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*(Information)*

# COMMISSION

## Communication from the Commission relating to the packaging of products to be supplied as Community food aid

(96/C 267/01)

*(as provided by Article 5 of Commission Regulation (EEC) No 2200/87 of 8 July 1987*[1][2]*)*

This communication cancels the communication published in the *Official Journal of the European Communities* No C 391 of 31 December 1994 and replaces paragraph 2 of each chapter concerning the requirements relating to packaging given in the communication published in the *Official Journal of the European Communities* No C 114 of 29 April 1991 starting from 1 January 1997.

For the products to be mobilized the requirements relating to packaging are as follows, without prejudice to the special provisions adopted where appropriate on an individual basis by the Commission.

*(Should the abovementioned requirements not have been complied with by the contracting authority, the certificate of conformity referred to in the abovementioned Regulation (EEC) No 2200/87 shall not be issued or shall be issued with reservations.)*

(1) OJ No L 204, 25. 7. 1987, p. 1.
(2) In its applicable version, as at the date of publication of the invitation to submit a bid.

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## ABBREVIATIONS

| | | |
|---|---|---|
| g | = | grams |
| kg | = | kilograms |
| MT | = | metric tonne |
| $g/m^2$ | = | grams per square metre |
| mm | = | millimetre |
| cm | = | centimetre |
| L | = | length |
| W | = | width |
| H | = | height |
| UV | = | ultra violet |
| 20 °C | = | 20 degrees Celsius |
| $J/m^2$ | = | Joules per square metre |
| % | = | per cent |
| N | = | Newton |
| $N/m^2$ | = | Newton per square metre |
| PE | = | Polyethylene |
| PP | = | Polypropylene |
| PET | = | Polyethylene terephtalate |
| HDPE | = | High-density polyethylene |
| LDPE | = | Low-density polyethylene |
| 'One way' pallet | = | non-returnable pallet |
| TEA average | = | average tension energy absorption |
| EN standards | = | European standards |
| ISO standards | = | International standards (International Organization for Standardization) |

## GENERAL DIRECTIVES FOR ALL SPECIFICATIONS

I. The conformity of the packaging with the defined specifications is to be certified annually (unless otherwise specified) by a packaging institute of the European Union approved by a Member State, which is to provide a detailed report and a description of the technical characteristics of the constituent elements of the packaging.

For each supply, the manufacturer of the packaging certifies that the packaging supplied corresponds to the requirements and supplies the relevant certificate.

II. All materials and objects intended to come into contact with foodstuffs must be in accordance with current regulations in the Member State where the supplier of the packaging is based, and with European Community Directive 89/109/EEC.

This conformity must be certified annually by a packaging institute of the European Union approved by a Member State.

III. The European Union may at any time have the conformity, referred to in points I and II, checked by an approved institute of its choice.

IV. The storage of packaging, its manufacture and filling must take place in conditions of hygiene that conform with Council Directive 93/43/EEC.

*Note:*

For purchases of Community food aid made outside the territory of the European Union, the abovementioned certificates must be supplied:
— either by an institute approved by a Member State,
— or by an institute approved by the State in which the purchases are made.
The following provisions apply *mutatis mutandis* to purchases made directly or indirectly by the Commission outside the territory of the European Union.

1.0 — CER

| Products | — CEREALS<br>— COMMON WHEAT<br>— DURUM WHEAT<br>— BARLEY<br>— MAIZE<br>— GRAIN SORGHUM<br>— RICE<br>— BROKEN RICE | 50 kg |
|---|---|---|
| A. *Primary pack* | 1. **Requirements relating to packaging and preservation**<br>The cereals are to be packed in clean new sacks corresponding to the descriptions below (content 50 kg):<br>(a) Good quality new jute sacks, with a minimum weight of 410 g/m$^2$, corresponding to EN standards 766.<br>(b) New sacks in a woven blend of jute/polyolefine with a minimum weight of 260 g/m$^2$, corresponding to EN standards 767.<br>(c) New sacks made of woven PP with a minimum weight of 85 g/m$^2$ with a special 'food-grade ultra violet' treatment, corresponding to EN standards 277.<br>— The dimensions of the sacks are to be appropriate to the density of the product with which they are filled.<br>— The sacks are to be closed with a strong UV-resistant cord (six months tropical climate: humidity and sunshine). The residual tensile value, after the UV test (cycle conditions in accordance with EN standards 277), must be at least 25 N.<br>2. **Conformity tests**<br>(a) New jute sacks should correspond to EN standards 766.<br>(b) New sacks in a woven blend of jute/polyolefine should correspond to EN standards 767.<br>(c) New sacks made of woven PP should correspond to EN standards 277.<br>The certificate of conformity of UV treatment is to be obtained within the six months preceding the date when the sacks are to be filled. | |
| B. *Transport* | 1. In bulk.<br>2. In bulk + empty sacks.<br>3. In loose sacks.<br>4. On pallets: (no stacking for overland transport):<br>— High-quality 'one way' pallet with a minimum gross weight of 25 kg.<br>— Four-way pallet.<br>— The sacks are to occupy as much space as possible on the pallet without extending beyond it.<br>— The surface area of the wood used for the floor of the pallet is to be at least 75 % of the surface area of the pallet.<br>— The whole is to be shrink-wrapped in transparent PE with a minimum thickness of 125 microns, UV-stabilized (six months tropical climate: humidity and sunshine).<br>5. With slings:<br>(a) Trefoil-type slings: four eyes.<br>Carrying capacity: 1 500 kg.<br>Safety factor 5:1 (minimum breaking load: five times carrying capacity).<br>(b) Basket-type slings.<br>Carrying capacity: 1 100 kg.<br>Safety factor 5:1 (minimum breaking load: five times carrying capacity).<br>6. In containers:<br>— Containers are to be filled without pallets.<br>— Sacks are to be laid flat.<br>— Any free space at the sides and at the ends is to be filled with 'ad hoc' material to ensure that the sacks are completely immobilized in the container. | |

**1.0 — CER** *(continued)*

| | | |
|---|---|---|
| **Products** | — CEREALS<br>— COMMON WHEAT<br>— DURUM WHEAT<br>— BARLEY<br>— MAIZE<br>— GRAIN SORGHUM<br>— RICE<br>— BROKEN RICE | **50 kg** |
| *Note* | 1. Where cereals are shipped in sacks, an additional 2 % of empty sacks should be provided, with a net capacity of 50 kg of the cereals supplied.<br>2. Where cereals are shipped in bulk, accompanied by empty sacks, a quantity of empty sacks with a net capacity of 50 kg of the cereals supplied and sufficient for packing the batch should be supplied, plus 5 %.<br>A quantity of needles corresponding to one needle per 100 MT of cereals supplied, together with strong UV-resistant thread (six months tropical climate: humidity and sunshine) — 2 m per sacks — are to be supplied at the same time as the empty sacks. The residual tensile value of the thread, after the UV test (cycle conditions in accordance with EN standards 277), must be at least 25 N. | |

## 2.1 — FAR 25

| Product | FLOUR { COMMON WHEAT / MAIZE / DURUM WHEAT } MAIZE MEAL 25 kg |
|---|---|
| A. *Primary pack* | 1. **Requirements relating to packaging and preservation**<br>The flour is to be packed in clean new sacks corresponding to the descriptions below (content 25 kg):<br>(a) Woven PP sacks with a minimum weight of 85 g/m$^2$, corresponding to EN standards 277.<br>(b) Woven jute/polyolefine sacks with a minimum weight of 260 g/m$^2$, corresponding to EN standards 767.<br>(c) Woven cotton/polyolefine sacks with a minimum weight of 200 g/m$^2$, corresponding to EN standards 769.<br>(d) Paper sacks, at least two-ply, corresponding to EN standards 770. The plies taken together should correspond to at least 510 J/m$^2$ TEA average.<br>The sacks are to be closed with a strong UV-resistant cord (six months tropical climate: humidity and sunshine). The residual tensile value, after the UV test (cycle conditions in accordance with EN 277) must be at least 25 N.<br>2. **Conformity tests**<br>(a) PP sacks should correspond to EN standards 277.<br>(b) Jute/polyolefine sacks should correspond to EN standards 767.<br>(c) Cotton/polyolefine sacks should correspond to EN standards 769.<br>(d) Paper sacks should correspond to EN standards 770.<br>The certificate of conformity of UV treatment is to be obtained within the six months preceding the date when the sacks are to be filled. |
| B. *Transport* | 1. In loose sacks.<br>2. On pallets (no stacking for overland transport):<br>— High-quality 'one way' pallet with a minimum gross weight of 25 kg.<br>— Four-way pallet.<br>— The surface area of the wood used for the floor of the pallet is to be at least 75 % of the surface area of the pallet.<br>— The sacks are to occupy as much space as possible on the pallet without extending beyond it.<br>— Two sheets of double-wall corrugated board are to cover the top of the pallet in the shape of a cross with a minimum 'return' of 20 cm on both sides of the pallet (strapping side).<br>— Two UV-resistant plastic strapping bands (six months tropical climate: humidity and sunshine).<br>Tension resistance: 550 N/mm$^2$.<br>— The whole is to be shrink-wrapped in transparent PE with a minimum thickness of 125 microns, UV-stabilized (six months tropical climate: humidity and sunshine).<br>3. With slings:<br>Basket or trefoil type.<br>Carrying capacity: 1 100 kg.<br>Safety factor 5:1 (minimum breaking load: five times carrying capacity).<br>4. In containers:<br>— Containers are to be filled without pallets.<br>— Sacks are to be laid flat.<br>— Any free space at the sides and at the ends is to be filled with 'ad hoc' material to ensure that the sacks are completely immobilized in the container. |

## 2.2 — FAR 50

| Product | FLOUR { COMMON WHEAT / MAIZE / DURUM WHEAT } | MAIZE MEAL | 50 kg |
|---|---|---|---|

A. *Primary pack*

1. **Requirements relating to packaging and preservation**

The flour is to be packed in clean new sacks corresponding to the descriptions below (content 50 kg):

(a) Jute sacks with a minimum weight of 270 g/m$^2$, lined with woven PP sacks, with a minimum weight of 85 g/m$^2$. The top edges of the two sacks are to be stitched together. They should correspond to EN standards 766.

(b) Cotton sacks with a minimum weight of 140 g/m$^2$, lined with woven PP sacks, with a minimum weight of 85 g/m$^2$. The top edges of the two sacks are to be stitched together. They should correspond to EN standards 768.

(c) Sacks in a blend of jute/polyolefine with a minimum weight of 260 g/m$^2$, corresponding to EN standards 767.

(d) Sacks made of woven PP with a minimum weight of 85 g/m$^2$, corresponding to EN standards 277. Food-grade UV-treated.

(e) Paper sacks, at least three-ply, corresponding to EN standards 770. The plies taken together should correspond to at least 680 J/m$^2$ TEA average.

The sacks are to be closed with a strong UV-resistant cord (six months tropical climate: humidity and sunshine). The residual tensile value, after the UV test (cycle conditions in accordance with EN standards 277) must be at least 25 N.

2. **Conformity tests**

(a) The lined jute sacks should correspond to EN standards 766.

(b) The lined cotton sacks should correspond to EN standards 768.

(c) The sacks in a blend of jute/polyolefine should correspond to EN standards 767.

(d) The sacks made of woven PP should correspond to EN standards 277.

(e) The paper sacks should correspond to EN standards 770.

The certificate of conformity of UV treatment is to be obtained within the six months preceding the date when the sacks are to be filled.

B. *Transport*

1. In loose sacks.

2. On pallets (no stacking for overland transport):

— High-quality 'one way' pallet with a minimum gross weight of 25 kg.

— Four-way pallet.

— The surface area of the wood used for the floor of the pallet is to be at least 75 % of the surface area of the pallet.

— The sacks are to occupy as much space as possible on the pallet without extending beyond it.

— Two sheets of double-wall corrugated board are to cover the top of the pallet in the shape of a cross with a minimum 'return' of 20 cm on both sides of the pallet (strapping side).

— Two UV-resistant plastic strapping bands (six months tropical climate: humidity and sunshine).

Tension resistance: 550 N/mm$^2$.

— The whole is to be shrink-wrapped in transparent PE with a minimum thickness of 125 microns, UV-stabilized (six months tropical climate: humidity and sunshine).

**2.2 — FAR 50** *(continued)*

| Product | | | | |
|---|---|---|---|---|
| | FLOUR { COMMON WHEAT / MAIZE / DURUM WHEAT } | MAIZE MEAL | | **50 kg** |
| | 3. With slings:<br>Basket or trefoil type.<br>Carrying capacity: 1 100 kg.<br>Safety factor 5:1 (minimum breaking load: five times carrying capacity).<br>4. In containers:<br>— Containers are to be filled without pallets.<br>— Sacks are to be laid flat.<br>— Any free space at the sides and at the ends is to be filled with 'ad hoc' material to ensure that the sacks are completely immobilized in the container. | | | |

## 2.3 — FHAF

| Products | ROLLED OATS | 25 kg |
|---|---|---|
| A. *Primary pack* | 1. **Requirements relating to packaging and preservation**<br>The rolled oats are to be packed in clean new sacks corresponding to the descriptions below (content 25 kg):<br>(a) Woven cotton/polyolefine sacks with a minimum weight of 200 g/m$^2$, corresponding to EN standards 769.<br>(b) Woven PP sacks with a minimum weight of 85 g/m$^2$, corresponding to EN standards 277.<br>(c) Paper sacks, at least two-ply, corresponding to EN standards 770. The plies taken together should correspond to at least 510 J/m$^2$ TEA average.<br>The sacks are to be closed with a strong UV-resistant cord (six months tropical climate: humidity and sunshine). The residual tensile value, after the UV test (cycle conditions in accordance with EN standards 277) must be at least 25 N.<br>2. **Conformity tests**<br>(a) Cotton/polyolefine sacks should correspond to EN standards 769.<br>(b) PP sacks should correspond to EN standards 277.<br>(c) Paper sacks should correspond to EN standards 770.<br>The certificate of conformity of UV treatment is to be obtained within the six months preceding the date when the sacks are to be filled. | |
| B. *Transport* | 1. In loose sacks.<br>2. On pallets (no stacking for overland transport):<br>— High-quality 'one way' pallet with a minimum gross weight of 25 kg.<br>— Four-way pallet.<br>— The surface area of the wood used for the floor of the pallet is to be at least 75 % of the surface area of the pallet.<br>— The sacks are to occupy as much space as possible on the pallet without extending beyond it.<br>— Two sheets of double-wall corrugated board are to cover the top of the pallet in the shape of a cross with a minimum 'return' of 20 cm on both sides of the pallet (strapping side).<br>— Two UV-resistant plastic strapping bands (six months tropical climate: humidity and sunshine).<br>Tension resistance: 550 N/mm$^2$.<br>— The whole is to be shrink-wrapped in transparent PE with a minimum thickness of 125 microns, UV-stabilized (six months tropical climate: humidity and sunshine).<br>3. With slings:<br>Basket type.<br>Carrying capacity: 1 100 kg.<br>Safety factor 5:1 (minimum breaking load: five times carrying capacity).<br>4. In containers:<br>— Containers are to be filled without pallets.<br>— Sacks are to be laid flat.<br>— Any free space at the sides and at the ends is to be filled with 'ad hoc' material to ensure that the sacks are completely immobilized in the container. | |

**3.0 — PAL**

| Product | PASTA |
|---|---|
| A. *Primary pack* | 1. **Requirements relating to packaging and preservation**<br>The pasta is to be packed in packs of maximum 1 kg.<br>The packaging is to be:<br>(a) either a food-grade protective film;<br>(b) or a box made of compacted board.<br>— The packaging is to be food-grade.<br>— Impact tests are to be carried out on multiple packs ready for supply. |
| B. *Multiple pack* | 1. **Requirements relating to packaging and preservation**<br>The packets of pasta are to be grouped together in high quality corrugated cardboard boxes that withstand the following tests:<br>— The content may vary from 12 to 24 packets, maximum 25 kg net.<br>— The outer box should fit the content perfectly in order to ensure stability and strength.<br>— The sealing of the outer box can be done by gluing and/or taping.<br>— Glue used for making up and sealing the packaging is to be moisture-resistant.<br>— Adhesive tape used for sealing should be capable of resisting a tropical climate (six months: humidity and sunshine).<br>— The width of the tape is to be at least 50 mm.<br>— The length of the tape used is to be at least equal to 2L+2H - 10 cm.<br>2. **Conformity tests**<br>The complete package ready for shipment, previously stored in accordance with EN standard 22233 for a week at 20 °C and at 90 % relative humidity, should withstand the following tests:<br>(a) Three vertical drops from a height of 1 metre.<br>This test is to be carried out in accordance with EN standard 22248, on three different edges belonging to different trihedrons for a parallelepipedic package, or on each of the three smallest sections for other types of packaging for the purposes of EN standard 22206, the package being lifted such that its centre of gravity is vertically above the point of impact;<br>(b) Minimum compressive strength: 5 000 N.<br>This test is to be carried out in accordance with EN standard 22872, the package being placed in its normal position for transport.<br>The result of each of these tests is to be assessed on five complete packages:<br>— The packages may be deformed but should remain intact and should not have any tear greater than half the height of the flap.<br>— The adhesive tape should not be torn or unstuck.<br>— The primary packaging should show no signs of leakage.<br>— The water resistance of the outer surface of the cardboard boxes is to be below 155 g/m$^2$ according to the COBB method (ISO standard 535). |

3.0 — **PAL** *(continued)*

| Product | PASTA |
|---|---|
| C. *Transport* | 1. On pallets (no stacking for overland transport):<br>— Maximum stacking height for pallets: two layers.<br>— High-quality 'one way' pallet with a minimum gross weight of 25 kg.<br>— Four-way pallet.<br>— The surface area of the wood used for the floor of the pallet is to be at least 75 % of the surface area of the pallet.<br>— The boxes are to occupy as much space as possible on the pallet and no less than 90 %.<br>— None of the cartons is to extend over the four edges of the pallet.<br>— A sheet of double-wall corrugated board is to be placed between the layers half way up.<br>— Two sheets of double-wall corrugated board are to cover the top of the pallet in the shape of a cross with a minimum 'return' of 20 cm on both sides of the pallet (strapping side).<br>— Two UV-resistant plastic strapping bands (six months tropical climate: humidity and sunshine).<br>Tension resistance: 550 $N/mm^2$.<br>— The whole is to be shrink-wrapped in transparent PE with a minimum thickness of 125 microns, UV-stabilized (six months tropical climate: humidity and sunshine).<br>2. In containers:<br>— Containers are to be filled without pallets.<br>— Boxes are to be laid flat.<br>— Double-wall corrugated board inserts are to be placed between the third and fourth layer, and also between the sixth and seventh, covering the surface over the width of the container and covering at least two boxes lengthwise.<br>The inserts are not to overlap.<br>— Any free space at the sides and at the ends is to be filled with 'ad hoc' material to ensure that the cartons are completely immobilized in the container. |

**4.0 — LEGs**

| Product | DRIED VEGETABLES: | BROAD BEANS<br>FIELD BEANS | 50 kg |
|---|---|---|---|

A. *Primary pack*

1. **Requirements relating to packaging and preservation**

The dried vegetables are to be packed in clean new sacks corresponding to the descriptions below (content 50 kg):

(a) New, high-quality jute sacks, with a minimum weight of 410 g/m$^2$, corresponding to EN standards 766.

(b) New sacks in a blend of jute/polyolefine with a minimum weight of 260 g/m$^2$, corresponding to EN standards 767.

(c) New sacks made of woven PP with a minimum weight of 85 g/m$^2$, corresponding to EN standards 277. Food-grade UV treated.

— The dimensions of the sacks are to be appropriate to the density of the product they are to contain.

— The sacks are to be closed with a strong UV-resistant cord (six months tropical climate: humidity and sunshine). The residual tensile value, after the UV test (cycle conditions in accordance with EN standards 277) must be at least 25 N.

2. **Conformity tests**

(a) New jute sacks should correspond to EN standards 766.

(b) New sacks in a blend of jute/polyolefine should correspond to EN standards 767.

(c) New sacks made of woven PP should correspond to EN standards 277.

The certificate of conformity of UV treatment is to be obtained within the six months preceding the date when the sacks are to be filled.

B. *Transport*

1. In loose sacks.

2. On pallets: (no stacking for overland transport):

— High-quality 'one way' pallet with a minimum gross weight of 25 kg.

— Four-way pallet.

— The surface area of the wood used for the floor of the pallet is to be at least 75 % of the surface area of the pallet.

— The sacks are to occupy as much space as possible on the pallet without extending beyond it.

— One sheet of double-wall corrugated board are to cover the top of the pallet in the shape of a cross with a minimum 'return' of 20 cm on both sides of the pallet (strapping side).

— Two UV-resistant plastic strapping bands (six months tropical climate: humidity and sunshine).

Tension resistance: 550 N/mm$^2$.

— The whole is to be shrink-wrapped in transparent PE with a minimum thickness of 125 microns, UV-stabilized (six months tropical climate: humidity and sunshine).

3. With slings:

(a) Trefoil type slings: four eyes.
Carrying capacity: 1 500 kg.
Safety factor 5:1. (minimum breaking load: five times carrying capacity).

(b) Basket-type slings.
Carrying capacity: 1 100 kg.
Safety factor 5:1 (minimum breaking load: five times carrying capacity).

4. In containers:

— Containers are to be filled without pallets.

— Sacks are to be laid flat.

— Any free space at the sides and at the ends is to be filled with 'ad hoc' material to ensure that the sacks are completely immobilized in the container.

*Note*

Where dried vegetables are shipped in sacks, an additional 2 % of empty sacks should be provided, with a net capacity of 50 kg of the dried vegetables supplied.

**5.0 — AlSev**

| Product | WEANING FOODS | 12 × 1 000 g |
|---|---|---|
| A. *Primary pack* | 1. **Requirements relating to packaging and preservation**<br>The weaning food is to be packed in sachets, maximum 1 kg, sealed at either end, sufficiently long and provided with a clip so that they can be resealed after opening, complying with the characteristics defined below:<br>— Laminated film designed to come into contact with foodstuffs.<br>— The film used should withstand tropical conditions for a minimum period of 12 months (humidity-sunshine) without any deterioration of the flavour or specific qualities of the product.<br>— The sachets are to be perfectly airtight and filled under a modified atmosphere.<br>2. **Conformity tests**<br>These characteristics are to be assessed on 30 empty sealed sachets:<br>— Tensile strength measured in accordance with ISO standard 1184 is at least 15 $N/mm^2$. Seals submitted to the tensile strength test are to have a strength equal to at least 11 $N/mm^2$ determined under the same conditions as that of the film.<br>— 'Oxygen transmission': maximum 0,1 $cc/m^2 \times 24$ h.<br>— Puncture strength measured in accordance with ASTM standard D 1709: minimum 120 g. | |
| B. *Multiple pack* | 1. **Requirements relating to packaging and preservation**<br>The sachets are to be packed together in high quality corrugated board box, maximum 12 kg, capable of withstanding the following tests:<br>— The outer box should fit the volume of the sachets exactly, so that there is as little free space between the sachets as possible.<br>— The sealing of the outer box can be done by gluing and/or taping.<br>— Glue used for making up and sealing the packaging is to be moisture-resistant.<br>— Adhesive tape used for sealing should be capable of resisting a tropical climate (six months: humidity and sunshine).<br>The width of the tape is to be at least 50 mm.<br>The length of the tape used is to be at least equal to 2L+2H - 10 cm.<br>2. **Conformity tests**<br>The complete package ready for shipment, previously stored in accordance with EN standard 22233 for a week at 20 °C and at 90 % relative humidity, should withstand the following tests:<br>(a) Three vertical drops from a height of 1 metre.<br>This test is to be carried out in accordance with EN standard 22248, on three different edges belonging to different trihedrons for a parallelepipedic package, or on each of the three smallest sections for other types of packaging for the purposes of EN standard 22206, the package being lifted such that its centre of gravity is vertically above the point of impact.<br>(b) Minimum compressive strength: 5 000 N.<br>This test is to be carried out in accordance with EN standard 22872, the package being placed in its normal position for transport.<br>The result of each of these tests is to be assessed on five complete packages:<br>— The packages may be deformed but should remain intact and should not have any tear greater than half the height of the flap. | |

5.0 — **AlSev** *(continued)*

| Product | WEANING FOODS | 12 × 1 000 g |
|---|---|---|
| | — The adhesive tape should not be torn or unstuck.<br>— The sachets should show no signs of leakage.<br>— The water resistance of the outer surface of the cardboard boxes is to be below 155 g/m$^2$ according to the COBB method (ISO standard 535). | |
| C. *Transport* | 1. On pallets: (no stacking for overland transport):<br>— Maximum stacking height for pallets: two layers.<br>— High-quality 'one way' pallet with a minimum gross weight of 25 kg.<br>— Four-way pallet.<br>— The surface area of the wood used for the floor of the pallet is to be at least 75 % of the surface area of the pallet.<br>— The boxes are to occupy as much space as possible on the pallet and no less than 90 %.<br>— None of the cartons is to extend over the four edges of the pallet.<br>— A sheet of double-wall corrugated board is to be placed between the layers half way up.<br>— Two sheets of double-wall corrugated board are to cover the top of the pallet in the shape of a cross with a minimum 'return' of 20 cm on both sides of the pallet (strapping side).<br>— Two UV-resistant plastic strapping bands (six months tropical climate: humidity and sunshine).<br>Tension resistance: 550 N/mm$^2$.<br>— The whole is to be shrink-wrapped in transparent PE with a minimum thickness of 125 microns, UV-stabilized (six months tropical climate: humidity and sunshine).<br>2. In containers:<br>— Containers are to be filled without pallets.<br>— Boxes are to be laid flat.<br>— Double-wall corrugated board inserts are to be placed between the third and fourth layer, and also between the sixth and seventh, covering the surface over the width of the container and covering at least two boxes lengthwise.<br>The inserts are not to overlap.<br>— Any free space at the sides and at the ends is to be filled with 'ad hoc' material to ensure that the cartons are completely immobilized in the container. | |

## 6.1 — LEP 1

| Product | SKIMMED-MILK POWDER<br>SKIMMED MILK-POWDER WITH ADDED VITAMINS<br>WHOLE-MILK POWDER | 12 × 1 kg<br>20 × 1 kg |
|---|---|---|

A. *Primary pack*

1. **Requirements relating to packaging and preservation**

The dried milk is to be packed in sachets, sealed at either end, sufficiently long and provided with a clip so that they can be resealed after opening, complying with the characteristics defined below:

— Laminated film designed to come into contact with foodstuffs.

— The film used should withstand tropical conditions for a minimum period of 12 months (humidity-sunshine) without any deterioration of the flavour or specific qualities of the product.

— The sachets are to be perfectly airtight and filled under a modified atmosphere.

2. **Conformity tests**

These characteristics are to be assessed on 30 empty sealed sachets:

— Tensile strength measured in accordance with ISO standard 1184 is at least 15 $N/mm^2$. Seals submitted to the tensile strength test are to have a strength equal to at least 11 $N/mm^2$ determined under the same conditions as that of the film.

— 'Oxygen transmission' maximum: 0,1 $cc/m^2 \times 24$ h.

— Puncture strength measured in accordance with ASTM standard D 1709: minimum 120 g.

B. *Multiple pack*

1. **Requirements relating to packaging and preservation**

12 or 20 × 1 000 g sachets are to be packed together in high quality corrugated board box, capable of withstanding the following tests:

— The outer box should fit the volume of the sachets exactly, so that there is as little free space between the sachets as possible.

— The sealing of the outer box can be done by gluing and/or taping.

— Glue used for making up and sealing the packaging is to be moisture-resistant.

— Adhesive tape used for sealing should be capable of resisting a tropical climate (six months: humidity and sunshine).

The width of the tape is to be at least 50 mm.

The length of the tape used is to be at least equal to 2L + 2H - 10 cm.

2. **Conformity tests**

The complete package ready for shipment, previously stored in accordance with EN standard 22233 for a week at 20 °C and at 90 % relative humidity, should withstand the following tests:

(a) Three vertical drops from a height of 1 metre.

This test is to be carried out in accordance with EN standard 22248, on three different edges belonging to different trihedrons for a parallelepipedic package, or on each of the three smallest sections for other types of packaging for the purposes of EN standard 22206, the package being lifted such that its centre of gravity is vertically above the point of impact.

(b) Minimum compressive strength: 10 000 N for 20 × 1 kg and 5 000 N for 12 × 1 kg.

This test is to be carried out in accordance with EN standard 22872, the package being placed in its normal position for transport.

**6.1 — LEP 1** *(continued)*

| Product | SKIMMED-MILK POWDER<br>SKIMMED MILK-POWDER WITH ADDED VITAMINS<br>WHOLE-MILK POWDER | **12 × 1 kg**<br>**20 × 1 kg** |
|---|---|---|
| | The result of each of these tests is to be assessed on five complete packages:<br>— The packages may be deformed but should remain intact and should not have any tear greater than half the height of the flap.<br>— The adhesive tape should not be torn or unstuck.<br>— The sachets should show no signs of leakage.<br>— The water resistance of the outer surface of the cardboard boxes is to be below 155 g/m$^2$ according to the COBB method (ISO standard 535). | |
| C. *Transport* | 1. On pallets (no stacking for overland transport):<br>— Maximum stacking height for pallets: two layers.<br>— High-quality 'one way' pallet with a minimum gross weight of 25 kg.<br>— Four-way pallet.<br>— The surface area of the wood used for the floor of the pallet is to be at least 75 % of the surface area of the pallet.<br>— The boxes are to occupy as much space as possible on the pallet and no less than 90 %.<br>— None of the cartons is to extend over the four edges of the pallet.<br>— A sheet of double-wall corrugated board is to be placed between the layers half way up.<br>— Two sheets of double-wall corrugated board are to cover the top of the pallet in the shape of a cross with a minimum 'return' of 20 cm on both sides of the pallet (strapping side).<br>— Two UV-resistant plastic strapping bands (six months tropical climate: humidity and sunshine).<br>Tension resistance: 550 N/mm$^2$.<br>— The whole is to be shrink-wrapped in transparent PE with a minimum thickness of 125 microns, UV-stabilized (six months tropical climate: humidity and sunshine).<br>2. In containers:<br>— Containers are to be filled without pallets.<br>— Boxes are to be laid flat.<br>— Double-wall corrugated board inserts are to be placed between the third and fourth layer, and also between the sixth and seventh, covering the surface over the width of the container and covering at least two boxes lengthwise.<br>The inserts are not to overlap.<br>— Any free space at the sides and at the ends is to be filled with 'ad hoc' material to ensure that the cartons are completely immobilized in the container. | |

## 6.2 — LEP 25 +

| Product | SKIMMED-MILK POWDER<br>SKIMMED-MILK POWDER WITH ADDED VITAMINS<br>WHOLE-MILK POWDER | 25 kg + 25 plastic sacks+clips |
|---|---|---|
| A. *Primary pack* | **1. Requirements relating to packaging and preservation**<br>The dried milk is to be packed in new paper sacks that are clean, dry and intact.<br>(a) — The sacks are to be at least three-ply and the plies taken together should correspond to at least 420 J/m$^2$ TEA average.<br>— The second ply is to be covered with a layer of PE of at least 15 g/m$^2$,.<br>— A PE sack, sealed at the bottom, inside the three paper plies (thickness: at least 0,08 mm).<br>(b) Twenty-five empty sachets with a capacity of 1 000 g.<br>— The PE sachets are to be of a suitable size for manual filling and easy to close using clips also supplied.<br>— The set of sachets and clips is to be inserted between the (at least three-ply) sack and the inner PE pocket, at the top of the sack.<br>— The stitching thread is to be capable of withstanding a tropical cimate (six months: humidity and sunshine). The residual tensile value, after the UV test (cycle conditions in accordance to EN standards 277), must be at least 25 N.<br>**2. Conformity tests**<br>(a) Sacks for the transport of food-aid dried milk in 25 kg sacks should comply with EN standards 770.<br>(b) The empty sachets are to meet the following conditions:<br>samples: 30 sealed empty sachets:<br>— Tensile strength measured in accordance with ISO standard 1184 is at least 15 N/mm$^2$. Seals submitted to the tensile strength test are to have a strength equal to at least 11 N/mm$^2$ determined under the same conditions as that of the film.<br>— They must be food-grade.<br>— Puncture strength measured in accordance with ASTM standard D 1709: minimum 120 g. | |
| B. *Transport* | 1. On pallets: (no stacking for overland transport):<br>— Maximum stacking for pallets: two layers.<br>— High quality 'one way' pallet with a minimum gross weight of 25 kg.<br>— Four-way pallet.<br>— The surface area of the wood used for the floor of the pallet is to be at least 75 % of the surface area of the pallet.<br>— The sacks are to occupy as much space as possible on the pallet and no less than 90 %, without extending beyond it.<br>— Two sheets of double-wall corrugated board are to cover the top of the pallet in the shape of a cross with a minimum 'return' of 20 cm on both sides of the pallet (strapping side).<br>— Two UV-resistant plastic strapping bands (six months tropical climate: humidity and sunshine).<br>Tension resistance: 550 N/mm$^2$.<br>— The whole is to be shrink-wrapped in transparent PE with a minimum thickness of 125 microns, UV-stabilized (six months tropical climate: humidity and sunshine).<br>2. In containers:<br>— Containers are to be filled without pallets.<br>— Sacks are to be laid flat.<br>— Any free space at the sides and at the ends is to be filled with 'ad hoc' material to ensure that the sacks are completely immobilized in the container. | |

## 6.3 — LEP 25

| Product | SKIMMED-MILK POWDER<br>SKIMMED-MILK POWDER WITH ADDED VITAMINS<br>WHOLE-MILK POWDER | 25 kg |
|---|---|---|
| A. *Primary pack* | 1. **Requirements relating to packaging and preservation**<br>The dried milk is to be packed in new paper sacks that are clean, dry and intact.<br>— The sacks are to be at least three-ply and the plies taken together should correspond to at least 420 J/m$^2$ TEA average.<br>— The second ply is to be covered with a layer of PE of at least 15 g/m$^2$.<br>— A PE sack, sealed at the bottom, inside the three-paper plies (thickness: at least 0,08 mm).<br>— The stitching thread is to be capable of withstanding a tropical cimate (six months: humidity and sunshine). The residual tensile value, after the UV test (cycle conditions in accordance to EN standards 277), must be at least 25 N.<br>2. **Conformity tests**<br>— Sacks for the transport of food-aid dried milk in 25 kg sacks should comply with EN standards 770. | |
| B. *Transport* | 1. On pallets (no stacking for overland transport):<br>— Maximum stacking for pallets: two layers.<br>— High-quality 'one way' pallet with a minimum gross weight of 25 kg.<br>— Four-way pallet.<br>— The surface area of the wood used for the floor of the pallet is to be at least 75 % of the surface area of the pallet.<br>— The sacks are to occupy as much space as possible on the pallet and no less than 90 %, without extending beyond it.<br>— Two sheets of double-wall corrugated board are to cover the top of the pallet in the shape of a cross with a minimum 'return' of 20 cm on both sides of the pallet (strapping side).<br>— Two UV-resistant plastic strapping bands (six months tropical climate: humidity and sunshine).<br>Tension resistance: 550 N/mm$^2$.<br>— The whole is to be shrink-wrapped in transparent PE with a minimum thickness of 125 microns, UV-stabilized (six months tropical climate: humidity and sunshine).<br>2. In containers:<br>— Containers are to be filled without pallets.<br>— Sacks are to be laid flat.<br>— Any free space at the sides and at the ends is to be filled with 'ad hoc' material to ensure that the sacks are completely immobilized in the container. | |

7.0 — B

| Product | BUTTER 1×25 kg |
|---|---|
| A. *Primary pack* | 1. **Requirements relating to packaging and preservation**<br>The butter is to be packed in new cardboard boxes containing 1×25 kg block.<br>The 25 kg block is to be packed in grease-proof paper or equivalent and fitted into the cartons.<br>The paper or equivalent is destined to come in contact with foodstuff. It is to be perfectly dry, of good quality, impermeable and not previously treated in brine.<br>2. **Conformity tests**<br>— The outer dimensions of the carton are to be: L 43 cm, W 32 cm, H ±24 cm.<br>— In view of the fact that no empty space may remain between the butter and the carton, and that the basic dimensions may not be modified, the height should be altered to fit.<br>— The corrugated board is to be composed of at least double-wall BC corrugations:<br>— one kraft 200 g/m$^2$ or equivalent,<br>— one semi-chemical 127 g/m$^2$,<br>— one kraft 200 g/m$^2$ or equivalent,<br>— one semi-chemical 127 g/m$^2$,<br>— one kraft 200 g/m$^2$ or equivalent.<br>Compressive strength on empty box after conditioning 23 °C — 50 % RH: 7 900 N in accordance with EN standard 22872.<br>— No staples, iron fasteners, steel strips or wires may be used.<br>— The cartons are to be sealed with plastic adhesive tape at least 50 mm wide.<br>— The length of the strips of tape must be at least equal to 2L+2H - 10 cm.<br>— The adhesive tape should not be torn or unstuck. |
| B. *Transport* | Butter is to be stored and transported at a temperature of -15 °C to -10 °C.<br>1. On pallets in a refrigerated lorry (no stacking of pallets for overland transport):<br>— High-quality 'one way' pallet with a minimum gross weight of 25 kg.<br>— Four-way pallet.<br>— Capable of resisting a load of 1 500 kg.<br>— The surface area of the wood used for the floor of the pallet is to be at least 75 % of the surface area of the pallet.<br>— The boxes are to occupy as much space as possible on the pallet and no less than 90 %.<br>— None of the cartons is to extend over the four edges of the pallet.<br>— The whole pallet is to be shrink-wrapped to make the pallet compact.<br>2. In refrigerated containers:<br>— Containers are to be filled with pallets.<br>— Any free space at the sides and at the ends is to be filled with 'ad hoc' material to ensure that the pallets are completely immobilized in the container. |

8.0 — FRO

| Product | PROCESSED CHEESE |
|---|---|
| A. *Primary pack* | 1. **Requirements relating to packaging and preservation**<br>The processed cheese is to be packed in cardboard boxes in portions.<br>Each portion is to be packed in food-grade aluminium foil.<br>The net weight of cheese contained in the primary pack is to be between 140 and 200 g per box.<br>Impact and compression tests are to be carried out on complete packages (see multiple pack below). |
| B. *Multiple pack* | 1. **Requirements relating to packaging and preservation**<br>The boxes are to be packed together in a high-quality cardboard box, maximum 12 kg net weight, capable of withstanding the following tests:<br>— The sealing of the outer box can be done by gluing and/or taping.<br>— Glue used for making up and sealing the packaging is to be moisture-resistant.<br>— Adhesive tape used for sealing should be capable of resisting a tropical climate (six months: humidity and sunshine).<br>The width of the tape is to be at least 50 mm.<br>The length of the tape used is to be at least equal to 2L+2H - 10 cm.<br>2. **Conformity tests**<br>The complete package ready for shipment, previously stored in accordance with EN standard 22233 for a week at 20 °C and at 90 % relative humidity, should withstand the following tests:<br>(a) Three vertical drops from a height of 1 metre.<br>This test is to be carried out in accordance with EN standard 22248, on three different edges belonging to different trihedrons for a parallelepipedic package, or on each of the three smallest sections for other types of packaging for the purposes of EN standard 22206, the package being lifted such that its centre of gravity is vertically above the point of impact.<br>(b) Minimum compressive strength: 6 000 N.<br>This test is to be carried out in accordance with EN standard 22872, the package being placed in its normal position for transport.<br>The result of each of these tests is to be assessed on five complete packages:<br>— The packages may be deformed but should remain intact and should not have any tear greater than half the height of the flap.<br>— The adhesive tape should not be torn or unstuck.<br>— The portions should show no signs of leakage.<br>— The water resistance of the outer surface of the cardboard boxes is to be below 155 g/m$^2$ according to the COBB method (ISO standard 535). |
| C. *Transport* | 1. On pallets (no stacking for overland transport):<br>— Maximum stacking height for pallets: two layers.<br>— High-quality 'one way' pallet with a minimum gross weight of 25 kg.<br>— Four-way pallet. |

8.0 — **FRO** *(continued)*

| Product | PROCESSED CHEESE |
|---|---|
| | — The surface area of the wood used for the floor of the pallet is to be at least 75 % of the surface area of the pallet.<br>— The boxes are to occupy as much space as possible on the pallet and no less than 90 %.<br>— None of the cartons is to extend over the four edges of the pallet.<br>— A sheet of double-wall corrugated board is to be placed between the layers half way up.<br>— Two sheets of double-wall corrugated board are to cover the top of the pallet in the shape of a cross with a minimum 'return' of 20 cm on both sides of the pallet (strapping side).<br>— Two UV-resistant plastic strapping bands (six months tropical climate: humidity and sunshine).<br>Tension resistance: 550 $N/mm^2$.<br>— The whole is to be shrink-wrapped in transparent PE with a minimum thickness of 125 microns, UV-stabilized (six months tropical climate: humidity and sunshine).<br>2. In containers:<br>— Containers are to be filled without pallets.<br>— Boxes are to be laid flat.<br>— Double-wall corrugated board inserts are to be placed between the third and fourth layer, and also between the sixth and seventh, covering the surface over the width of the container and covering at least two boxes lengthwise.<br>The inserts are not to overlap.<br>— Any free space at the sides and at the ends is to be filled with 'ad hoc' material to ensure that the cartons are completely immobilized in the container. |

## 9.1 — BO 1 m

| Product | BUTTER OIL | 12 × 1 kg |
|---|---|---|
| A. *Primary pack* | 1. **Requirements relating to packaging and preservation**<br>The butter oil is to be contained in metal cans with a net capacity of 1 kg, coated on the outside with lacquer and on the inside with food-grade lacquer, filled to capacity and hermetically sealed.<br>Filling is to take place under a modified atmosphere.<br>— Lacquer one layer inner — tinning inner/outer 2,8 + 2,8 g/m$^2$ — side-seam striped cans.<br>— Impact tests are to be carried out on multiple packs ready for supply.<br>— Minimum thickness of sheet metal: 0,19 mm. | |
| B. *Multiple pack* | 1. **Requirements relating to packaging and preservation**<br>The cans of butter oil are to be packed in cartons containing 12 × 1 kg cans.<br>— The sealing of the outer box can be done by gluing and/or taping.<br>— Glue used for making up and sealing the packaging is to be moisture-resistant.<br>— Adhesive tape used for sealing should be capable of resisting a tropical climate (six months: humidity and sunshine).<br>The width of the tape is to be at least 50 mm.<br>The length of the tape used is to be at least equal to 2L + 2H - 10 cm.<br>— Where cans are stacked on top of each other inside the cardboard box, a double-wall board separator is required.<br>2. **Conformity tests**<br>Cartons of 12 × 1 kg cans filled for 95 % with water and previously stored in accordance with EN standard 22233 for a week at 20 °C and at 90 % relative humidity, should withstand the following tests:<br>(a) Three vertical drops from a height of 1 metre.<br>This test is to be carried out in accordance with EN standard 22248, on three different edges belonging to different trihedrons, the package being lifted such that its centre of gravity is vertically above the point of impact.<br>(b) Minimum compressive strength: 8 000 N.<br>This test is to be carried out in accordance with EN standard 22872, the package being placed in its normal position for transport.<br>The result of each of these tests is to be assessed on five complete packages:<br>— The cartons may be deformed but should remain intact and should not have any tear greater than the height of the flap.<br>— The adhesive tape should not be torn or unstuck.<br>— The separators are to remain intact and functional.<br>— The cans should show no signs of leakage after the vacuum is released.<br>— The water resistance of the outer surface of the cardboard boxes is to be below 155 g/m$^2$ according to the COBB method (ISO standard 535). | |
| C. *Transport* | 1. On pallets (no stacking for overland transport):<br>— Maximum stacking height for pallets: two layers.<br>— High quality 'one way' pallet with a minimum gross weight of 25 kg.<br>— Four-way pallet. | |

**9.1 — BO 1 m** *(continued)*

| Product | BUTTER OIL | 12 × 1 kg |
|---|---|---|
| | — The surface area of the wood used for the floor of the pallet is to be at least 75 % of the surface area of the pallet.<br>— The boxes are to occupy as much space as possible on the pallet and no less than 90 %.<br>— None of the cartons is to extend over the four edges of the pallet.<br>— A sheet of double-wall corrugated board is to be placed between the layers half way up.<br>— Two sheets of double-wall corrugated board are to cover the top of the pallet in the shape of a cross with a minimum 'return' of 20 cm on both sides of the pallet (strapping side).<br>— Two UV-resistant plastic strapping bands (six months tropical climate: humidity and sunshine).<br>Tension resistance: 550 N/mm$^2$.<br>— The whole is to be shrink-wrapped in transparent PE with a minimum thickness of 125 microns, UV-stabilized (six months tropical climate: humidity and sunshine).<br>2. In containers:<br>— Containers are to be filled without pallets.<br>— Boxes are to be laid flat.<br>— Double-wall corrugated board inserts are to be placed between the third and fourth layer, covering the surface over the width of the container and covering at least two boxes lengthwise.<br>The inserts are not to overlap.<br>— Any free space at the sides and at the ends is to be filled with 'ad hoc' material to ensure that the cartons are completely immobilized in the container. | |

## 9.2 — BO 2,5 m

| Product | BUTTER OIL | 8×2,5 kg |
|---|---|---|
| A. *Primary pack* | 1. **Requirements relating to packaging and preservation**<br>The butter oil is to be contained in metal cans with a net capacity of 2,5 kg, coated on the outside with lacquer and on the inside with food-grade lacquer, filled to capacity and hermetically sealed.<br>Filling is to take place under a modified atmosphere.<br>— Lacquer one layer inner — tinning inner/outer 2,8 + 2,8 g/m$^2$ — side-seam striped cans.<br>— Impact tests are to be carried out on multiple packs ready for supply.<br>— Minimum thickness of sheet metal: 0,22 mm. | |
| B. *Multiple pack* | 1) **Requirements relating to packaging and preservation**<br>The cans of butter oil are to be packed in cartons containing 8×2,5 kg cans.<br>— The sealing of the outer box can be done by gluing and/or taping.<br>— Glue used for making up and sealing the packaging is to be moisture resistant.<br>— Adhesive tape used for sealing should be capable of resisting a tropical climate (six months: humidity and sunshine).<br>The width of the tape is to be at least 50 mm.<br>The length of the tape used is to be at least equal to 2L + 2H - 10 cm.<br>— Where cans are stacked on top of each other inside the cardboard box, a double-wall board separator is required.<br>2. **Conformity tests**<br>Cartons of 8×2,5 kg cans filled for 95 % with water and previously stored in accordance with EN standard 22233 for a week at 20 °C and at 90 % relative humidity, should withstand the following tests:<br>(a) Three vertical drops from a height of 1 metre.<br>This test is to be carried out in accordance with EN standard 22248, on three different edges belonging to different trihedrons, the package being lifted such that its centre of gravity is vertically above the point of impact.<br>(b) Minimum compressive strength: 8 000 N.<br>This test is to be carried out in accordance with EN standard 22872, the package being placed in its normal position for transport.<br>The result of each of these tests is to be assessed on five complete packages:<br>— The cartons may be deformed but should remain intact and should not have any tear greater than the height of the flap.<br>— The adhesive tape should not be torn or unstuck.<br>— The separators are to remain intact and functional.<br>— The cans should show no signs of leakage after the vacuum is released.<br>— The water resistance of the outer surface of the cardboard boxes is to be below 155 g/m$^2$ according to the COBB method (ISO standard 535). | |
| C. *Transport* | 1. On pallets: (no stacking for overland transport):<br>— Maximum stacking height for pallets: two layers.<br>— High-quality 'one way' pallet with a minimum gross weight of 25 kg.<br>— Four-way pallet. | |

**9.2 — BO 2,5 m** *(continued)*

| Product | BUTTER OIL | 8×2,5 kg |
|---|---|---|
| | — The surface area of the wood used for the floor of the pallet is to be at least 75 % of the surface area of the pallet.<br>— The boxes are to occupy as much space as possible on the pallet and no less than 90 %.<br>— None of the cartons is to extend over the four edges of the pallet.<br>— A sheet of double-wall corrugated board is to be placed between the layers half way up.<br>— Two sheets of double-wall corrugated board are to cover the top of the pallet in the shape of a cross with a minimum 'return' of 20 cm on both sides of the pallet (strapping side).<br>— Two UV-resistant plastic strapping bands (six months tropical climate: humidity and sunshine).<br>Tension resistance: 550 $N/mm^2$.<br>— The whole is to be shrink-wrapped in transparent PE with a minimum thickness of 125 microns, UV-stabilized (six months tropical climate: humidity and sunshine).<br>2. In containers:<br>— Containers are to be filled without pallets.<br>— Boxes are to be laid flat.<br>— Double-wall corrugated board inserts are to be placed between the third and fourth layer, covering the surface over the width of the container and covering at least two boxes lengthwise.<br>The inserts are not to overlap.<br>— Any free space at the sides and at the ends is to be filled with 'ad hoc' material to ensure that the cartons are completely immobilized in the container. | |

## 9.3 — BO 5 m

| Product | BUTTER OIL | 4 × 5 kg |
|---|---|---|
| A. *Primary pack* | 1. **Requirements relating to packaging and preservation**<br>The butter oil is to be contained in metal cans with a net capacity of 5 kg, coated on the outside with lacquer and on the inside with food-grade lacquer, filled to capacity and hermetically sealed.<br>Filling is to take place under a modified atmosphere.<br>— Lacquer one layer inner — tinning inner/outer 2,8 + 2,8 g/m$^2$ — side-seam striped cans.<br>— Impact tests are to be carried out on multiple packs ready for supply.<br>— Minimum thickness of sheet metal: 0,23 mm. | |
| B. *Multiple pack* | 1. **Requirements relating to packaging and preservation**<br>The cans of butter oil are to be packed in cartons containing 4 × 5 kg cans.<br>— The sealing of the outer box can be done by gluing and/or taping.<br>— Glue used for making up and sealing the packaging is to be moisture-resistant.<br>— Adhesive tape used for sealing should be capable of resisting a tropical climate (six months: humidity and sunshine).<br>The width of the tape is to be at least 50 mm.<br>The length of the tape used is to be at least equal to 2L + 2H - 10 cm.<br>2. **Conformity tests**<br>Cartons of 4 × 5 kg cans filled for 95 % with water and previously stored in accordance with EN standard 22233 for a week at 20 °C and at 90 % relative humidity, should withstand the following tests:<br>(a) Three vertical drops from a height of 1 metre.<br>This test is to be carried out in accordance with EN standard 22248, on three different edges belonging to different trihedrons, the package being lifted such that its centre of gravity is vertically above the point of impact.<br>(b) Minimum compressive strength: 8 000 N.<br>This test is to be carried out in accordance with EN standard 22872, the package being placed in its normal position for transport.<br>The result of each of these tests is to be assessed on five complete packages:<br>— The cartons may be deformed but should remain intact and should not have any tear greater than the height of the flap.<br>— The adhesive tape should not be torn or unstuck.<br>— The cans should show no signs of leakage after the vacuum is released.<br>— The water resistance of the outer surface of the cardboard boxes is to be below 155 g/m$^2$ according to the COBB method (ISO standard 535). | |
| C. *Transport* | 1. On pallets: (no stacking for overland transport):<br>— Maximum stacking height for pallets: two layers.<br>— High-quality 'one way' pallet with a minimum gross weight of 25 kg.<br>— Four-way pallet.<br>— The surface area of the wood used for the floor of the pallet is to be at least 75 % of the surface area of the pallet.<br>— The boxes are to occupy as much space as possible on the pallet and no less than 90 %. | |

**9.3 — BO 5 m** *(continued)*

| Product | BUTTER OIL | 4 × 5 kg |
|---|---|---|
| | — None of the cartons is to extend over the four edges of the pallet.<br>— A sheet of double-wall corrugated board is to be placed between the layers half way up.<br>— Two sheets of double-wall corrugated board are to cover the top of the pallet in the shape of a cross with a minimum 'return' of 20 cm on both sides of the pallet (strapping side).<br>— Two UV-resistant plastic strapping bands (six months tropical climate: humidity and sunshine).<br>Tension resistance: 550 $N/mm^2$.<br>— The whole is to be shrink-wrapped in transparent PE with a minimum thickness of 125 microns, UV-stabilized (six months tropical climate: humidity and sunshine).<br>2. In containers:<br>— Containers are to be filled without pallets.<br>— Boxes are to be laid flat.<br>— Double-wall corrugated board inserts are to be placed between the third and fourth layer, covering the surface over the width of the container and covering at least two boxes lengthwise.<br>The inserts are not to overlap.<br>— Any free space at the sides and at the ends is to be filled with 'ad hoc' material to ensure that the cartons are completely immobilized in the container. | |

## 9.4 — BO 10 m

| Product | BUTTER OIL | 2×10 kg |
|---|---|---|
| A. *Primary pack* | 1. **Requirements relating to packaging and preservation**<br>The butter oil is to be contained in metal cans with a net capacity of 10 kg, coated on the outside with lacquer and on the inside with food-grade lacquer, filled to capacity and hermetically sealed.<br>Filling is to take place under a modified atmosphere.<br>— Lacquer one layer inner — tinning inner/outer 2,8 + 2,8 g/m$^2$ — side-seam striped cans.<br>— Impact tests are to be carried out on multiple packs ready for supply.<br>— Minimum thickness of sheet metal: 0,27 mm. | |
| B. *Multiple pack* | 1. **Requirements relating to packaging and preservation**<br>The cans of butter oil are to be packed in cartons containing 2×10 kg cans.<br>— The sealing of the outer box can be done by gluing and/or taping.<br>— Glue used for making up and sealing the packaging is to be moisture-resistant.<br>— Adhesive tape used for sealing should be capable of resisting a tropical climate (six months: humidity and sunshine).<br>The width of the tape is to be at least 50 mm.<br>The length of the tape used is to be at least equal to 2L + 2H - 10 cm.<br>2. **Conformity tests**<br>Cartons of 2×10 kg cans filled for 95 % with water and previously stored in accordance with EN standard 22233 for a week at 20 °C and at 90 % relative humidity, should withstand the following tests:<br>(a) Three vertical drops from a height of 1 metre.<br>This test is to be carried out in accordance with EN standard 22248, on three different edges belonging to different trihedrons, the package being lifted such that its centre of gravity is vertically above the point of impact.<br>(b) Minimum compressive strength: 6 000 N.<br>This test is to be carried out in accordance with EN standard 22872, the package being placed in its normal position for transport.<br>The result of each of these tests is to be assessed on five complete packages:<br>— The cartons may be deformed but should remain intact and should not have any tear greater than the height of the flap.<br>— The adhesive tape should not be torn or unstuck.<br>— The cans should show no signs of leakage after the vacuum is released.<br>— The water resistance of the outer surface of the cardboard boxes is to be below 155 g/m$^2$ according to the COBB method (ISO standard 535). | |
| C. *Transport* | 1. On pallets (no stacking for overland transport):<br>— Maximum stacking height for pallets: two layers.<br>— High quality 'one way' pallet with a minimum gross weight of 25 kg.<br>— Four-way pallet.<br>— The surface area of the wood used for the floor of the pallet is to be at least 75 % of the surface area of the pallet.<br>— The boxes are to occupy as much space as possible on the pallet and no less than 90 %. | |

**9.4 — BO 10 m** *(continued)*

| Product | BUTTER OIL | 2 × 10 kg |
|---|---|---|
| | — None of the cartons is to extend over the four edges of the pallet.<br>— A sheet of double-wall corrugated board is to be placed between the layers half way up.<br>— Two sheets of double-wall corrugated board are to cover the top of the pallet in the shape of a cross with a minimum 'return' of 20 cm on both sides of the pallet (strapping side).<br>— Two UV-resistant plastic strapping bands (six months tropical climate: humidity and sunshine).<br>Tension resistance: 550 $N/mm^2$.<br>— The whole is to be shrink-wrapped in transparent PE with a minimum thickness of 125 microns, UV-stabilized (six months tropical climate: humidity and sunshine).<br>2. In containers:<br>— Containers are to be filled without pallets.<br>— Boxes are to be laid flat.<br>— Double-wall corrugated board inserts are to be placed between the third and fourth layer, covering the surface over the width of the container and covering at least two boxes lengthwise.<br>The inserts are not to overlap.<br>— Any free space at the sides and at the ends is to be filled with 'ad hoc' material to ensure that the cartons are completely immobilized in the container. | |

## 9.5 — BO 20 m

| Product | BUTTER OIL | 1 × 20 kg |
|---|---|---|
| A. *Primary pack* | 1. **Requirements relating to packaging and preservation**<br>The butter oil is to be contained in metal cans with a net capacity of 20 kg, coated on the outside with lacquer and on the inside with food-grade lacquer, filled to capacity and hermetically sealed.<br>Filling is to take place under a modified atmosphere.<br>— Lacquer one layer inner — tinning inner/outer 2,8 + 2,8 g/m$^2$ — side-seam striped cans.<br>— Impact tests are to be carried out on multiple packs ready for supply.<br>— Minimum thickness of sheet metal: 0,27 mm. | |
| B. *Multiple pack* | 1. **Requirements relating to packaging and preservation**<br>The cans of butter oil are to be packed in cartons containing 1 × 20 kg cans.<br>— The sealing of the outer box can be done by gluing and/or taping.<br>— Glue used for making up and sealing the packaging is to be moisture-resistant.<br>— Adhesive tape used for sealing should be capable of resisting a tropical climate (six months: humidity and sunshine).<br>The width of the tape is to be at least 50 mm.<br>The length of the tape used is to be at least equal to 2L + 2H - 10 cm.<br>2. **Conformity tests**<br>Cartons of 1 × 20 kg cans filled for 95 % with water and previously stored in accordance with EN standard 22233 for a week at 20 °C and at 90 % relative humidity, should withstand the following tests:<br>(a) Three vertical drops from a height of 1 metre.<br>This test is to be carried out in accordance with EN standard 22248, on three different edges belonging to different trihedrons, the package being lifted such that its centre of gravity is vertically above the point of impact.<br>(b) Minimum compressive strength: 6 000 N.<br>This test is to be carried out in accordance with EN standard 22872, the package being placed in its normal position for transport.<br>The result of each of these tests is to be assessed on five complete packages:<br>— The cartons may be deformed but should remain intact and should not have any tear greater than the height of the flap.<br>— The adhesive tape should not be torn or unstuck.<br>— The cans should show no signs of leakage after the vacuum is released.<br>— The water resistance of the outer surface of the cardboard boxes is to be below 155 g/m$^2$ according to the COBB method (ISO standard 535). | |
| C. *Transport* | 1. On pallets (no stacking for overland transport):<br>— Maximum stacking height for pallets: two layers.<br>— High-quality 'one way' pallet with a minimum gross weight of 25 kg.<br>— Four-way pallet.<br>— The surface area of the wood used for the floor of the pallet is to be at least 75 % of the surface area of the pallet.<br>— The boxes are to occupy as much space as possible on the pallet and no less than 90 %. | |

**9.5 — BO 20 m** *(continued)*

| Product | BUTTER OIL | 1 × 20 kg |
|---|---|---|
| | — None of the cartons is to extend over the four edges of the pallet.<br>— A sheet of double-wall corrugated board is to be placed between the layers half way up.<br>— Two sheets of double-wall corrugated board are to cover the top of the pallet in the shape of a cross with a minimum 'return' of 20 cm on both sides of the pallet (strapping side).<br>— Two UV-resistant plastic strapping bands (six months tropical climate: humidity and sunshine).<br>Tension resistance: 550 $N/mm^2$.<br>— The whole is to be shrink-wrapped in transparent PE with a minimum thickness of 125 microns, UV-stabilized (six months tropical climate: humidity and sunshine).<br>2. In containers:<br>— Containers are to be filled without pallets.<br>— Boxes are to be laid flat.<br>— Double-wall corrugated board inserts are to be placed between the third and fourth layer, covering the surface over the width of the container and covering at least two boxes lengthwise.<br>The inserts are not to overlap.<br>— Any free space at the sides and at the ends is to be filled with 'ad hoc' material to ensure that the cartons are completely immobilized in the container. | |

## 9.6 — BO 200 m

| Product | BUTTER OIL | 200 kg |
|---|---|---|
| A. *Primary pack* | 1. **Requirements relating to packaging and preservation**<br>The butter oil is to be contained in new bunged metal drums with a net capacity of 200 kg, under a nitrogen atmosphere, coated on the outside with lacquer and on the inside with food-grade lacquer, filled to capacity and hermetically sealed.<br>— The minimum gross weight of the drum is to be 18 kg.<br>— It is to be composed of at least a base and a lid of 1,0 mm thick.<br>— The body of the drum is to be at least 0,9 mm thick.<br>2. **Conformity tests**<br>Metal drums filled at 95 % with water are to be capable of withstanding the following impact test:<br>— First test (on three samples):<br>The package must hit the impact area diagonally on the bottom rim or, if there is no rim, on a peripheral seam at the edge.<br>— Second test (on three other samples):<br>The package must hit the impact area on the weakest part that has not been tested in the first impact test, for example on a closure or, for certain cylindrical drums, on the welded longitudinal seam of the hoop.<br>Height of fall: 1,20 m.<br>The result of these tests is to be assessed on six drums:<br>The drums should show no signs of leakage after the vacuum is released. | |
| B. *Transport* | Drums are always to be transported in an upright position.<br>1. In drums (in bulk).<br>2. On pallets (no stacking for overland transport):<br>— Maximum stacking height for pallets: three layers.<br>— High-quality 'one way' pallet with a minimum gross weight of 25 kg.<br>— Four-way pallet.<br>— The drums must be loaded on the pallet so as to be compact and interdependent.<br>— Two UV-resistant plastic strapping bands (six months tropical climate: humidity and sunshine), are to be placed horizontally.<br>Tension resistance: 550 $N/mm^2$.<br>3. In containers:<br>— Two layers maximum in a vertical position.<br>— A sheet of chipboard at least 10 mm thick or planks of dunnage wood are to be placed as inserts between the two layers, covering the surface over the width of the container and, in the case of the sheets, covering at least two drums lengthwise.<br>— The sheets/planks of wood are not to overlap.<br>— Any free space at the sides and at the ends is to be filled with 'ad hoc' material to ensure that the drums are completely immobilized in the container.<br>4. Maritime transport:<br>*Mutatis mutandis*, the same rules as for containers. | |

## 10.1 — H 1 pet

| Product | OILS | RAPE SEED<br>PALM<br>SUNFLOWER<br>OLIVE | 12 × 1 l<br>15 × 1 l |
|---|---|---|---|

A. *Primary pack*

1. **Requirements relating to packaging and preservation**

The oil is to be contained in one litre food-grade PET (Polyethylene terephtalate) bottles, hermetically sealed.

The bottles are to have caps with tamper-proof devices.

— Weight of the empty bottle: 28,5 g minimum.

— Impermeability: no leakage under the pressure of two stacked pallets.

— Impact tests are to be carried out on multiple packs ready for supply.

B. *Multiple pack*

1. **Requirements relating to packaging and preservation**

The one litre PET bottle of oil is to be packed in cartons containing 12×1 l or 15×1 l bottles.

— The sealing of the outer box can be done by gluing and/or taping.

— Glue used for making up and sealing the packaging is to be moisture-resistant.

— Adhesive tape used for sealing should be capable of resisting a tropical climate (six months: humidity and sunshine).

The width of the tape is to be at least 50 mm.

The length of the tape used is to be at least equal to 2L+2H - 10 cm.

2. **Conformity tests**

Cartons of 12×1 l or 15×1 l, filled and previously stored in accordance with EN standard 22233 for a week at 20 °C and 90 % relative humidity.

Resistance to vertical impact:

— First test: one carton flat on its base.

— Second test: one carton flat on its top.

— Third test: one carton flat on the longest side.

— Fourth test: one carton flat on the shortest side.

— Fifth test: one carton on an upper corner.

Height of fall: 1,20 m.

Minimum compressive strength: 6 000 N.

This test is to be carried out in accordance with EN standard 22872, the package being placed in its normal position for transport.

The result of each of the tests is to be assessed on five complete packages:

— The packages may be deformed but should remain intact and should not have any tear greater than half the height of the flap.

— The adhesive tape should not be torn or unstuck.

— The PET bottles should show no signs of leakage.

— The water resistance of the outer surface of the cardboard boxes is to be below 155 g/m$^2$ according to the COBB method (ISO standard 535).

C. *Transport*

1. On pallets (no stacking for overland transport):

— Maximum stacking height for pallets: two layers,

— High quality 'one way' pallet with a minimum gross weight of 25 kg.

— Four-way pallet.

**10.1 — H 1 pet** *(continued)*

| Product | | | |
|---|---|---|---|
| | OILS | RAPE SEED<br>PALM<br>SUNFLOWER<br>OLIVE | 12 × 1 l<br>15 × 1 l |
| | — The surface area of the wood used for the floor of the pallet is to be at least 75 % of the surface area of the pallet.<br>— The boxes are to occupy as much space as possible on the pallet and no less than 90 %.<br>— None of the cartons is to extend over the four edges of the pallet.<br>— A sheet of double-wall corrugated board is to be placed between the layers half way up.<br>— Two sheets of double-wall corrugated board are to cover the top of the pallet in the shape of a cross with a minimum 'return' of 20 cm on both sides of the pallet (strapping side).<br>— Two UV-resistant plastic strapping bands (six months tropical climate: humidity and sunshine).<br>Tension resistance: 550 N/mm$^2$.<br>— The whole is to be shrink-wrapped in transparent PE with a minimum thickness of 125 microns, UV-stabilized (six months tropical climate: humidity and sunshine).<br>2. In containers:<br>— Containers are to be filled without pallets.<br>— Boxes are to be laid flat.<br>— Double-wall corrugated board inserts are to be placed between the third and fourth layer, covering the surface over the width of the container and covering at least two boxes lengthwise.<br>The inserts are not to overlap.<br>— Any free space at the sides and at the ends is to be filled with 'ad hoc' material to ensure that the cartons are completely immobilized in the container. | |

## 10.2 — H 1 m

| Product | OILS { RAPE SEED, PALM, SUNFLOWER, OLIVE } | Metal — 12 × 1 l |
|---|---|---|

### A. *Primary pack*

1. **Requirements relating to packaging and preservation**

The oil is to be contained in metal cans with a net capacity of 1 l, coated on the outside with lacquer, filled to capacity and hermetically sealed.

Filling is to take place under a modified atmosphere.

— Unlacquered body — tinning inner/outer 2,8 + 2,8 g/m$^2$ — side-seam striped cans.

— Impact tests are to be carried out on multiple packs ready for supply.

— Minimum thickness of sheet metal: 0,19 mm.

### B. *Multiple pack*

1. **Requirements relating to packaging and preservation**

The cans of oil are to be packed in cartons containing 12 × 1 l cans.

— The sealing of the outer box can be done by gluing and/or taping.

— Glue used for making up and sealing the packaging is to be moisture-resistant.

— Adhesive tape used for sealing should be capable of resisting a tropical climate (six months: humidity and sunshine).

The width of the tape is to be at least 50 mm.

The length of the tape used is to be at least equal to 2L + 2H - 10 cm.

— Where cans are stacked on top of each other inside the cardboard box, a double-wall board separator is required.

2. **Conformity tests**

Cartons of 12 × 1 l cans filled for 95 % with water and previously stored in accordance with EN standard 22233 for a week at 20 °C and at 90 % relative humidity, should withstand the following tests:

— Three vertical drops from a height of 1 metre.

This test is to be carried out in accordance with EN standard 22248, on three different edges belonging to different trihedrons, the package being lifted such that its centre of gravity is vertically above the point of impact.

— Minimum compressive strength: 6 000 N.

This test is to be carried out in accordance with EN standard 22872, the package being placed in its normal position for transport.

The result of each of these tests is to be assessed on five complete packages:

— The cartons may be deformed but should remain intact and should not have any tear greater than the height of the flap.

— The adhesive tape should not be torn or unstuck.

— The separators are to remain intact and functional.

— The cans should show no signs of leakage after the vacuum is released.

— The water resistance of the outer surface of the cardboard boxes is to be below 155 g/m$^2$ according to the COBB method (ISO standard 535).

### C. *Transport*

1. On pallets (no stacking for overland transport):

— Maximum stacking height for pallets: two layers.

— High-quality 'one way' pallet with a minimum gross weight of 25 kg.

— Four-way pallet.

**10.2 — H 1 m** *(continued)*

| Product | OILS { RAPE SEED, PALM, SUNFLOWER, OLIVE } | Metal — 12 × 1 l |
|---|---|---|
| | — The surface area of the wood used for the floor of the pallet is to be at least 75 % of the surface area of the pallet.<br>— The boxes are to occupy as much space as possible on the pallet and no less than 90 %.<br>— None of the cartons is to extend over the four edges of the pallet.<br>— A sheet of double-wall corrugated board is to be placed between the layers half way up.<br>— Two sheets of double-wall corrugated board are to cover the top of the pallet in the shape of a cross with a minimum 'return' of 20 cm on both sides of the pallet (strapping side).<br>— Two UV-resistant plastic strapping bands (six months tropical climate: humidity and sunshine).<br>Tension resistance: 550 $N/mm^2$.<br>— The whole is to be shrink-wrapped in transparent PE with a minimum thickness of 125 microns, UV-stabilized (six months tropical climate: humidity and sunshine).<br>2. In containers:<br>— Containers are to be filled without pallets.<br>— Boxes are to be laid flat.<br>— Double-wall corrugated board inserts are to be placed between the third and fourth layer, covering the surface over the width of the container and covering at least two boxes lengthwise.<br>— The inserts are not to overlap.<br>— Any free space at the sides and at the ends is to be filled with 'ad hoc' material to ensure that the cartons are completely immobilized in the container. | |

**10.3 — H 2,5 m**

| Product | OILS { RAPE SEED / PALM / SUNFLOWER / OLIVE } | Metal — 8 × 2,5 l |
|---|---|---|

A. *Primary pack*

1. **Requirements relating to packaging and preservation**

The oil is to be contained in metal cans with a net capacity of 2,5 l, coated on the outside with lacquer, filled to capacity and hermetically sealed.

Filling is to take place under a modified atmosphere.

— Unlacquered body — tinning inner/outer 2,8+2,8 g/m$^2$ — side-seam striped cans.

— Impact tests are to be carried out on multiple packs ready for supply.

— Minimum thickness of sheet metal: 0,22 mm.

B. *Multiple pack*

1. **Requirements relating to packaging and preservation**

The cans of oil are to be packed in cartons containing 8×2,5 l cans.

— The sealing of the outer box can be done by gluing and/or taping.

— Glue used for making up and sealing the packaging is to be moisture-resistant.

— Adhesive tape used for sealing should be capable of resisting a tropical climate (six months: humidity and sunshine).

The width of the tape is to be at least 50 mm.

The length of the tape used is to be at least equal to 2L+2H - 10 cm.

— Where cans are stacked on top of each other inside the carboard box, a double-wall board separator is required.

2. **Conformity tests**

Cartons of 8×2,5 l cans filled for 95 % with water and previously stored in accordance with EN standard 22233 for a week at 20 °C and at 90 % relative humidity, should withstand the following tests:

(a) Three vertical drops from a height of 1 metre.

This test is to be carried out in accordance with EN standard 22248, on three different edges belonging to different trihedrons, the package being lifted such that its centre of gravity is vertically above the point of impact.

(b) Minimum compressive strength: 8 000 N.

This test is to be carried out in accordance with EN standard 22872, the package being placed in its normal position for transport.

The result of each of these tests is to be assessed on five complete packages:

— The cartons may be deformed but should remain intact and should not have any tear greater than the height of the flap.

— The adhesive tape should not be torn or unstuck.

— The separators are to remain intact and functional.

— The cans should show no signs of leakage after the vacuum is released.

— The water resistance of the outer surface of the cardboard boxes is to be below 155 g/m$^2$ according to the COBB method (ISO standard 535).

**10.3 — H 2,5 m** *(continued)*

| Product | OILS { RAPE SEED, PALM, SUNFLOWER, OLIVE } | Metal — 8 × 2,5 l |
|---|---|---|
| C. *Transport* | 1. On pallets: (no stacking for overland transport):<br>— Maximum stacking height for pallets: two layers.<br>— High quality 'one way' pallet with a minimum gross weight of 25 kg.<br>— Four-way pallet.<br>— The surface area of the wood used for the floor of the pallet is to be at least 75 % of the surface area of the pallet.<br>— The boxes are to occupy as much space as possible on the pallet and no less than 90 %.<br>— None of the cartons is to extend over the four edges of the pallet.<br>— A sheet of double-wall corrugated board is to be placed between the layers half way up.<br>— Two sheets of double-wall corrugated board are to cover the top of the pallet in the shape of a cross with a minimum 'return' of 20 cm on both sides of the pallet (strapping side).<br>— Two UV-resistant plastic strapping bands (six months tropical climate: humidity and sunshine).<br>Tension resistance: 550 $N/mm^2$.<br>— The whole is to be shrink-wrapped in transparent PE with a minimum thickness of 125 microns, UV-stabilized (six months tropical climate: humidity and sunshine).<br>2. In containers:<br>— Containers are to be filled without pallets.<br>— Boxes are to be laid flat.<br>— Double-wall corrugated board inserts are to be placed between the third and fourth layer, covering the surface over the width of the container and covering at least two boxes lengthwise.<br>The inserts are not to overlap.<br>— Any free space at the sides and at the ends is to be filled with 'ad hoc' material to ensure that the cartons are completely immobilized in the container. | |

**10.4 — H 5 m**

| Product | OILS { RAPE SEED, PALM, SUNFLOWER, OLIVE } | Metal — 4 × 5 l |
|---|---|---|

A. *Primary pack*

1. **Requirements relating to packaging and preservation**

The oil is to be contained in metal cans with a net capacity of 5 l, coated on the outside with lacquer, filled to capacity and hermetically sealed.

Filling is to take place under a modified atmosphere.

— Unlacquered body — tinning inner/outer 2,8 + 2,8 g/m$^2$ — side-seam striped cans.

— Impact tests are to be carried out on multiple packs ready for supply.

— Minimum thickness of sheet metal: 0,23 mm.

B. *Multiple pack*

1. **Requirements relating to packaging and preservation**

The cans of oil are to be packed in cartons containing 4 × 5 l cans.

— The sealing of the outer box can be done by gluing and/or taping.

— Glue used for making up and sealing the packaging is to be moisture-resistant.

— Adhesive tape used for sealing should be capable of resisting a tropical climate (six months: humidity and sunshine).

The width of the tape is to be at least 50 mm.

The length of the tape used is to be at least equal to 2L + 2H - 10 cm.

2. **Conformity tests**

Cartons of 4 × 5 l cans filled for 95 % with water and previously stored in accordance with EN standard 22233 for a week at 20 °C and at 90 % relative humidity, should withstand the following tests:

(a) Three vertical drops from a height of 1 metre.

This test is to be carried out in accordance with EN standard 22248, on three different edges belonging to different trihedrons, the package being lifted such that its centre of gravity is vertically above the point of impact.

(b) Minimum compressive strength: 8 000 N.

This test is to be carried out in accordance with EN standard 22872, the package being placed in its normal position for transport.

The result of each of these tests is to be assessed on five complete packages:

— The cartons may be deformed but should remain intact and should not have any tear greater than the height of the flap.

— The adhesive tape should not be torn or unstuck.

— The cans should show no signs of leakage after the vacuum is released.

— The water resistance of the outer surface of the cardboard boxes is to be below 155 g/m$^2$ according to the COBB method (ISO standard 535).

C. *Transport*

1. On pallets (no stacking for overland transport):

— Maximum stacking height for pallets: two layers.

— High quality 'one way' pallet with a minimum gross weight of 25 kg.

— Four-way pallet.

— The surface area of the wood used for the floor of the pallet is to be at least 75 % of the surface area of the pallet.

**10.4 — H 5 m** *(continued)*

| Product | OILS { RAPE SEED, PALM, SUNFLOWER, OLIVE } | Metal — 4 × 5 l |
|---|---|---|
| | — The boxes are to occupy as much space as possible on the pallet and no less than 90 %.<br>— None of the cartons is to extend over the four edges of the pallet.<br>— A sheet of double-wall corrugated board is to be placed between the layers half way up.<br>— Two sheets of double-wall corrugated board are to cover the top of the pallet in the shape of a cross with a minimum 'return' of 20 cm on both sides of the pallet (strapping side).<br>— Two UV-resistant plastic strapping bands (six months tropical climate: humidity and sunshine).<br>Tension resistance: 550 N/mm$^2$.<br>— The whole is to be shrink-wrapped in transparent PE with a minimum thickness of 125 microns, UV-stabilized (six months tropical climate: humidity and sunshine).<br>2. In containers:<br>— Containers are to be filled without pallets.<br>— Boxes are to be laid flat.<br>— Double-wall corrugated board inserts are to be placed between the third and fourth layer, covering the surface over the width of the container and covering at least two boxes lengthwise.<br>The inserts are not to overlap.<br>— Any free space at the sides and at the ends is to be filled with 'ad hoc' material to ensure that the cartons are completely immobilized in the container. | |

## 10.5 — H 10 m

| Product | OILS { RAPE SEED, PALM, SUNFLOWER, OLIVE } | Metal — 2 × 10 l |
|---|---|---|

A. *Primary pack*

1. **Requirements relating to packaging and preservation**

The oil is to be contained in metal cans with a net capacity of 10 l, coated on the outside with lacquer, filled to capacity and hermetically sealed.

Filling is to take place under a modified atmosphere.

— Unlacquered body — tinning inner/outer 2,8 + 2,8 g/m$^2$ — side-seam striped cans.

— Impact tests are to be carried out on multiple packs ready for supply.

— Minimum thickness of sheet metal: 0,27 mm.

B. *Multiple pack*

1. **Requirements relating to packaging and preservation**

The cans of oil are to be packed in cartons containing 2 × 10 l cans.

— The sealing of the outer box can be done by gluing and/or taping.

— Glue used for making up and sealing the packaging is to be moisture-resistant.

— Adhesive tape used for sealing should be capable of resisting a tropical climate (six months: humidity and sunshine).

The width of the tape is to be at least 50 mm.

The length of the tape used is to be at least equal to 2L + 2H - 10 cm.

2. **Conformity tests**

Cartons of 2 × 10 l cans filled for 95 % with water and previously stored in accordance with EN standard 22233 for a week at 20 °C and at 90 % relative humidity, should withstand the following tests:

(a) Three vertical drops from a height of 1 metre.

This test is to be carried out in accordance with EN standard 22248, on three different edges belonging to different trihedrons, the package being lifted such that its centre of gravity is vertically above the point of impact.

(b) Minimum compressive strength: 6 000 N.

This test is to be carried out in accordance with EN standard 22872, the package being placed in its normal position for transport.

The result of each of these tests is to be assessed on five complete packages:

— The cartons may be deformed but should remain intact and should not have any tear greater than the height of the flap.

— The adhesive tape should not be torn or unstuck.

— The cans should show no signs of leakage after the vacuum is released.

— The water resistance of the outer surface of the cardboard boxes is to be below 155 g/m$^2$ according to the COBB method (ISO standard 535).

C. *Transport*

1. On pallets (no stacking for overland transport):

— Maximum stacking height for pallets: two layers.

— High-quality 'one way' pallet with a minimum gross weight of 25 kg.

— Four-way pallet.

— The surface area of the wood used for the floor of the pallet is to be at least 75 % of the surface area of the pallet.

**10.5 — H 10 m** *(continued)*

| Product | OILS { RAPE SEED, PALM, SUNFLOWER, OLIVE } | Metal — 2 × 10 l |
|---|---|---|
| | — The boxes are to occupy as much space as possible on the pallet and no less than 90 %.<br>— None of the cartons is to extend over the four edges of the pallet.<br>— A sheet of double-wall corrugated board is to be placed between the layers half way up.<br>— Two sheets of double-wall corrugated board are to cover the top of the pallet in the shape of a cross with a minimum 'return' of 20 cm on both sides of the pallet (strapping side).<br>— Two UV-resistant plastic strapping bands (six months tropical climate: humidity and sunshine).<br>Tension resistance: 550 $N/mm^2$.<br>— The whole is to be shrink-wrapped in transparent PE with a minimum thickness of 125 microns, UV-stabilized (six months tropical climate: humidity and sunshine).<br>2. In containers:<br>— Containers are to be filled without pallets.<br>— Boxes are to be laid flat.<br>— Double-wall corrugated board inserts are to be placed between the third and fourth layer, covering the surface over the width of the container and covering at least two boxes lengthwise.<br>The inserts are not to overlap.<br>— Any free space at the sides and at the ends is to be filled with 'ad hoc' material to ensure that the cartons are completely immobilized in the container. | |

**10.6 — H 20 m**

| Product | OILS { RAPE SEED / PALM / SUNFLOWER / OLIVE } | Metal — 1 × 20 l |
|---|---|---|

A. *Primary pack*

1. **Requirements relating to packaging and preservation**

The oil is to be contained in metal cans with a net capacity of 20 l, coated on the outside with lacquer, filled to capacity and hermetically sealed.

Filling is to take place under a modified atmosphere.

— Unlacquered body — tinning inner/outer 2,8 + 2,8 g/m$^2$ — side-seam striped cans.

— Impact tests are to be carried out on multiple packs ready for supply.

— Minimum thickness of sheet metal: 0,27 mm.

B. *Multiple pack*

1. **Requirements relating to packaging and preservation**

The cans of oil are to be packed in cartons containing 1 × 20 l cans.

— The sealing of the outer box can be done by gluing and/or taping.

— Glue used for making up and sealing the packaging is to be moisture-resistant.

— Adhesive tape used for sealing should be capable of resisting a tropical climate (six months: humidity and sunshine).

The width of the tape is to be at least 50 mm.

The length of the tape used is to be at least equal to 2L + 2H - 10 cm.

2. **Conformity tests**

Cartons of 1 × 20 l cans filled for 95 % with water and previously stored in accordance with EN standard 22233 for a week at 20 °C and at 90 % relative humidity, should withstand the following tests:

(a) Three vertical drops from a height of 1 metre.

This test is to be carried out in accordance with EN standard 22248, on three different edges belonging to different trihedrons, the package being lifted such that its centre of gravity is vertically above the point of impact.

(b) Minimum compressive strength: 6 000 N.

This test is to be carried out in accordance with EN standard 22872, the package being placed in its normal position for transport.

The result of each of these tests is to be assessed on five complete packages:

— The cartons may be deformed but should remain intact and should not have any tear greater than the height of the flap.

— The adhesive tape should not be torn or unstuck.

— The cans should show no signs of leakage after the vacuum is released.

— The water resistance of the outer surface of the cardboard boxes is to be below 155 g/m$^2$ according to the COBB method (ISO standard 535).

C. *Transport*

1. On pallets (no stacking for overland transport):

— Maximum stacking height for pallets: two layers.

— High-quality 'one way' pallet with a minimum gross weight of 25 kg.

— Four-way pallet.

— The surface area of the wood used for the floor of the pallet is to be at least 75 % of the surface area of the pallet.

**10.6 — H 20 m** *(continued)*

| Product | OILS { RAPE SEED, PALM, SUNFLOWER, OLIVE } | Metal — 1 × 20 l |
|---|---|---|
| | — The boxes are to occupy as much space as possible on the pallet and no less than 90 %.<br>— None of the cartons is to extend over the four edges of the pallet.<br>— A sheet of double-wall corrugated board is to be placed between the layers half way up.<br>— Two sheets of double-wall corrugated board are to cover the top of the pallet in the shape of a cross with a minimum 'return' of 20 cm on both sides of the pallet (strapping side).<br>— Two UV-resistant plastic strapping bands (six months tropical climate: humidity and sunshine).<br>Tension resistance: 550 $N/mm^2$.<br>— The whole is to be shrink-wrapped in transparent PE with a minimum thickness of 125 microns, UV-stabilized (six months tropical climate: humidity and sunshine).<br>2. In containers:<br>— Containers are to be filled without pallets.<br>— Boxes are to be laid flat.<br>— Double-wall corrugated board inserts are to be placed between the third and fourth layer, covering the surface over the width of the container and covering at least two boxes lengthwise.<br>The inserts are not to overlap.<br>— Any free space at the sides and at the ends is to be filled with 'ad hoc' material to ensure that the cartons are completely immobilized in the container. | |

**10.7 — H 200 m**

| Product | OILS { RAPE SEED / PALM / SUNFLOWER / OLIVE } | Metal — 1 × 200 l |
|---|---|---|
| A. *Primary pack* | 1. **Requirements relating to packaging and preservation**<br>The oil is to be contained in new bunged metal drums with a net capacity of 200 l, under a nitrogen atmosphere, coated on the outside with lacquer and on the inside with food-grade lacquer, filled to capacity and hermetically sealed.<br>The minimum gross weight of the drum is to be 18 kg.<br>It is to be composed of at least a base and a lid of 1,0 mm thick.<br>The body of the drum is to be at least 0,9 mm thick.<br>2. **Conformity tests**<br>Metal drums filled at 95 % with water are to be capable of withstanding the following impact test:<br>— First test (on three samples):<br>The package must hit the impact area diagonally on the bottom rim or, if there is no rim, on a peripheral seam at the edge.<br>— Second test (on three other samples):<br>The package must hit the impact area on the weakest part that has not been tested in the first impact test, for example on a closure or, for certain cylindrical drums, on the welded longitudinal seam of the hoop.<br>Height of fall: 1,20 m.<br>The result of these tests is to be assessed on six drums:<br>The drums should show no signs of leakage after the vacuum is released. | |
| B. *Transport* | Drums are always to be transported in an upright position.<br>1. In drums (in bulk).<br>2. On pallets (no stacking for overland transport):<br>— Maximum stacking height for pallets: three layers.<br>— High quality 'one way' pallet with a minimum gross weight of 25 kg.<br>— Four-way pallet.<br>— The drums must be loaded on the pallet so as to be compact and interdependent.<br>— Two UV-resistant plastic strapping bands (six months tropical climate: humidity and sunshine) are to be placed horizontally.<br>Tension resistance: 550 N/mm$^2$.<br>3. In containers:<br>— Two layers maximum in a vertical position.<br>— A sheet of chipboard at least 10 mm thick or planks of dunnage wood are to be placed as inserts between the two layers, covering the surface over the width of the container and, in the case of the sheets, covering at least two drums lengthwise.<br>— The sheets/planks of wood are not to overlap.<br>— Any free space at the sides and at the ends is to be filled with ad hoc material to ensure that the drums are completely immobilized in the container.<br>4. Maritime transport:<br>*Mutatis mutandis*, the same rules as for containers. | |

**10.8 — H 5 pe**

| Product | OILS { RAPE SEED, PALM, SUNFLOWER, OLIVE } | PE — 4 × 5 l |
|---|---|---|

| | |
|---|---|
| A. *Primary pack* | 1. **Requirements relating to packaging and preservation**<br>The oil is to be contained in 5 l containers made of food-grade high-density polyethylene, hermetically sealed.<br>The containers are to be fitted with a handle and a screw cap with tamper-proof device.<br>— The HDPE is to be UV-stabilized.<br>— Weight of the empty container: 180 g.<br>— Impact tests are to be carried out on multiple packs ready for supply. |
| B. *Multiple pack* | 1. **Requirements relating to packaging and preservation**<br>The containers of oil are to be packed in cartons containing 4 × 5 l containers<br>— The sealing of the outer box can be done by gluing and/or taping.<br>— Glue used for making up and sealing the packaging is to be moisture-resistant.<br>— Adhesive tape used for sealing should be capable of resisting a tropical climate (six months: humidity and sunshine).<br>The width of the tape is to be at least 50 mm.<br>The length of the tape used is to be at least equal to 2L + 2H — 10 cm.<br>2. **Conformity tests**<br>Cartons 4 × 5 l, filled and previously stored in accordance with EN standard 22233 for a week at 20 °C and 90 % relative humidity.<br>Resistance to vertical impact:<br>— First test: one carton flat on its base.<br>— Second test: one carton flat on its top.<br>— Third test: one carton flat on the longest side.<br>— Fourth test: one carton flat on the shortest side.<br>— Fifth test: one carton on an upper corner.<br>Height of fall: 1,20 m.<br>Minimum compressive strength: 5 000 N.<br>This test is to be carried out in accordance with EN standard 22872, the package being placed in its normal position for transport.<br>The result of each of the tests is to be assessed on five complete packages,<br>— The packages may be deformed but should remain intact and should not have any tear greater than half the height of the flap.<br>— The adhesive tape should not be torn or unstuck.<br>— The PE containers should show no signs of leakage.<br>— The water resistance of the outer surface of the cardboard boxes is to be below 155 g/m$^2$ according to the COBB method (ISO standard 535). |
| C. *Transport* | 1. On pallets (no stacking for overland transport):<br>— Maximum stacking height for pallets: two layers.<br>— High-quality 'one way' pallet with a minimum gross weight of 25 kg.<br>— Four-way pallet. |

**10.8 — H 5 pe** *(continued)*

| Product | OILS { RAPE SEED, PALM, SUNFLOWER, OLIVE } | PE — 4 × 51 |
|---|---|---|
| | — The surface area of the wood used for the floor of the pallet is to be at least 75 % of the surface area of the pallet.<br>— The boxes are to occupy as much space as possible on the pallet and no less than 90 %.<br>— None of the cartons is to extend over the four edges of the pallet.<br>— A sheet of double-wall corrugated board is to be placed between the layers half way up.<br>— Two sheets of double-wall corrugated board are to cover the top of the pallet in the shape of a cross with a minimum 'return' of 20 cm on both sides of the pallet (strapping side).<br>— Two UV-resistant plastic strapping bands (six months tropical climate: humidity and sunshine).<br>Tension resistance: 550 $N/mm^2$.<br>— The whole is to be shrink-wrapped in transparent PE with a minimum thickness of 125 microns, UV-stabilized (six months tropical climate: humidity and sunshine).<br>2. In containers:<br>— Containers are to be filled without pallets.<br>— Boxes are to be laid flat.<br>— Double-wall corrugated board inserts are to be placed between the third and fourth layer, covering the surface over the width of the container and covering at least two boxes lengthwise.<br>The inserts are not to overlap.<br>— Any free space at the sides and at the ends is to be filled with 'ad hoc' material to ensure that the cartons are completely immobilized in the container. | |

## 10.9 — H 20 pe

| Product | OILS { RAPE SEED / PALM / SUNFLOWER / OLIVE } | PE — 1 × 20 l |
|---|---|---|

A. *Primary pack*

1) **Requirements relating to packaging and preservation**

The oil is to be contained in 20 l containers made of food-grade high-density polyethylene, hermetically sealed.

The containers are to be fitted with a handle and a screw cap with tamper-proof device.

The containers are to be fully stackable.

— The HDPE is to be UV-stabilized.

— Weight of the empty container: 1 000 g minimum.

— Impermeability: no leakage under the pressure of two stacked pallets.

2. **Conformity tests**

The requirements of resistance to the impact tests are as follows (height: 1,20 m):

(a) The package must hit the impact area diagonally on the bottom rim or, if there is no rim, on a peripheral seam at the edge.

Test: three samples.

(b) The package must hit the impact area on the weakest part that has not been tested in the first impact test, for example on a closure.

Test: three other samples.

The result of these tests is to be assessed on six containers:

The containers should show no signs of leakage after the vacuum is released and remain tamper-proof after these impacts.

B. *Transport*

1. On pallets (no stacking for overland transport):

— Maximum stacking height for pallets: maximum two pallets.

— High-quality 'one way' pallet with a minimum gross weight of 25 kg.

— Four-way pallet.

— The surface area of the wood used for the floor of the pallet is to be at least 75 % of the surface area of the pallet.

— The containers are to occupy as much space as possible on the pallet and no less than 90 %,

— None of the containers is to extend over the four edges of the pallet.

— A sheet of flat grey 500 g board is to be placed between the layers half way up.

— Two sheets of double-wall corrugated board are to cover the top of the pallet in the shape of a cross with a minimum 'return' of 20 cm on both sides of the pallet (strapping side).

— Two UV-resistant plastic strapping bands (six months tropical climate: humidity and sunshine).

Tension resistance: 550 N/mm$^2$.

— One UV-resistant plastic strapping band, 550 N/mm$^2$, per row of containers on the pallet.

Four heights of containers = four strapping bands.

— All the strapping is to be protected by good-quality protective corners equal in height to the load on the pallet less 20 cm.

— The whole is to be shrink-wrapped in transparent PE with a minimum thickness of 125 microns, UV-stabilized (six months tropical climate: humidity and sunshine).

**10.9 — H 20 pe** *(continued)*

| Product | | | |
|---|---|---|---|
| | OILS | RAPE SEED<br>PALM<br>SUNFLOWER<br>OLIVE | PE — 1 × 20 l |
| | 2. In containers:<br>— Containers are to be filled without pallets.<br>— The bottles are to be placed upright in the container.<br>— A chipboard insert at least 10 mm thick is to be placed between the second and third layer, covering the surface over the width of the container and covering at least two bottles lengthwise.<br>The inserts are not to overlap.<br>— Any free space at the sides and at the ends is to be filled with 'ad hoc' material to ensure that the bottles are completely immobilized in the container. | | |

## 11.1 — SUB 25

| Product | SUGAR | 1 × 25 kg |
|---|---|---|
| A. *Primary pack* | 1. **Requirements relating to packaging and preservation**<br>25 kg sugar is to be packed in clean new sacks corresponding to the descriptions below:<br>(a) New sacks made of woven PP with a minimum weight of 85 g/m$^2$, with a polyethylene inner pocket welded to the bottom, 50 microns LDPE or 30 microns HDPE. Sacks made of woven PP are to be given a special food-grade 'ultraviolet' treatment. The lower and upper edges are to be stitched together with the PE sack. They should correspond to EN standards 277.<br>(b) New HDPE/LDPE sacks. Laminated sacks made of 50 % HDPE and 50 % LDPE with a minimum weight of 130 g/m$^2$, corresponding to EN standards 787.<br>(c) Paper sacks, at least two-ply, corresponding to EN standards 770. The second ply is to be covered with a PE layer of 15 g/m$^2$. The plies taken together should correspond to at least 510 J/m$^2$ TEA average.<br>The sacks are to be closed with a strong UV-resistant cord (six months tropical climate: humidity and sunshine).<br>The residual tensile value, after the UV test (cycle conditions in accordance with EN 277) must be at least 25 N.<br>2. **Conformity tests**<br>(a) The new sacks made of woven PP should correspond to EN standards 277.<br>(b) The new HDPE/LDPE sacks should correspond to EN standards 787.<br>(c) The paper sacks should correspond to EN standards 770.<br>The certificate of conformity of UV treatment is to be obtained within the six months preceding the date when the sacks are to be filled. | |
| B. *Transport* | 1. On pallets (no stacking for overland transport):<br>— High-quality 'one way' pallet with a minimum gross weight of 25 kg.<br>— Four-way pallet.<br>— The surface area of the wood used for the floor of the pallet is to be at least 75 % of the surface area of the pallet.<br>— The sacks are to occupy as much space as possible on the pallet without extending beyond it.<br>— Two sheets of double-wall corrugated board are to cover the top of the pallet in the shape of a cross with a minimum 'return' of 20 cm on both sides of the pallet (strapping side).<br>— Two UV-resistant plastic strapping bands (six months tropical climate: humidity and sunshine).<br>Tension resistance: 550 N/mm$^2$.<br>— The whole is to be shrink-wrapped in transparent PE with a minimum thickness of 125 microns, UV-stabilized (six months tropical climate: humidity and sunshine).<br>2. With slings:<br>Basket or trefoil type.<br>Carrying capacity: 1 500 kg.<br>Safety factor 5:1 (minimum breaking load: five times carrying capacity).<br>3. In containers:<br>— Containers are to be filled without pallets.<br>— Sacks are to be laid flat.<br>— Any free space at the sides and at the ends is to be filled with 'ad hoc' material to ensure that the sacks are completely immobilized in the container. | |

## 11.2 — SUB 50

| Product | SUGAR | 50 kg |
|---|---|---|
| A. *Primary pack* | 1. **Requirements relating to packaging and preservation**<br>50 kg sugar is to be packed in clean new sacks corresponding to the descriptions below:<br>(a) New jute sacks with a minimum weight of 305 g/m$^2$, with an inner pocket welded to the bottom, 50 microns LDPE or 30 microns HDPE, as a minimum. The lower and upper edges of the two sacks are to be stitched together. They should correspond to EN standards 766.<br>(b) New sacks made of woven PP with a minimum weight of 85 g/m$^2$, with a polyethylene inner pocket welded to the bottom, 50 microns LDPE or 30 microns HDPE. Sacks made of woven PP are to be given a special food-grade 'ultraviolet' treatment. The lower and upper edges are to be stitched together with the PE sack. They should correspond to EN standards 277.<br>The dimensions of the sacks are to be appropriate to the density of the product they are to contain.<br>The sacks are to be closed with a strong UV-resistant cord (six months tropical climate: humidity and sunshine). The residual tensile value, after the UV test (cycle conditions in accordance with EN 277) must be at least 25 N.<br>2. **Conformity tests**<br>(a) The new jute sacks + inner pocket should correspond to EN standards 766.<br>(b) The new sacks made of woven PP should correspond to EN standards 277.<br>The certificate of conformity of UV treatment is to be obtained within the six months preceding the date when the sacks are to be filled. | |
| B. *Transport* | 1. In loose sacks.<br>2. On pallets (no stacking for overland transport):<br>— High-quality 'one way' pallet with a minimum gross weight of 25 kg.<br>— Four-way pallet.<br>— The surface area of the wood used for the floor of the pallet is to be at least 75 % of the surface area of the pallet.<br>— The sacks are to occupy as much space as possible on the pallet without extending beyond it.<br>— Two sheets of double-wall corrugated board are to cover the top of the pallet in the shape of a cross with a minimum 'return' of 20 cm on both sides of the pallet (strapping side).<br>— Two UV-resistant plastic strapping bands (six months tropical climate: humidity and sunshine).<br>Tension resistance: 550 N/mm$^2$.<br>— The whole is to be shrink-wrapped in transparent PE with a minimum thickness of 125 microns, UV-stabilized (six months tropical climate: humidity and sunshine).<br>3. With slings:<br>(a) Trefoil type slings: four eyes.<br>Carrying capacity: 1 500 kg.<br>Safety factor 5:1 (minimum breaking load: five times carrying capacity).<br>(b) Basket-type slings.<br>Carrying capacity: 1 100 kg.<br>Safety factor 5:1 (minimum breaking load: five times carrying capacity).<br>4. In containers:<br>— Containers are to be filled without pallets.<br>— Sacks are to be laid flat.<br>— Any free space at the sides and at the ends is to be filled with 'ad hoc' material to ensure that the sacks are completely immobilized in the container. | |

**12.1 — RsC 5**

| Product | FRUIT & VEGETABLES: CURRANTS | 4 × 5 kg |
|---|---|---|
| A. *Primary pack* | 1. **Requirements relating to packaging and preservation**<br>Currants are to be packed in food-grade plastic bags with a net capacity of 5 kg.<br>Impact tests are to be carried out on multiple packs ready for supply. | |
| B. *Multiple pack* | 1. **Requirements relating to packaging and preservation**<br>The 5 kg packs of currants are to be packed together in high-quality cardboard boxes, capable of withstanding the following tests:<br>— The content is 4×5 kg bags.<br>— The outer box should fit the content perfectly so as to ensure its stability and strength.<br>— The sealing of the outer box can be done by gluing and/or taping.<br>— Glue used for making up and sealing the packaging is to be moisture-resistant.<br>— Adhesive tape used for sealing should be capable of resisting a tropical climate (six months: humidity and sunshine).<br>The width of the tape is to be at least 50 mm.<br>The length of the tape used is to be at least equal to 2L+2H - 10 cm.<br>2. **Conformity tests**<br>The complete package ready for shipment, previously stored in accordance with EN standard 22233 for a week at 20 °C and at 90 % relative humidity, should withstand the following tests:<br>(a) Three vertical drops from a height of 1 metre.<br>This test is to be carried out in accordance with EN standard 22248, on three different edges belonging to different trihedrons for a parallelepipedic package, or on each of the three smallest sections for other types of packaging for the purposes of EN standard 22206, the package being lifted such that its centre of gravity is vertically above the point of impact.<br>(b) Minimum compressive strength: 5 000 N.<br>This test is to be carried out in accordance with EN standard 22872, the package being placed in its normal position for transport.<br>The result of each of these tests is to be assessed on five complete packages:<br>— The packages may be deformed but should remain intact and should not have any tear greater than half the height of the flap.<br>— The adhesive tape should not be torn or unstuck.<br>— The packages should show no signs of leakage.<br>— The water resistance of the outer surface of the cardboard boxes is to be below 155 g/m$^2$ according to the COBB method (ISO standard 535). | |
| C. *Transport* | 1. On pallets (no stacking for overland transport):<br>— Maximum stacking height for pallets: two layers.<br>— High-quality 'one way' pallet with a minimum gross weight of 25 kg.<br>— Four-way pallet.<br>— The surface area of the wood used for the floor of the pallet is to be at least 75 % of the surface area of the pallet.<br>— The boxes are to occupy as much space as possible on the pallet and no less than 90 %. | |

**12.1 — RsC 5** *(continued)*

| Product | FRUIT & VEGETABLES: CURRANTS | 4 × 5 kg |
|---|---|---|
| | — None of the cartons is to extend over the four edges of the pallet.<br>— A sheet of double-wall corrugated board is to be placed between the layers half way up.<br>— Two sheets of double-wall corrugated board are to cover the top of the pallet in the shape of a cross with a minimum 'return' of 20 cm on both sides of the pallet (strapping side).<br>— Two UV-resistant plastic strapping bands (six months tropical climate: humidity and sunshine).<br>Tension resistance: 550 $N/mm^2$.<br>— The whole is to be shrink-wrapped in transparent PE with a minimum thickness of 125 microns, UV-stabilized (six months tropical climate: humidity and sunshine).<br>2. In containers:<br>— Containers are to be filled without pallets.<br>— Boxes are to be laid flat.<br>— Double-wall corrugated board inserts are to be placed between the third and fourth layer, and also between the sixth and seventh, covering the surface over the width of the container and covering at least two boxes lengthwise.<br>The inserts are not to overlap.<br>— Any free space at the sides and at the ends is to be filled with 'ad hoc' material to ensure that the cartons are completely immobilized in the container. | |

## 12.2 — RsC 1

| Product | FRUIT & VEGETABLES: CURRANTS | 20 × 1 kg |
|---|---|---|
| A. *Primary pack* | **1. Requirements relating to packaging and preservation**<br>Currants are to be packed:<br>(a) In food-grade plastic bags.<br>(b) In compacted board boxes at least 500 g/m$^2$.<br>The 1 kg pack is to be food-grade.<br>Impact tests are to be carried out on multiple packs ready for supply. | |
| B. *Multiple pack* | **1. Requirements relating to packaging and preservation**<br>The 1 kg packs of currants are to be packed together in high-quality cardboard boxes, capable of withstanding the following tests:<br>— The content is 20×1 kg.<br>— The outer box should fit the content perfectly so as to ensure its stability and strength.<br>— The sealing of the outer box can be done by gluing and/or taping.<br>— Glue used for making up and sealing the packaging is to be moisture resistant.<br>— Adhesive tape used for sealing should be capable of resisting a tropical climate (six months: humidity and sunshine).<br>The width of the tape is to be at least 50 mm.<br>The length of the tape used is to be at least equal to 2L+2H - 10 cm.<br>**2. Conformity tests**<br>The complete package ready for shipment, previously stored in accordance with EN standard 22233 for a week at 20 °C and at 90 % relative humidity, should withstand the following tests:<br>(a) Three vertical drops from a height of 1 metre.<br>This test is to be carried out in accordance with EN standard 22248, on three different edges belonging to different trihedrons for a parallelepipedic package, or on each of the three smallest sections for other types of packaging for the purposes of EN standard 22206, the package being lifted such that its centre of gravity is vertically above the point of impact.<br>(b) Minimum compressive strength: 5 000 N.<br>This test is to be carried out in accordance with EN standard 22872, the package being placed in its normal position for transport.<br>The result of each of these tests is to be assessed on five complete packages:<br>— The packages may be deformed but should remain intact and should not have any tear greater than half the height of the flap.<br>— The adhesive tape should not be torn or unstuck.<br>— The packages should show no signs of leakage.<br>— The water resistance of the outer surface of the cardboard boxes is to be below 155 g/m$^2$ according to the COBB method (ISO standard 535). | |
| C. *Transport* | 1. On pallets (no stacking for overland transport):<br>— Maximum stacking height for pallets: two layers.<br>— High-quality 'one way' pallet with a minimum gross weight of 25 kg.<br>— Four-way pallet.<br>— The surface area of the wood used for the floor of the pallet is to be at least 75 % of the surface area of the pallet. | |

**12.2 — RsC 1** *(continued)*

| Product | FRUIT & VEGETABLES: CURRANTS | 20 × 1 kg |
|---|---|---|
| | — The boxes are to occupy as much space as possible on the pallet and no less than 90 %.<br>— None of the cartons is to extend over the four edges of the pallet.<br>— A sheet of double-wall corrugated board is to be placed between the layers half way up.<br>— Two sheets of double-wall corrugated board are to cover the top of the pallet in the shape of a cross with a minimum 'return' of 20 cm on both sides of the pallet (strapping side).<br>— Two UV-resistant plastic strapping bands (six months tropical climate: humidity and sunshine).<br>Tension resistance: 550 $N/mm^2$.<br>— The whole is to be shrink-wrapped in transparent PE with a minimum thickness of 125 microns, UV-stabilized (six months tropical climate: humidity and sunshine).<br>2. In containers:<br>— Containers are to be filled without pallets.<br>— Boxes are to be laid flat.<br>— Double-wall corrugated board inserts are to be placed between the third and fourth layer, and also between the sixth and seventh, covering the surface over the width of the container and covering at least two boxes lengthwise.<br>The inserts are not to overlap.<br>— Any free space at the sides and at the ends is to be filled with 'ad hoc' material to ensure that the cartons are completely immobilized in the container. | |

13.0 — CT

| Product | FRUIT & VEGETABLES: TOMATO CONCENTRATE | 24 × 440 g |
|---|---|---|
| A. *Primary pack* | 1. **Requirements relating to packaging and preservation**<br>— Tomato concentrate is to be packed in cans with a net capacity of 440 g.<br>— The cans are to be coated on the inside with food-grade lacquer and on the outside with lacquer.<br>They are to be filled to capacity and hermetically sealed.<br>— Impact tests are to be carried out on whole packages ready for distribution.<br>— The cans are to be completely airtight and filled under a modified atmosphere.<br>— One layer of lacquer — heavy tinning inner/outer 11,2+11,2 g/m$^2$ — side-seam striped cans.<br>— Weight of the can: 60 g minimum. | |
| B. *Multiple pack* | 1. **Requirements relating to packaging and preservation**<br>24 cans of 440 g net are to be packed together in high quality cardboard boxes, capable of withstanding the following tests:<br>— The outer box should fit the content perfectly so as to ensure its stability and strength.<br>— The sealing of the outer box can be done by gluing and/or taping.<br>— Glue used for making up and sealing the packaging is to be moisture resistant.<br>— Adhesive tape used for sealing should be capable of resisting a tropical climate (six months: humidity and sunshine).<br>The width of the tape is to be at least 50 mm.<br>The length of the tape used is to be at least equal to 2L+2H - 10 cm.<br>2. **Conformity tests**<br>The complete package ready for shipment, previously stored in accordance with EN standard 22233 for a week at 20 °C and at 90 % relative humidity, should withstand the following tests:<br>(a) Three vertical drops from a height of 1 metre.<br>This test is to be carried out in accordance with EN standard 22248, on three different edges belonging to different trihedrons for a parallelepipedic package, or on each of the three smallest sections for other types of packaging for the purposes of EN standard 22206, the package being lifted such that its centre of gravity is vertically above the point of impact.<br>(b) Minimum compressive strength: 6 000 N.<br>This test is to be carried out in accordance with EN standard 22872, the package being placed in its normal position for transport.<br>The result of each of these tests is to be assessed on five complete packages:<br>— The packages may be deformed but should remain intact and should not have any tear greater than half the height of the flap.<br>— The adhesive tape should not be torn or unstuck.<br>— The cans should show no signs of leakage.<br>— The water resistance of the outer surface of the cardboard boxes is to be below 155 g/m$^2$ according to the COBB method (ISO standard 535). | |
| C. *Transport* | 1. On pallets (no stacking for overland transport):<br>— Maximum stacking height for pallets: two layers.<br>— High-quality 'one way' pallet with a minimum gross weight of 25 kg.<br>— Four-way pallet. | |

**13.0 — CT** *(continued)*

| Product | FRUIT & VEGETABLES: TOMATO CONCENTRATE | 24 × 440 g |
|---|---|---|

— The surface area of the wood used for the floor of the pallet is to be at least 75 % of the surface area of the pallet.

— The boxes are to occupy as much space as possible on the pallet and no less than 90 %.

— None of the cartons is to extend over the four edges of the pallet.

— A sheet of double-wall corrugated board is to be placed between the layers half way up.

— Two sheets of double-wall corrugated board are to cover the top of the pallet in the shape of a cross with a minimum 'return' of 20 cm on both sides of the pallet (strapping side).

— Two UV-resistant plastic strapping bands (six months tropical climate: humidity and sunshine).

Tension resistance: 550 $N/mm^2$.

— The whole is to be shrink-wrapped in transparent PE with a minimum thickness of 125 microns, UV-stabilized (six months tropical climate: humidity and sunshine).

2. In containers:

— Containers are to be filled without pallets.

— Boxes are to be laid flat.

— Double-wall corrugated board inserts are to be placed between the third and fourth layer, and also between the sixth and seventh, covering the surface over the width of the container and covering at least two boxes lengthwise.

The inserts are not to overlap.

— Any free space at the sides and at the ends is to be filled with 'ad hoc' material to ensure that the cartons are completely immobilized in the container.

**14.0 — SAR**

| Product | FISHERY PRODUCTS — MACKEREL IN OIL — SARDINES IN OIL 50 × 125 g |
|---|---|
| A. *Primary pack* | 1. **Requirements relating to packaging and preservation**<br>Fishery products (mackerel and sardines) are to be packed in cans with a net weight of 120 to 125 g — drained: minimum 75 % of the net weight. The cans are to be coated on the inside with food-grade lacquer and on the outside with lacquer.<br>They are to be filled to capacity and hermetically sealed.<br>— Impact tests are to be carried out on whole packages ready for distribution.<br>— The cans are to be completely airtight and filled under a modified atmosphere.<br>— One layer of internal lacquer — tinning inner/outer 2,8+2,8 g/m$^2$ — side-seam striped cans. |
| B. *Multiple pack* | 1. **Requirements relating to packaging and preservation**<br>The cans are to be packed together in high-quality cardboard boxes, maximum 12 kg, capable of withstanding the following tests:<br>— The outer box should fit the content perfectly so as to ensure its stability and strength.<br>— The sealing of the outer box can be done by gluing and/or taping.<br>— Glue used for making up and sealing the packaging is to be moisture-resistant.<br>— Adhesive tape used for sealing should be capable of resisting a tropical climate (six months: humidity and sunshine).<br>The width of the tape is to be at least 50 mm.<br>The length of the tape used is to be at least equal to 2L+2H - 10 cm.<br>2. **Conformity tests**<br>The complete package ready for shipment, previously stored in accordance with EN standard 22233 for a week at 20 °C and at 90 % relative humidity, should withstand the following tests:<br>(a) Three vertical drops from a height of 1 metre.<br>This test is to be carried out in accordance with EN standard 22248, on three different edges belonging to different trihedrons for a parallelepipedic package, or on each of the three smallest sections for other types of packaging for the purposes of EN standard 22206, the package being lifted such that its centre of gravity is vertically above the point of impact.<br>(b) Minimum compressive strength: 6 000 N.<br>This test is to be carried out in accordance with EN standard 22872, the package being placed in its normal position for transport.<br>The result of each of these tests is to be assessed on five complete packages:<br>— The packages may be deformed but should remain intact and should not have any tear greater than half the height of the flap.<br>— The adhesive tape should not be torn or unstuck.<br>— The cans should show no signs of leakage.<br>— The water resistance of the outer surface of the cardboard boxes is to be below 155 g/m$^2$ according to the COBB method (ISO standard 535). |

**14.0 — SAR** *(continued)*

| Product | FISHERY PRODUCTS | — MACKEREL IN OIL<br>— SARDINES IN OIL | 50 x 125 g |
|---|---|---|---|
| C. *Transport* | 1. On pallets (no stacking for overland transport):<br>— Maximum stacking height for pallets: two layers.<br>— High-quality 'one way' pallet with a minimum gross weight of 25 kg.<br>— Four-way pallet.<br>— The surface area of the wood used for the floor of the pallet is to be at least 75 % of the surface area of the pallet.<br>— The boxes are to occupy as much space as possible on the pallet and no less than 90 %.<br>— None of the cartons is to extend over the four edges of the pallet.<br>— A sheet of double-wall corrugated board is to be placed between the layers half way up.<br>— Two sheets of double-wall corrugated board are to cover the top of the pallet in the shape of a cross with a minimum 'return' of 20 cm on both sides of the pallet (strapping side).<br>— Two UV-resistant plastic strapping bands (six months tropical climate: humidity and sunshine).<br>Tension resistance: 550 $N/mm^2$.<br>— The whole is to be shrink-wrapped in transparent PE with a minimum thickness of 125 microns, UV-stabilized (six months tropical climate: humidity and sunshine).<br>2. In containers:<br>— Containers are to be filled without pallets.<br>— Boxes are to be laid flat.<br>— Double-wall corrugated board inserts are to be placed between the third and fourth layer, and also between the sixth and seventh, covering the surface over the width of the container and covering at least two boxes lengthwise.<br>The inserts are not to overlap.<br>— Any free space at the sides and at the ends is to be filled with 'ad hoc' material to ensure that the cartons are completely immobilized in the container. | | |

**15.0 — CB**

| Product | MEAT | CORNED-BEEFL | 48 × 340 g |
|---|---|---|---|

A. *Primary pack*

1. **Requirements relating to packaging and preservation**

— Corned-beef is to be packed in metal cans with a net capacity of 440 g.

— The cans are to be coated on the inside with food-grade lacquer and on the outside with lacquer.

They are to be filled to capacity and hermetically sealed.

— Impact tests are to be carried out on whole packages ready for distribution.

— The cans are to be completely airtight and filled under a modified atmosphere.

— One layer of internal lacquer — tinning inner/outer 2,8+2,8 g/m$^2$ — side-seam striped cans.

B. *Multiple pack*

1. **Requirements relating to packaging and preservation**

The cans are to be packed together in high quality cardboard boxes, maximum 20 kg, capable of withstanding the following tests:

— The outer box should fit the content perfectly so as to ensure its stability and strength.

— The sealing of the outer box can be done by gluing and/or taping.

— Glue used for making up and sealing the packaging is to be moisture-resistant.

— Adhesive tape used for sealing should be capable of resisting a tropical climate (six months: humidity and sunshine).

The width of the tape is to be at least 50 mm.

The length of the tape used is to be at least equal to 2L+2H - 10 cm.

2. **Conformity tests**

The complete package ready for shipment, previously stored in accordance with EN standard 22233 for a week at 20 °C and at 90 % relative humidity, should withstand the following tests:

(a) Three vertical drops from a height of 1 metre.

This test is to be carried out in accordance with EN standard 22248, on three different edges belonging to different trihedrons for a parallelepipedic package, or on each of the three smallest sections for other types of packaging for the purposes of EN standard 22206, the package being lifted such that its centre of gravity is vertically above the point of impact.

(b) Minimum compressive strength: 6 000 N.

This test is to be carried out in accordance with EN standard 22872, the package being placed in its normal position for transport.

The result of each of these tests is to be assessed on five complete packages:

— The packages may be deformed but should remain intact and should not have any tear greater than half the height of the flap.

— The adhesive tape should not be torn or unstuck.

— The cans should show no signs of leakage.

— The water resistance of the outer surface of the cardboard boxes is to be below 155 g/m$^2$ according to the COBB method (ISO standard 535).

C. *Transport*

1. On pallets (no stacking for overland transport):

— Maximum stacking height for pallets: two layers.

— High-quality 'one way' pallet with a minimum gross weight of 25 kg.

— Four-way pallet.

**15.0 — CB** *(continued)*

| Product | MEAT | CORNED-BEEFL | 48 × 340 g |
|---|---|---|---|

— The surface area of the wood used for the floor of the pallet is to be at least 75 % of the surface area of the pallet.

— The boxes are to occupy as much space as possible on the pallet and no less than 90 %.

— None of the cartons is to extend over the four edges of the pallet.

— A sheet of double-wall corrugated board is to be placed between the layers half way up.

— Two sheets of double-wall corrugated board are to cover the top of the pallet in the shape of a cross with a minimum 'return' of 20 cm on both sides of the pallet (strapping side).

— Two UV-resistant plastic strapping bands (six months tropical climate: humidity and sunshine).

Tension resistance: 550 $N/mm^2$.

— The whole is to be shrink-wrapped in transparent PE with a minimum thickness of 125 microns, UV-stabilized (six months tropical climate: humidity and sunshine).

2. In containers:

— Containers are to be filled without pallets.

— Boxes are to be laid flat.

— Double-wall corrugated board inserts are to be placed between the third and fourth layer, and also between the sixth and seventh, covering the surface over the width of the container and covering at least two boxes lengthwise.

The inserts are not to overlap.

— Any free space at the sides and at the ends is to be filled with 'ad hoc' material to ensure that the cartons are completely immobilized in the container.

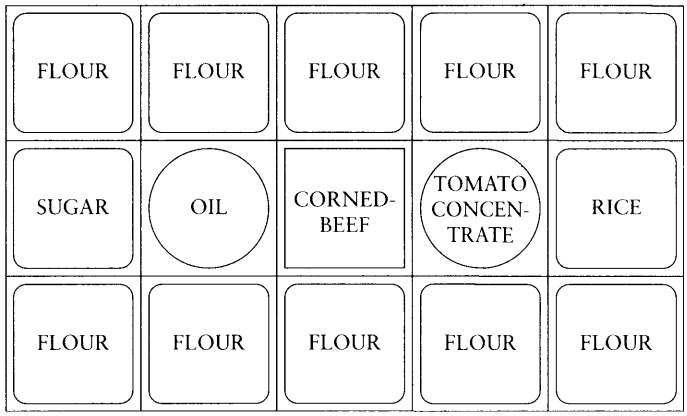
## 16.0 — Rations

| Product | RATIONS — FLOUR — RICE — SUGAR — OIL — CORNED-BEEF — TOMATO CONCENTRATE | 1 × 16 pockets |
|---|---|---|
| A. *Primary pack* | **1. Requirements relating to packaging and preservation**<br>(a) Wheat flour, rice, sugar:<br>These three products are to be packed in food-grade paper bags containing 1000 g of product.<br>(b) Oil:<br>Oil is to be packed in a can containing 0,750 kg.<br>(c) Corned-beef:<br>Corned-beef is to be packed in a can containing 340 g.<br>(d) Tomato concentrate:<br>Tomato concentrate is to be packed in a can containing 440 g.<br>**2. Specifications of the primary pack**<br>(a) Flour, rice, sugar:<br>The paper used for packaging the three products is to have a minimum weight of 80 g/m$^2$.<br>Glue used for sealing the packages is to be water resistant.<br>The glue is to be appropriate to the food nature of the products.<br>(b) Oil:<br>Cans with unlacquered body — tinning inner/outer 2,8 + 2,8 g/m$^2$ — side-seam striped cans.<br>Thickness of sheet metal: minimum 0,19 mm.<br>(c) Corned-beef:<br>One layer of internal lacquer — tinning inner/outer 2,8 + 2,8 g/m$^2$ — side-seam striped cans.<br>Weight of the empty can: 68 g minimum.<br>(d) Tomato concentrate:<br>One layer of internal lacquer — heavy tinning inner/outer 11,2 + 11,2 g/m$^2$ — side-seam striped cans.<br>Weight of the empty can: 60 g minimum.<br>All the cans are to be coated on the outside with lacquer or treated so as to provide equivalent guarantees. They are to be filled to capacity and hermetically sealed. They are to be filled under a modified atmosphere.<br>NOTE: for further details see above, chapters on 'corned-beef', 'tomato concentrate' and 'oil 12 × 1 l/metal'.<br>(Attention: the can of oil in the rations is to contain only 750 g). | |
| B. *Multiple pack* | **1. Requirements relating to packaging and preservation**<br>10 × 1 kg packets of flour.<br>1 × 1 kg packet of rice.<br>1 × 1 kg packet of sugar.<br>1 × 0,75 kg can of oil.<br>2 × 0,340 kg cans of corned-beef.<br>1 × 0,440 kg can of tomato concentrate. | |

**16.0 — Rations** *(continued)*

| Product | RATIONS | — FLOUR<br>— RICE<br>— SUGAR | — OIL<br>— CORNED-BEEF<br>— TOMATO CONCENTRATE | **1 × 16 pockets** |
|---|---|---|---|---|

The set of 16 units below is to be shrink-wrapped in transparent PE with a minimum thickness of 100 microns in accordance with the diagram below.




2. **Conformity tests**

The unit composed of 16 products should withstand vertical compression corresponding at least to the highest individual load supported.

Since the pallets are not to be stacked, the resistance of each ration is to be at least 1 500 N.

C. *Transport*

1. On pallets (no stacking for overland transport):

— High-quality 'one way' pallet with a minimum gross weight of 25 kg.

— Four-way pallet.

— The surface area of the wood used for the floor of the pallet is to be at least 75 % of the surface area of the pallet.

— The packets are to occupy as much space as possible on the pallet and no less than 90 %.

— None of the sets is to extend over the four edges of the pallet.

— A sheet of double-wall corrugated board is to be placed between the layers half way up.

— Two sheets of double-wall corrugated board are to cover the top of the pallet in the shape of a cross with a minimum 'return' of 20 cm on both sides of the pallet (strapping side).

— Two UV-resistant plastic strapping bands (six months tropical climate: humidity and sunshine).

Tension resistance: 550 $N/mm^2$.

— The whole is to be shrink-wrapped in transparent PE with a minimum thickness of 125 microns, UV-stabilized (six months tropical climate: humidity and sunshine).

**16.0 — Rations** *(continued)*

| Product | RATIONS | — FLOUR<br>— RICE<br>— SUGAR | — OIL<br>— CORNED-BEEF<br>— TOMATO CONCENTRATE | **1 × 16 pockets** |
|---|---|---|---|---|
| | 2. In containers:<br>— Containers are to be filled without pallets.<br>— Packages are to be laid flat.<br>— Double-wall corrugated board inserts are to be placed between each layer, covering the surface over the width of the container and covering at least two boxes lengthwise.<br>The inserts are not to overlap.<br>— Any free space at the sides and at the ends is to be filled with 'ad hoc' material to ensure that the cartons are completely immobilized in the container. | | | |