



Packaging Materials used with Pall Single-Use Systems, Filtration Products and Equipment Primary, Secondary, Tertiary

Version Number: 1.0
Date: May 22, 2023
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Introduction

Packaging Materials Compliance to European Commission Decision 129/97/EC and Italian Legislative Decree No. 116/2020

European Commission Decision 129/97/EC establishes an identification system for packaging materials pursuant to European Parliament and Council Directive 94/62/EC on packaging and packaging waste. This document is intended to provide details on the primary, secondary, and tertiary packaging used with Pall Single-use Systems and filtration products and equipment to assist customers in processing these materials.

Please also be advised that it is our goal to reduce our waste footprint and increase sustainability.

Definitions

Primary packaging

Primary packaging are the packaging materials which are in direct contact with our products. This packaging is used to contain the product and/or preserve the product. Within Single-use Systems we define all packaging materials which enter cleanrooms as primary packaging materials.

Secondary packaging

Secondary packaging is the middle layer of our packaging that protects the primary packaging. In most cases, secondary packaging is the unit-size packaging in which the products are sent, e.g., corrugated boxes, labels, tape (to close the boxes), bubble foil, etc.

Tertiary Packaging

Tertiary packaging is the pallet or transit packaging. It is used to transport larger numbers of goods safely and securely to their global destinations. For our purposes, tertiary packaging is all packaging related to shipping our products on pallets, e.g., the pallet or crate, stretch foil, seal labels, etc.

Packaging Tables

Tables 1 – 4 are organized by product type and provide details on the primary, secondary, and tertiary packaging used. The coding in the tables corresponds to the requirements of the commission decision and the Italian Legislative Decree No. 116/2020.

Table 1 – Packaging for Pall Single-Use Technology Systems.

Table 2 – Packaging for Pall Filters.

Table 3 – Packaging Pall Filter Systems Equipment.

Table 4 – Packaging for PASS (Pall Advanced Separation Systems).

Table 5 – Reference Notes.

Table 1













Packaging for Pall Single-Use Technology Systems.











| Packaging | Description | Material | Logo on the Packaging Item | Symbol | Plastic Material Code | % Recycled Content or FSC |
|-----------|--------------------------|---------------------------------|----------------------------|--------|-----------------------|---------------------------|
| Primary | Protective bags | Low density polyethylene (LDPE) | No | | | |
| | Foam | Closed cell foam | No | | 4 | 0% |
| | Elongated air cushioning | LDPE with nylon layer | No | | N/A | 0% |
| | Protective caps | Silicone | No | | 127 | 0% |
| | Packaging bags | LDPE with nylon layer | Yes | | N/A | 0% |
| | Label | Vinyl or polyether | No | | 3 | 0% |
| | Bubble foil | LDPE with nylon layer | Yes | | N/A | 30% |
| Secondary | Box | Corrugated fiber board | Yes | | N/A | (1) |
| | Foam | Open and closed cell foam | No | | 4 | 0% |
| | Double sided tape | | | | | |
| | Transparent tape | LDPE | No | | 4 | 30% |
| | Label | | | | | |
| | IFU | Paper | No | | N/A | (1) |
| | Wrapping foil | | | | | 0% |
| Tertiary | Top sheet foil | | | | | 0% |
| | Plastic envelope | LDPE | No | | 4 | 0% |
| | Corner protectors | Fiber board | No | | N/A | (1) |
| | Pallet sheet | Corrugated | No | | N/A | (1) |
| | Pallet | HDPE | No | | 02 | 100% |
| | Strap | Wood (HT) (2) | No | | N/A | (1) |
| | Strap Corners | LDPE | No | | 4 | 100% |

*Refer to **Error! Reference source not found.** for notes (1) and (2),
N/A = Not Applicable.

Table 2

Packaging for Pall Filters.












| Packaging | Description | Material | Logo on the Packaging Item | Symbol | Plastic Material Code | % Recycled Content or FSC |
|---------------|----------------------------------|-------------------------------------|---|---|---|---|
| Primary | Protective caps | Silicone | No |  | 127 | 0% |
| | Packaging bags | LDPE with nylon layer | No |  | N/A | 0% |
| | Label | Vinyl or polyether | No |  | 3 | 0% |
| | Bubble wrap | LDPE with nylon layer | Yes |  | N/A | 0% |
| | Box / pallet systems (cleanroom) | Corrugated fiber board | No |  | N/A |  (1) |
| No | | |  | N/A |  (1) | |
| Corrugated PP | | No |  | 5 | 0% | |
| Secondary | End cap | Plastic cap to close off tubes | No |  | 5 | 0% |
| | Inserts | Foam | No | | 04 | 0% |
| | | Corrugated fiber board | No | | N/A |  (1) |
| | Transparent tape | PVC | No | | 3 | 30% |
| | Straps / supports and handles | Nylon straps with metal attachments | No | | 43 | 0% |
| Label | | | | | | |
| Leaflet | Paper | No | | N/A |  (1) | |

| Packaging | Description | Material | Logo on the Packaging Item | Symbol | Plastic Material Code | % Recycled Content or FSC |
|-----------------|-------------------------|---------------|----------------------------|--|-----------------------|---|
| | Plastic envelope | LDPE | No |  | 4 | 0% |
| | Pallet cones | | | | | |
| | Corner protectors | Fiber board | No |  | N/A |  FSC (1) |
| | Pallet sheet | Corrugated | No |  | N/A |  FSC (1) |
| Tertiary | | | | | | |
| | | HDPE | No |  | 02 | 100% |
| | Pallet | | | | | |
| | | Wood (HT) (2) | No |  | N/A |  FSC (1) |
| | Metal clamps for straps | | | | | |
| | Nylon straps | PA | No |  | 43 | 0% |
| | Top sheet foil | | | | | |
| | Wrapping foil | LDPE | No |  | 04 | 0% |

*Refer to **Error! Reference source not found.** for notes (1) and (2),
N/A = Not Applicable.

Table 3













Packaging for Pall Filter Systems Equipment.

| Packaging | Description | Material | Logo on the Packaging Item | Symbol | Plastic Material Code | % Recycled Content or FSC |
|-----------|---|------------------------|----------------------------|--|-----------------------|---|
| Primary | Wrapping foil (to protect product against moisture) | LDPE | No |  | 04 | 0% |
| | Bubble foil | LDPE with nylon layer | Yes |  | N/A | 30% |
| Secondary | Box | Corrugated fiber board | Yes |  | N/A |  (1) |
| | Foam | Open cell | No |  | 4 | 0% |
| | Tape | LDPE | No |  | 4 | 30% |
| | Crate | Wood (HT) (2) | No |  | N/A |  (1) |
| Tertiary | Label | Paper | No |  | N/A |  (1) |
| | Plastic envelope | LDPE | No |  | 04 | 0% |

*Refer to **Error! Reference source not found.** for notes (1) and (2),
N/A = Not Applicable.

Table 4


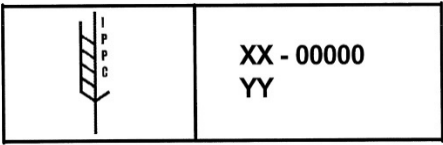
Packaging for PASS (Pall Advanced Separation Systems).

| Packaging | Description | Material | Logo on the Packaging Item | Symbol | Plastic Material Code | % Recycled Content or FSC |
|-----------|------------------|------------------------|----------------------------|--|-----------------------|--|
| Primary | Wrapping foil | LDPE | No |  PE-LD | 04 | 0% |
| | Bubble foil | LDPE | No |  PE-LD | 04 | 0% |
| Secondary | Box | Corrugated fiber board | Yes |  PAP | N/A |  (1) |
| | Tape | LDPE | No |  PE-LD | 04 | 0% |
| Tertiary | Crate | Wood (HT) (2) | No |  FOR | N/A |  (1) |
| | Wooden pallet | Wood (HT) (2) | No |  FOR | N/A |  (1) |
| | Label | Paper | No |  PAP | N/A |  (1) |
| | Plastic envelope | LDPE | No |  PE-LD | 04 | 0% |

*Refer to **Error! Reference source not found.** for notes (1) and (2),
N/A = Not Applicable.

Table 5

Reference Notes.

| No. | Description | Illustration |
|-----|--|---|
| (1) | FSC Forest Stewardship Council. All materials used come from responsibly managed, FSC-certified forests. Products with FSC 100% label contribute most directly to our mission to ensure thriving forests for all, forever. |  The FSC logo consists of a stylized green tree with a circular arrow around it, and the letters 'FSC' below. |
| (2) | Most of our pallets are indicated with the ISPM15 sign. |  The ISPM15 sign is a rectangular box divided into two sections. The left section contains a stylized tree with the letters 'I', 'P', 'P', and 'C' stacked vertically on its trunk. The right section contains the text 'XX - 00000' on the top line and 'YY' on the bottom line. |



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USTR 3963 Version 1.0
March 2023