# Specifications

by Mondial Relay

## Packaging

Applicable to all the parcels entrusted to Mondial Relay

## **A. Introduction**

The purpose of the packaging is to contain and protect products, so that they can be handled and transported from the supplier to the final recipient, so that their appearance is preserved.

The packaging made by the customer must be able to withstand the various types of handling operations during transportation in order to be delivered or returned in the best conditions.

So that a package can fulfil its protective role, 3 essential points should be taken into account:

- Fragility of the product
- · Transport environment
- Packaging properties

The packaging must fulfil the following three main functions:

- **Outer packaging**: must protect against all external influences: shocks, friction, water, dust, etc. It must preserve the rigidity of the parcel and support it.
- Inner packaging: must hold the products in place and absorb shocks.
- **Closure**: must close the packaging so that it provides adequate and durable protection. Packaging that is properly closed and sealed will not open accidentally leading to the loss of the product.

When a parcel contains several items, they must be properly arranged to keep them separate (no direct contact between them: cardboard divider, packing materials, etc.) and protected (bubble wrap, foam or shrink wrap), and the packing materials must stop them from moving about.

## **B. Labelling rules**

Affixing a label bearing all the required information so that the parcel can be collected, recorded, sorted and delivered effectively.

- Sticking the label on the outer surface of the packaging so that it can be read without a problem during scanning.
- Affixing the label to the side with the largest surface area (length of the parcel).
- Position the label in a perpendicular direction in relation to the parcel (not diagonally).
- Do not stick the label on the seams (closures) of the packaging and/or on the corners.
- Do not damage the label and make sure that it is not cut. Print quality is especially important for the barcodes.
- There should only be one label per package.
- Remove any old address details, labels, stickers, especially if the parcel has been used previously.
- · Do not use glossy paper to print the labels.
- In the case of a plastic bag, stick the label on a flat surface and do not place it on the corners or folds of the parcel.
- In the case of a tube, stick the label parallel to the length of the tube.
- For document enclosed wallets stuck to the box, do not use selfadhesive wallets with printed information that could cover the barcode or address data.







Examples of incorrectly placed labels



A label is also an element that refers to the parcel and can be used to identify it in the event of a handling issue.

In addition to the label stuck on the outside of the parcel, the receipt must be placed inside the parcel.



FICHE DESTINATAIRE

Minimum parcel size

In order to be machinable, parcels must be greater than  $15 \times 10$  cm in size with a thickness of more than 1cm and/or weigh more than 100g.





Packaging must be chosen according to the characteristics of the product that will be transported inside. The box must be made of double wall BC flute cardboard that is stiff enough and has no mechanical damage.



Double sided

Double wall Flute

## **D. Pictograms**

Pictograms are essential for transporting products as they provide information regarding the handling direction, the typology and the fragility of the products.

The pictograms must be visible and on two sides of the packaging.

Below, you will find a comprehensive list of standard pictograms:





## E. Packing materials and immobilization

#### 1. FILLING

The filling makes the packaging stronger so that it can withstand external influences (mechanical, climatic, etc.) by being inflexible and resistant to bending, bursting, tearing, and stacking. Its purpose is to absorb the external influences acting on the parcel, and not transmit them to the product.

How do you check the quality of the filling? Press the top and side of the package. If the box crumples, it means that the box is not full, or the filling is inadequate.

Prior packaging takes the fragility of equipment into account. Tissue paper, cellulose wadding, polyethylene foam, polyethylene paper, bull pack, crumpled paper, etc., are used primarily.



#### **2. IMMOBILISATION**

The purpose of immobilizing the product is to prevent the product from moving inside the packaging. A product that is moving about can get damaged by coming in contact with another product, packaging, etc., or break the packaging and damage another parcel.

How do you check that the products are immobilized? Pick up and shake the packaging. If the product moves inside the packaging, it means that the product has not been properly secured in place.

#### **3. SEPARATION**

By keeping the products apart, there is no chance of the products damaging each other or the packaging. This packaging method should be used when sending multiple individual parcels.

How do you check if the packaging is compliant? Grasp the packaging and shake it. If there are noises come from inside the packaging (knocking, beeping, etc.), it means that the products are not separated.

#### 4. SECURITY

Under handling process and transportation conditions, it is not possible to ensure that the packaging is in a stable position. Consequently, every side of the product inside the packaging must be secured in a consistent manner and be held in a relatively stable position.

How do you check that the product is secure? Press the top and both sides of the packaging. If you can touch the product through the packaging, it means that it is not secure on all sides and is in contact with the packaging.



## F. General packaging and sealing obligations

Packaging that is properly closed and sealed prevents it from opening accidentally leading to the loss of the contents.

The correct way to close and package the parcel is as follows:

- · Double "H"-shaped seal
- Tape with a minimum width of 48mm

How do you check the integrity of the closure and seal? Press the top and bottom parts of the package where they have been bonded with adhesive tape. If the adhesive tape peels off the box giving you access to the contents, it means that the shipment is not properly closed and sealed.

The contents of the boxes cannot include magnets if the package weight/magnet strength ratio is greater than 10 (e.g., for a 1kgF magnet, the package weight is  $\geq$  10kg). However, it should be noted that any magnet-based equipment is prohibited in polybags.



## G. Specific packaging obligations by product category

The packaging must be capable of supporting the weight of the items transported, so that the products cannot puncture the packaging during the different handling phases.

For each product category, our recommendations are based on the packaging rules described below.

#### 1) Hob (induction, glass ceramic, etc.)

	Double wall corrugated cardboard box or dense polystyrene that is tailored to the dimensions of the product (cover + base)
Outside	Glass/fragile pictogram
	Handling/storage direction pictogram
Inside	Protection on top with polystyrene or a reinforced panel
	Product held in place by a double polystyrene dome & heat-sealed film

#### 2) Small household appliances (video and audio)

Outside	Double wall cardboard box adapted to product dimensions
	Flaps taped with adhesive tape forming the H shape
	Glass/fragile pictogram on at least two sides of the packaging
	Handling/storage direction pictogram on at least two sides of the packaging
Inside	Item in the original packaging and protection of the manufacturer/supplier
	Kraft paper or bubble wrap packing materials

## 3) Furniture (flat-packed/preassembled furniture with or without glass parts)

Outside	Double wall cardboard box adapted to product dimensions	
	Flaps taped with adhesive tape forming an H-shape or glued	
Outside	Glass/fragile pictogram on at least two sides of the packaging	
	Handling/storage direction pictogram	
	Side protection made of polystyrene or double wall flute cardboard strips	
Incide	Edge protection made of polystyrene or double wall flute cardboard strips	
mside	Immobilization of items inside the box	
	Top and bottom protection made of polystyrene or double wall flute cardboard	
Specific requirements		
	Dense polystyrene panel on the top and bottom of each glass section	
	Reinforcement of the bottom of the box with double wall flute cardboard for furniture with feet	

## 4) Glassware, crockery, porcelain, frames, ceramics (basin, shower tray, etc.)

	Double wall cardboard box adapted to product dimensions	
Outside	Flaps taped with adhesive tape forming the H shape	
	Glass/fragile pictogram on at least two sides of the packaging	
	Handling/storage direction pictogram on at least two sides of the packaging	
Inside	Immobilization of items inside the box (packing and padding)	
	Cardboard box packaging of glass or fragile containers	
Specific health-related requirements		
	Packing in dense polystyrene form-fitted to the product dimensions	

## 5) Drugstore, perfumery, beauty, hygiene and prepharmacy products

	Double wall cardboard box adapted to product dimensions
Outside	Flaps taped with adhesive tape forming an H shape
	Glass/fragile pictogram on at least two sides of the packaging
	Handling/storage direction pictogram on at least two sides of the packaging
Inside	Individual packaging with bubble wrap
	Kraft paper or bubble wrap packing materials
	Sealed with adhesive tape on the caps
	Packaging of liquid containers in sealed plastic bags

### 6) Liquid container

Outside	Double wall cardboard box adapted to product dimensions
	Flaps taped with adhesive tape forming an H shape
	Glass/fragile pictogram on at least two sides of the packaging
	Handling/storage direction pictogram on at least two sides of the packaging
Inside	Double or triple wall cardboard braces fitted to bottle dimensions
	Immobilization of liquid containers in each brace

#### 7) Textile

	Plastic film packaging without handles (70µm)	
Outside	Sealing with adhesive tape or shrink-wrap film	
	Adhesive part of the package: stick the strip precisely and take care not to go beyond the contours	
Inside	Inside Protection of items under plastic cover	

## 8) Non-perishable food, long-life products, and animal food (cans, etc.)

Outside	Double wall cardboard box adapted to product dimensions
	Flaps taped with adhesive tape forming the H shape
	Glass/fragile pictogram on at least two sides of the packaging
	Handling/storage direction pictogram on at least two sides of the packaging
Inside	Immobilization of items inside the box
	Product packing materials made of kraft paper or bubble wrap, etc.
	Packaging of liquid containers in airtight and vacuum sealed bags

### 9) Automotive product

	Double wall cardboard box adapted to product dimensions
Outside	Flaps taped with adhesive tape forming an H-shape or glued
	Glass/fragile pictogram on at least two sides of the packaging
	Handling/storage direction pictogram on at least two sides of the packaging
Inside	Vacuum-sealed plastic cover for wrapping liquid containers
	Individual packaging with bubble wrap
	Immobilization of items inside the box (packing and padding)

#### 10) Miscellaneous (small items not mentioned above)

Outside	Double wall cardboard box adapted to product dimensions
	Flaps taped with adhesive tape forming the H shape
Inside	Individual packaging with bubble wrap
	Item in the original packaging and protection of the manufacturer/supplier
	Kraft paper or bubble wrap packing materials

## H. Falling tests (ISO 2248 & ISO 2206 standards)

You shall be responsible for performing the drop tests on your packaging in accordance with the following guidelines and standards:



#### 1) ISO 2248 and ISO 2206 standard: summary of the procedure

The packaged product is suspended above a smooth, rigid impact surface and then released to fall freely until it hits a rigid surface. The impact surface must be perfectly horizontal and flat, but also sufficiently solid and rigid to not be deformed under the impact of the tested object. The fall height shall be determined by the weight of the parcel, according to the standard:

• Less than 10 kg	80 cm
• 10 to 20 kg	60 cm
• 20 to 30 kg	50 cm
• 30 to 40 kg	40 cm
• 40 to 50 kg	30 cm
• 50 to 70 kg	20 cm

All packages containing liquids must be tested at a height of 80 cm.

#### 2) Steps of the test, in accordance with the ISO 2206 standard.

The ISO 2206 standard describes the edges, corners and sides of different shapes of a package.

- The box must be positioned flat on the largest side (see Fig. 1).
- Each side is numbered 1 to 6, as on the parcel diagram above. The corners and edges are identified by the sides.

The objective is to perform 10 free falls in the following order:



Fig.1

Impacts	Number of falls	Side no.
Corner	1 fall	2;3;5
Edge	3 falls	2-5;3-5;2-3
Side	6 falls	5;6;2;4;1;3

### I. Compliance reports

The client may ask Mondial Relay to approve the packaging, after sending the compliance reports drawn up in advance by an ISO 2248 and 2206 certified partner (e.g., Metropack), **and provided that all of the recommendations defined herein are followed.** 

