UNHCR Environmentally Friendly Procurement

DOCUMENT VERSION

This is the second version of this item with enhanced sustainability attributes. This specification represents UNHCR's ongoing commitment to advancing the environmental, technical, social, and economic sustainability of relief items, as of February 14, 2024.

BUCKET, HEAVY DUTY PLASTIC, 14L, WITH TAP, RECYCLED

Providing material assistance to forcibly displaced populations is fundamental to UNHCR's protection mandate. In an emergency, buckets are one of the main essential items that UNHCR distributes as part of the assistance to the affected populations. The food-grade bucket is primarily used in emergencies as a container that offers a solution for water storage protected from contamination.

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 a forcibly displaced population, especially in emergencies, to ensure an innovative and sustainable product design that is user centered.

SUSTAINABLE SUPPLY CHAIN

For UNHCR to fulfil 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 is user-friendly and accessible.[1]
- Manufacturing processes take into consideration the protection of the environment and respect for social standards.[2]
- Products are made from sustainable materials and post-consumer recycled (PCR) materials.[3]
- Packaging is made from sustainable materials, ideally with a second-life purpose.
- All unnecessary single-use plastic is removed.[4]
- 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 proximity of product delivery.

PREFERENCE

Preference will be given to a product that is most user-friendly and has the highest overall sustainability elements that satisfy technical specifications. Please see the Sustainability Procurement Indicators from the United Nations Global Market that we comply with.

1. https://universaldesign.ie/Technology-ICT/Universal-Design-for-ICT/User-Testing/
2. Suppliers to demonstrate the application of ISO 14001:2015: Environmental managing systems, ISO 9001:2015: Quality management systems, ISO 26000: Guidance on social responsibility
3. In the absence of PCR materials, pre-consumer (post-industrial) recycled materials are acceptable.
4. https://www.unep.org/resources/report/single-use-plastics-roadmap-sustainability

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BUCKET, HEAVY DUTY PLASTIC, 14L, WITH TAP, RECYCLED

UNHCR Item No **HH-BU-10004**

Item Application Sample

Technical Specification

Design:	A 14L heavy-duty bucket, stackable and round, with a handle, a clipped cover and a cap that is attached to the lid. It should be easy to lift, fill up and pour from, have a good grip with no sharp edges, and be comfortable to carry for the end user. A user-friendly and accessible product design that follows Universal Design Principles. Note that other design solutions can be considered if they comply with the quality requirement and offer a solution for water storage that sustainably protects from pollution.
Capacity:	Minimum 14L, ISO volume closest to minimum 14L could be considered.
Weight:	Minimum weight for the bucket is 600g if polyethylene (PE) or 550g if polypropylene (PP). Minimum weight for the lid is 150g if PE or 14g if PP. Weight of handle: new, to determine, durable light options are welcome.
Material:	The bucket and the lid are made of a mixture of virgin and recycled (pre-consumer and/or post-consumer) food-grade plastic (i.e., High-Density Polyethylene (HDPE), Low-Density Polyethylene (LDPE), Polypropylene (PP)), which is safe for food and water storage. The target minimum of food-grade recycled plastic in the product is 30%, but a higher and lower percentage will also be considered. Preference will be given to the product that contains the highest amount of food-grade recycled plastic while satisfying the quality and usability requirements of the product. The plastic part of the handle does not need to be food-grade, however it should ideally be 100% recycled plastic and no additional colorants added.
Lid:	A tight-fitting stackable lid of the same material as the bucket with an attached push-on cap. Easy to fill up and pour with the outlet of 50mm +/- 10% and clip cap on the lid. The bucket can be filled through the cap. The lid can be taken off for periodic cleaning so cannot be too tight.
Tap:	Each bucket comes with a loose, sturdy plastic tap, which is stored on the bottom of the bucket during transport. At the destination, the tap can be inserted into the intended hole* in the bucket from the outside and secured by tightening the lock nut from the inside. The tap and its connection must be leak tight. (*The hole for the tap installation should remain intended but not drilled, punched or otherwise poked until the bucket is delivered to the end user. Likewise, for the drop test, the bucket should reach the laboratory without a pre-poked tap installation hole, and the drop test should be conducted without the tap installed on the bucket.)
Handle:	A strong handle with an ergonomic grip, e.g., a strong metal handle with a recycled plastic moulded grip fixed to the bucket, brings comfort to the user's hand. Alternative, innovative solutions are welcome.
Dimensions:	Height is 300mm +/- 15mm Top external diameter is 300mm +/-15mm Bottom external diameter is 240mm +/-12mm If ISO volume standard bucket is offered, dimensions close to these could be considered.
Colours:	Additional colour pigmentation are prohibited to be introduced to the bucket body, lid or handle. It is essential that the bucket body remains sufficiently light for users to discern the liquid level within. White is the preferred color for the bucket body; however, if sourcing recycled material in pure white proves challenging, incorporating small amounts of coloured recycled material is permissible. The lid and handle may be any colour not explicitly prohibited. Colours prohibited for the bucket body, lid, and handle include black, red, and military/camouflaged colours. Incorporating small amounts of coloured recycled material is allowed. Additionally, drawings are prohibited.
Quality of each part:	Strong and durable quality for a long-life span in tough climate conditions. Food-safe, odourless and neutral in taste.
Reinforcement:	The top of the bucket is reinforced to prevent ovaling and other deformation. The walls shall meet the bottom of the bucket with a curved surface to prevent dirt accumulation and facilitate cleaning. The bottom must be smooth and spike-free for improved comfort when carried on the head, with a ribbed bottom to prevent damages.
Stack-ability:	The buckets must be designed for stack-ability, with a shape that facilitates easy separation of each bucket from the stack. To ensure effortless separation, the buckets should feature robust downward extensions of the handle ears or equivalent built-in stacking stops. These elements are essential to prevent the buckets from being tightly pressed together during packaging and transportation.
Compliance:	The bucket and all its supplementary parts should not contain toxic elements according to EN 1186-3-9 standard or equivalent international standard for food-grade materials.
Shelf life:	The life span of the bucket should be a minimum of 2 years.

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Packaging

Primary packaging: Reducing plastic waste in the environment: Individual bucket should have no packaging (zero plastic).

Secondary packaging:

- An optimal number of products should be packed in export-quality secondary packaging, preferably using sustainable material and its natural colour - plastic packaging is forbidden. In case cardboard is used, it must be unbleached and unlaminated. Inks must be non-toxic and ecologically friendly. Innovative solutions are welcome.
- Filled secondary packaging must resist without any damage to a weight or a pressure of 230 kg applied on a strong, rigid board on top of the box (equivalent weight to 6m high stacking).
- Quantity per secondary packaging: currently 20 pcs; the alternative optimal amount will be considered.
- The packing must guaranty that the buckets will not get stuck together.
- 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.

Optimal Shipping / Container Information

What is the maximum number of items you can fit into a transport unit?

Please include the container layout plan.

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.

Manufacturer's Marking

The product should include the following data:

- manufacturer identification moulded on the bucket
- manufacturing month and year moulded on the bucket
- unique reference batch number
- certified sustainability claim/eco-labelling (if applicable)
- Recycling identification symbol and code (as per ASTM International Resin Identification Coding System (RIC))

Supplier's and manufacturer's logos are prohibited. The final marking on the bucket and design needs to be approved by UNHCR before production.

Marking on the Secondary Packaging

Supplier's and manufacturer's logos are prohibited. Shipping marks on the secondary packaging shall be printed in non-toxic black indelible ink. They must remain readable, well-fixed, and clearly legible after a minimum of ten handlings. In case shipping marks are printed separately on labels instead of being directly printed on the secondary packaging, the labels shall neither be plastic nor laminated and the marks should still be printed in black indelible ink. The marks shall include the specified information as detailed in the "Shipping Marks" section of the relevant Goods PO. Each 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 Marks on Individual Boxes).

Marking Techniques

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

Testing

UNHCR will/may carry out tests as its own discretion tests to verify the quality and performance of the item. The following tests are not exhaustive:

Lid: The lid should securely close yet be easy to open and close. To test its performance, the lid must withstand a fall on its side with the maximum volume of water inside. A bucket filled with water is placed on the floor and pushed until it topples over onto its side. The lid must remain intact, and the cap must not open.

Durability: Items will be subjected to simulations to verify their ability to withstand various conditions while remaining functional. Durability will be evaluated in field conditions during normal operation.

Handle: The handle must also resist a 28 kg traction in a normal usage position. Other tests but not limited to: repeated load test, side load test, dynamic load test and twist test.

Flexibility test: The bucket must return to its original shape without damage after applying pressure on the two sides of the top rim to make them touch one another in the middle.

Drop test: The bucket filled with 14 L water or 2 cm below the top and closed with the lid must resist without damage to two consecutive vertical drops from 2 m high from the bucket bottom to the smooth flat concrete floor. Please note, that for the drop test, the tap shall not be installed on the bucket, and the hole for the tap installation shall remain intended but not drilled, punched, or otherwise poked. Requirement: the bucket should not break. Remark: the lid opening and deformation without breakage will not be considered a fail.

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Graphic Reference

Picture of an 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 that meet the basic requirements indicated in the specification.

Detailed View

Capacity: 14 L

Dimensions, (±5%):

Height: 300mm +/- 15mm
Top external diameter: 300mm +/-15mm
Bottom external diameter: 240mm +/-12mmIf ISO volume standard bucket is offered, dimensions close to these could be considered.

Minimum Weight:

Bucket: 600g if PE or 550g if PP
Lid: 150g if PE or 14g if PP
Handle: new, to determine, durable light options welcome.

BUCKET, HEAVY DUTY PLASTIC, 14L, WITH TAP, RECYCLED

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UNHCR Logo Application Reference

UNHCR Vertical Visibility logo

UNHCR Horizontal Visibility logo

Logo and Shipping Marks on Plastic Bucket Boxes

The front and back of the Transport Carton (the largest surface sides of the carton) should include only the UNHCR visibility vertical logo. The two other opposite sides should include the UNHCR visibility vertical logo with the shipping marks area (below the logo).
The top side should include the horizontal visibility logo on one of the closures and the content list on the other closure.

Opened Box

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Logo and Shipping Marks Application Reference

A. Application of the logo and markings for the front and back sides of the Transport Carton:

On the front and the back sides of the Transport Carton, the vertical logo is to be placed centrally, occupying a minimum of 60% surface space and without any image distortions as per (graphic 1.1).

In case of a rectangular shape carton, the UNHCR horizontal visibility logo should be used instead of the UNHCR vertical visibility logo, having a better usage of the surface space (graphic 1.2).

Graphic 1.1

Graphic 1.2

Technical Drawing

Logo and Shipping Marks Application Reference

B. Application of the logo on the two other opposite sides of the Transport Carton:

On the two other opposite sides of the Transport Carton, 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, as per (graphic 2).

In case of a rectangular shape carton, the UNHCR horizontal visibility logo should be used instead of the UNHCR vertical visibility logo, having a better usage of the surface space (graphic 2.2)

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

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 visibility logo and framed with the same indelible ink as the detailed information as per the graphic 2.1.

Graphic 2.1

Graphic 2.2

Technical Drawing

Logo and Shipping Marks Application Reference

C. Application of the logo and marking on the top side of the Transport Carton:

On the top side of the Transport Carton, the UNHCR horizontal logo is to be placed centrally on one of the closures, occupying a minimum of 60% surface space and without any image distortions.

Graphic 3

Technical Drawing