polished and should not contain any residuals or dust, and must be clean, including cutlery. **Surface finish:** maximum RA 0.8 micrometer measured according to ISO 4287.

Exemplary (reference) items of the kitchen sets

The picture and size of each item should be used as a reference only, therefore it is not required to comply with this specific model. Suppliers are invited to offer alternative solutions for structures and stacking that meet the basic requirements indicated in the specification, while minimizing the volume and maximizing the durability and performance of the items.

1 x 7-litre cooking pot:

Material: stainless steel.

Inner volume: minimum 7 litres

Internal diameter: minimum 25 cm, maximum 28 cm

Thickness: minimum 0.8 mm in the center of the bottom; and minimum 0.6 mm at 20 mm from the top of the wall.

Handles: 2 stainless steel handles, attached with strong rivets, rivets must not leak, bent upward to allow a hanging bar of 10 mm to pass through; handles must resist 20 kg load in the normal usage position.

Lid: the 2.5-litre frying pan should be designed to fit properly into the 7-litre cooking pot.



1 x 2.5-litre frying pan (used as a lid for 7L cooking pot):

Material: stainless steel.

Inner volume: minimum 2.5 litres.

Internal diameter: adapted to serve as a lid for the 7-litre cooking pot.

Thickness: minimum 0.8 mm in the center of the bottom.

Handle: 1 detachable stainless-steel handle; the handle must resist a 10 kg load in a normal usage position.



1 x 5-litre cooking pot with a lid:

Material: stainless steel.

Inner volume: minimum 5 litres.

Internal diameter: minimum 22 cm, maximum 24.5 cm.

Thickness: minimum 0.8 mm in the center of the bottom; and minimum 0.6 mm at 20 mm from the top of the wall.

Handles: 2 stainless steel handles, attached with strong rivets, rivets must not leak, bent upward to allow a hanging bar of 10 mm to pass through; handles must resist 16 kg load in the normal usage position.

Lid: lid with a minimum thickness of 0.6 mm with a strong and durable handle/knob; the handle/knob of the lid must resist up to 2 kg load in the normal usage position.



5 x 1-litre bowls:

Material: stainless steel.

Inner volume: minimum 1 litre.

Thickness: minimum 0.5 mm in the center of the bottom.

Height: 5-7 cm.



5 x 0.75-litre plates:

Material: stainless steel.

Inner volume: minimum 0.75 litres.

Thickness: minimum 0.5 mm in the center of the bottom.

Diameter: 24-25 cm.



Exemplary (reference) items of the kitchen sets

5 x 0.3-litre cup:

Material: stainless steel.

Inner volume: minimum 0.3 litres.

Thickness: minimum 0.5 mm in the center of the bottom; and minimum 0.4 mm at 20 mm from the top of the wall.

Handle: securely welded. Handle to resist to 1 kg pulling. Alternative design options are encouraged to ensure stackability.

Lid: lid with a minimum thickness of 0.6 mm with a strong and durable handle/knob. The handle/knob of the lid must resist up to 2 kg load in the normal usage position.



5 x 10 ml tablespoons:

Material: one-piece stainless steel.

Volume: minimum 10 ml.

Length: minimum 17 cm.

Thickness: minimum 1 mm in the center of the spoon.

Resistance: must resist a weight of 4 kg, applied at the middle of the item.



5 x table forks:

Material: one-piece stainless steel.

Length: minimum 17 cm.

Thickness: minimum 1.5 mm at the back of the tines.

Resistance: must resist a weight of 4 kg, applied at the middle of the item and at the distance between the point where the tines rest on their support and the point where the handle rest.



5 x table knives:

Material: one-piece stainless steel.

Length: minimum 17 cm.

Thickness: Back of the blade: minimum 1 mm, measured at the middle of the blade.

Handle: minimum 1.5 mm, measured at the middle of the handle.

Resistance: must resist a weight of 4 kg, applied at the middle of the item.



1 x kitchen knife:

Material: stainless steel.

Length: minimum 15 cm.

Thickness: Blade minimum 1.5 mm, measured at the middle of the blade.

Handle: wood or plastic with a triple rivet or strong durable fixation.

Resistance: must resist a weight of 4 kg, applied at the middle of the item.



2 x 35 ml serving spoons:

Material: one-piece stainless steel.

Volume: minimum 35 ml.

Length: minimum 30 cm.

Thickness: minimum 1 mm in the center of the scoop.

Resistance: must resist a weight of 4 kg, applied at the middle of the item.



1 x 100 ml serving ladle:

Material: stainless steel.

Volume: minimum 100 ml.

Length: minimum 30 cm.

Thickness: minimum 1 mm in the center of the scoop.

Handle: securely welded, or in one piece. Handle to resist to 1 kg pulling. Flat handle with a hole.

Resistance: must resist a weight of 4 kg, applied at the middle of the item.



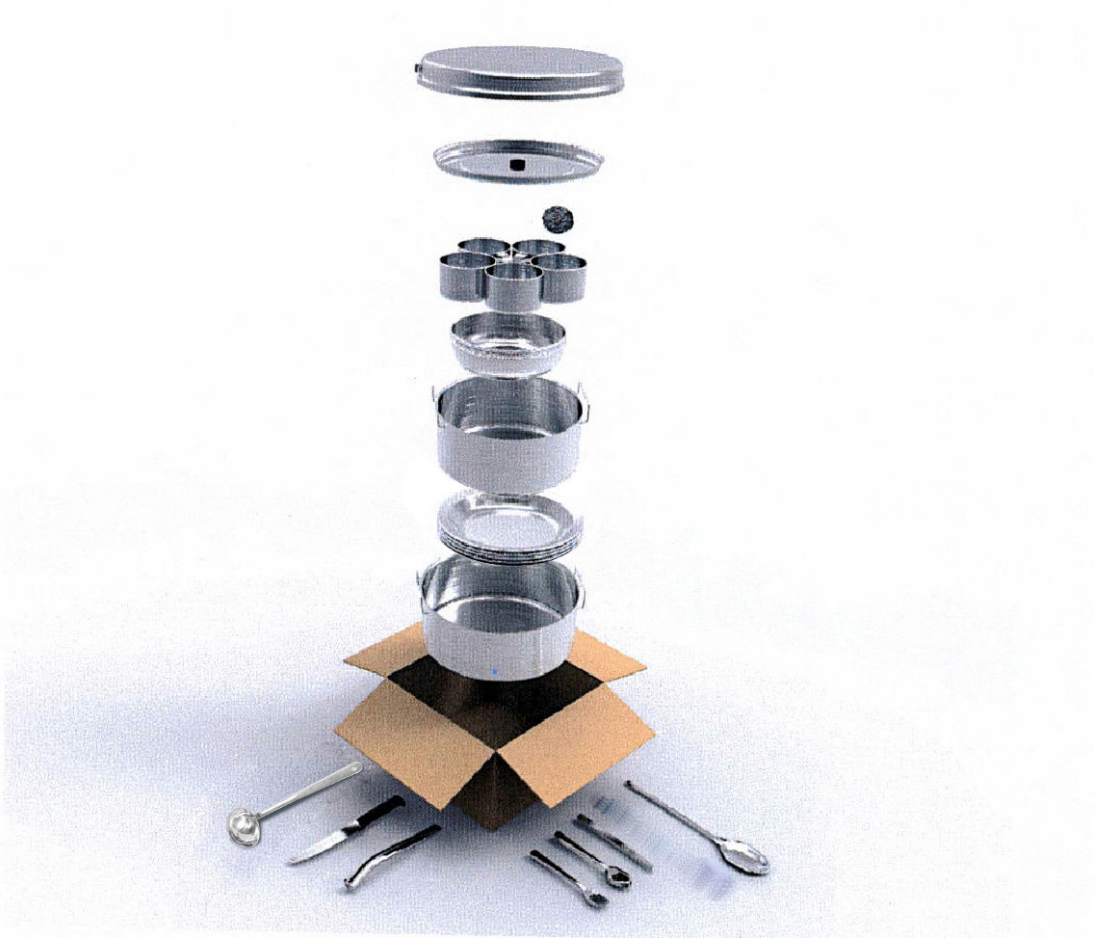
1 x scouring pad:

Material: stainless steel wire scouring pad.

Weight: minimum 20 g.



Exploded View



Reference Picture



Primary packaging

Reducing plastic waste in the environment. Individual items should have no plastic packaging (zero plastic).

If necessary (for protection from scratches caused by friction), paper sheets with a thickness of 35 to 45 gsm can be placed between individual items (preferably recycled).

Secondary packaging

One kitchen set should be packed in an export-quality carton box, preferably made of recycled paper of its natural colour. Cardboard boxes must be unbleached and unlaminated. Inks must be non-toxic and ecologically friendly. Innovative solutions are welcome. Recycled symbol is required on the recycled cardboard boxes (for more details refer to the section "Marking on the secondary packaging"). No straps are required for the boxes.

The sizes of the boxes should be optimized to maximize load ability in pallets and containers. A typical box dimensions for reference kitchen sets are 30 x 30 x 20 cm +/- 2%. However, depending on the kitchen set items design, other box dimensions can be also considered.

The exact dimensions of the boxes should be specified in PO.

- Filled secondary packaging must resist without any damage to a weight or a pressure of 140 kg applied on a strong, rigid board on top of the box (equivalent weight to 4 m high stacking).
- Preference will be given to innovative packaging that does not harm the product, ideally with a second-life purpose, and minimizes packaging waste.
- Ensure that user-friendliness and safety aspects of handling persons are considered in the packaging design.

Tertiary packaging

Secondary packaging might be packed on a pallet; in this case, they need to be wrapped in a water-tight material, preferably made of or containing sustainable material, e.g. recycled plastic or reusable material (such as tarpaulins), or other alternatives. Packaging needs to ensure that products are protected from any damage including water and moisture. Innovative sustainable solutions are welcomed. Avoid compostable plastics for packaging and increase recycled content wherever possible.

All the plastic packaging materials -wrapping film, straps (if any), etc.- must contain a proper recycling code to specify the type of plastic used. Use recycling codes as per ASTM International Resin Identification Coding System (RIC)⁶.

In order to avoid pallets slippage during transportation and possible damaging of the carton boxes and their contents, the boxes should be piled to best fit the pallet, i.e. cartons should fit perpendicularly to the edge of the palette and not hang over it or not reach it (edge of the pallet).

⁶ https://www.astm.org/d7611_d7611m-21.html

Optimal Shipping / Container Information

In preparing shipping, the maximum number of items that can fit into a transport unit must be considered. The container layout plan will be defined on the purchase order.

- 20' DC container (without pallets)
- 40' DC container (without pallets)
- 40' HC container (without pallets)
- 20' DC container (with pallets)
- 40' DC container (with pallets)
- 40' HC container (with pallets)

The final number of the transport unit and maximum height of loaded pallet, if palletized, will be defined on the purchase order.

Manufactured marking

Suppliers are required to etch the following information on both the 5-litre and 7-litre pots:

- Supplier and factory marking
- Unique reference batch number
- Date of manufacture
- Type of material
- Information related to the reuse/recyclability of the item

No company logo should be included with the manufacturer's marking. The final marking and design need to be approved by UNHCR before production.

Marking on the secondary packaging

Every box should include a tag with the manufacturer's identification. The tag should be no larger than half of an A4 page and it must include the following information:

- Supplier's and manufacturer's name
- Unique reference batch number
- Date of manufacture

No logo of the supplier is allowed.

Every box made of recycled paper must have a symbol about its recycled nature and the possibility to be recycled (see the figure under *Logo and Shipping Markings on Individual Boxes*).

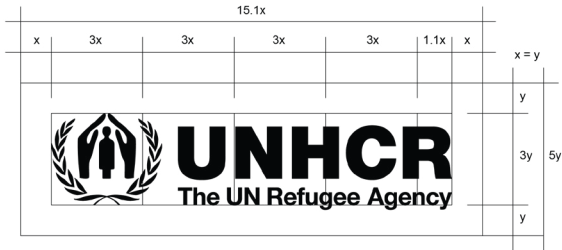
Marking techniques

- Laser engraving
- Printing with water-based ink
- Printing on sustainable sticky tapes
- No harmful ink/colouring should be used

UNHCR Logo Application Reference



UNHCR Vertical Visibility logo



UNHCR Horizontal Visibility logo

Logo and Shipping Markings on Individual Boxes

The front and back of individual packaging (the largest surface sides of the carton) should include only the UNHCR visibility vertical logo. The 2 other opposite sides should include the UNHCR visibility vertical logo with the shipping marking information area (below the logo). The top side should include the horizontal visibility logo in one of the closures and the content list in the other closure.

Every box made of recycled paper must have a symbol about its recycled nature and the possibility to be recycled (see graphic 1):



Graphic 1: Recycled Paper Symbol



Logo and Shipping Marking on Individual Boxes

Logo and Shipping Marking for The Kitchen Set Packaging
Box Size: L 30 x W 30 x H 20 cm +/- 2%



Graphic 2

A. Application of the logo and marking for the front and back sides of the secondary packaging:

On the front and back sides of the Secondary Packaging, the vertical logo must be placed centrally, occupying a minimum of 60% surface space without any image distortion (as per graphic 2). Visibility logo in one of the closures and the content list in the other closure.

Every box made of recycled paper must have a symbol about its recycled nature and the possibility to be recycled (see graphic 1):

Technical Drawing



Logo and Shipping Marking on Individual Boxes

B. Application of the logo in the 2 other opposite sides of the Secondary Packaging:

On the 2 other opposite sides of Individual Packaging the vertical logo and shipping marking information are to be placed centrally, occupying a minimum of 60% surface space (45% for the UNHCR visibility logo and 15% for the shipping markings) and without any image distortions.

Important: In order to respect the integrity of the logo, the shipping marking information area should be visually separated from the lower part of the UNHCR visibility logo and framed with the same indelible ink as the details information as per graphic 2.

The information to be placed in the shipping marking box is as follows:

- UNHCR Item name and number:
- PO No:
- PO Quantity:
- Consignor (supplier/manufacturer):
- Consignee:
- Destination:
- Packing units: {number / total number} - To be marked with consecutive numbers shown over the total number of packing units comprising the consignment (N/N: i.e 1/20, 19/20)



Important: In order to respect the integrity of the logo, the shipping marking information area should be visually separated from the lower part of the UNHCR visibility logo and framed with the same indelible ink as the details information as per graphic 2.

The information to be placed in the shipping marking box is as follows.

Technical Drawing



Logo and Shipping Marking on Individual Boxes

C. Application of the logo and marking on the top side of the secondary package:

On the top side of the secondary packaging for kitchen sets, the UNHCR horizontal logo is to be placed centrally in one of the closures, occupying a minimum of 60% surface space and without any image distortions. The complete content list of the kitchen set should be included in the other closure. Please see the graphic below.

1 x 7-litre cooking pot
1 x 2.5-litre frying pan
1 detachable handle for the 2.5-litre frying pan;
1 x 5-litre cooking pot with a lid
5 x 1-litre bowls
5 x 0.75-litre plates
5 x cups
5 x tablespoons
5 x table forks
5 x table knives
1 x kitchen knife
2 x serving spoons
1 x serving ladle
1 x scouring pad

Technical Drawing

