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## Introduction

The ELECTROSTAR packaging guidelines have been part of the supply and quality contract since 1/1/2008. All previous packaging guidelines for suppliers are hereby deprived of validity.

ELECTROSTAR is completely organised according to the directives of DIN ISO 9001 and is obliged to comply with the provisions. Therefore, a smooth workflow can only be ensured by adherence to our packaging guidelines, including proper transport and storage.

In the event of non-compliance with our packaging guidelines, ELECTROSTAR is entitled to bring the transport packaging damaged during delivery into a storable condition and charge this service.

In case of repeated, gross deviation from the desired condition, which most likely result in damage of the goods during further processing, acceptance will be refused.

By maintaining a trouble-free storage flow and assembly procedure, all regulations serve to ensure a constantly good product quality.

## 1 Packaging rules

The provisions of the German Packaging Ordinance shall apply.

All information on the packaging ordinance can be obtained at <http://www.bmu.de/allgemein/aktuell/160.php>.

### General packaging requirements

The supplier will guarantee that all goods delivered to ELECTROSTAR are packaged safely for transport and storage.

All goods have to be delivered to the ELECTROSTAR receiving department in accordance with the requirements listed in the ELECTROSTAR packaging guidelines:

- environmentally compatible
- recyclable
- sufficiently protected against:
  - breakage and impacts
  - contamination by e.g. oils / grease, dirt, metal powder, ...
  - leakage and release of substances hazardous to health or the environment as well as inflammable and explosive substances
  - exposure to emissions and light that affect the quality of the goods

The pack volume shall be adapted to the transported goods and their load during transport.

Principally inadmissible package components are:

- composites
- PVC packaging materials
- components containing CFC

## **1.2 Type of packaging**

A storable, transport-safe packaging, suitable for the shipping method shall be selected to ensure that the goods and the packaging reach the ELECTROSTAR receiving department in sound condition.

## **1.3 Reuse / Recycling of packaging**

In order to be able to recycle / reuse the packaging material, the following recyclable materials shall be exclusively used:

- cardboard, paperboard
- polystyrene foam rubber
- PE wrapping foil
- PP non-metallic strapping
- Euro pallets and lattice boxes, by arrangement.

## **1.4 Packaging dimensions**

While complying with the transport protection regulations, the size of the package shall be adapted to the content and the size of the storage rack at ELECTROSTAR. See information in the attachment check list items 5.2 and 7.1.

## **1.5 Cardboard containers**

The cardboard containers have to be glued and must not contain any metal clips. Only carton boxes with RESY imprint shall be used. Cardboard containers used on a Euro pallet shall be standardised and adapted to the pallet dimensions.

## **1.6 Void fill**

The amount of void fill shall be minimised. Wastepaper and scrap paper as well as mixed void fill must not be used for this purpose.

## 1.7 Adhesive tape, strapping

For gluing the packaging, adhesive paper tape shall be used. Metal strapping must not be used. It has to be possible to cut PP straps by means of a box cutter.

## 1.8 Pallets

By arrangement, Euro pallets with the dimensions length 120cm, width 80cm, height max. 115cm and weight max 750kg and expendable pallets with the dimensions length 120cm, width, 80cm, height max. 100cm and weight max. 300kg are used; overhangs are inadmissible. The pallets have to comply with the **ISPM 15 Standard**.

- As a matter of principle, the wood has to be bark-free.
- According to the ISPM 15, the following two treatment procedures are approved of:
  - **HT** => heat treatment
  - **MB** => methyl bromide fumigation

The pallet wood shall be legibly, visibly and permanently marked with a sign of the following content.

- IPPC symbol
- ISO code of the manufacturing country
- Registration number of the manufacturer / operator
- Acronym for the treatment procedure, HT or MB
- Acronym DB for debarking

## 1.9 Lattice boxes

By arrangement, lattice boxes with the dimensions length 124cm, width 85cm and height max. 98cm are used. The boxes have to be swept clean and must not be filled beyond the top edge.

## 2 Dispatch rules

### 2.1 Delivery note

The delivery note is to be visibly attached to the outer surface of the package and enclosed in the shipping documents upon each delivery.

The delivery note has to contain the following information:

- Supplier's address, delivery note no. and date
- Order no., date of delivery, item designation and ES part reference no.
- Number of items and packages
- Weight of the packaging unit

## **2.2 Package contents list**

The package contents list includes the following information on each inhomogeneous package:

- Supplier's address, delivery note no. and date
- Item designation and ES part reference no.
- Number of items in the package
- Weight of the packaging unit

## **2.3 Mixed pallet / lattice box**

A package contents list shall be attached to each mixed pallet (with several different items) and the container additionally marked with mixed pallet /mixed lattice box.

## **2.4 Complete pallet / lattice box**

The marking is attached to the right side wall, including designation, quantity, date and part reference no.

## **2.5 Consignments including several packages**

In case of consignments consisting of several packages, the packages shall be numbered consecutively.

## **2.6 Packages on pallets / in lattice boxes**

In case packages are compiled to a pallet, it shall be ensured that their content is evident by markings on the outer surface. The individual carton boxes shall be packed sorted by item. The weight of the individual carton boxes must not exceed 15 kg. All packages shall be bundled to a transport-safe unit.

## **2.7 Bar code / Label**

The label has to contain the following information in text height 12 mm and still be legible from a distance of 5 metres:

- ES part reference number and designation
- quantity and date of manufacture

The same information in encoded form shall be printed on as bar code, in coordination with our EDP department.

## 2.8 Load securing

In order to avoid damage and ensure safe transport of goods from the supplier to ELECTROSTAR, the goods shall be properly secured. The load securing shall be adapted to the transported goods and their load during transport, using recyclable materials. If necessary, transport hoods, corner and edge protection, transport wrapping, retaining straps of PP instead of metal, adhesive tapes, etc. shall be used.

## 2.9 Symbols / Handling marks, corrections

Packages with handling marks, i.e. symbols in accordance with ISO R/780 and DIN 55402 shall be marked. It has to be evident

- if the package is sensitive to heat or moisture
- if there is a risk of breakage
- where the top and the bottom are
- where the cargo gear can be fixed, if necessary

In case corrections are required due to non-compliance with the ELECTROSTAR packaging guidelines, these will be charged according to the incurred costs, however at least with a **lump sum for expenditures to the amount of 200 € per ordered item.**

## 3. Overview

### 3.1 Check list as packaging report (attachment QA-agreement)

The copy of the “check list of packaging guidelines” in the attachment is a summary of the contractual requirements on proper packaging and dispatch. It contains provisions which shall be strictly adhered to and individual requirements which are adapted to special goods and deliveries.

### 3.2 Packaging schemes / Image representation

Packaging schemes (comp. attachment item 7) are necessary in case the goods require specially designed packaging. If necessary, the packaging schemes shall be coordinated with the supplier and made a note of as supplement on the “check list of packaging guidelines”. If possible, the complete design of the packaging shall be documented by digital photos.

## Check list of packaging guidelines

Supplier: .....  
Address: .....

Part designation: ..... Part ref. no. ....

### 1. Packaging unit / Container:

- 1.1 Pallet: .....
- 1.2 Lattice box: .....
- 1.4 Carton box: .....
- 1.5 Carton box with corner and edge protection: .....
- 1.6 Blister packaging: .....
- 1.7 Secondary packaging: .....
- 1.8 Special packaging: .....
- 1.9 Bulk goods in sack/carton box/barrel.....

### 2. External weather protection:

- Plastic cover: .....
- Plastic bag / black / transparent / PE / PP /material .....
- Stretch wrapping, ..... layers: ..... pcs.....

### 3. Internal protection of goods:

- Container lined with corrugated cardboard: .....
- Plastic bag / in container: .....
- Intermediate layers and cover of corrugated cardboard / corrugated cardboard rolls:
- Cardboard intermediate layers as collective return: .....
- Polystyrene lining / bubble wrapping: .....
- Other lining: .....

### 4. Abrasion protection:

- Individual parts in plastic bag / transparent / PE / PP .....
- Individual parts separated by corrugated cardboard / polystyrene plates: .....
- Side with printing on it must not abut: .....
- Void shall be filled out with corrugated cardboard, polystyrene, wrapping foil .....
- Other protection .....

### 5. Units of quantity:

- 5.1 Quantity per container: pcs .....; kg.....; litre.....
- 5.2 Quantity per layer: pcs .....; kg .....; litre .....

### 6. Provisions:

- 6.1 Type of provision: .....

### 7. Attachments:

- 7.1 Packaging schemes.....  Image representation.....  Ring/Label.....