

***Packaging and delivery specifications***  
***for all suppliers of***  
***Leybold companies worldwide***

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Changes since version 04:

1. Specification of undesirable, environmentally critical packaging materials.
2. Emphasis on the environmental relevance of packaging materials.
3. Definitions specified.

## Table of contents

Packaging and delivery specifications for all suppliers of Leybold companies worldwide .....	0
1. Prologue .....	3
2. Permissible packing material .....	4
2.1 Packaging made of wood .....	4
2.2 Wooden crates (solid wood and plywood boxes) .....	4
2.3 Pallets .....	4
2.4 Pallet attachment frames .....	4
2.5 Cartons and fillers .....	5
2.6 Delivery specification for oils/greases .....	5
2.6.1 Accompanying documents .....	5
2.6.2 Duty to inform .....	5
2.7 Materials handling equipment/returnable packaging/skeleton boxes .....	8
2.8 Bags, front box lids, films .....	8
2.9 ESD packaging .....	8
2.10 Filling material .....	8
2.11 Structural packaging .....	8
2.11.1 Structural packaging foam (e.g.: PE/PP) .....	9
2.11.2 Structural packaging made of corrugated cardboard .....	9
2.12 Straps .....	9
2.13 Edge protection .....	9
2.14 Sealing adhesive tapes/security sealing tape .....	9
2.15 Stretch foil .....	10
2.16 Stickers/Labels .....	10
3. Impermissible packing material .....	10
3.1 Filling material .....	10
3.2 Moulded parts made of polystyrene and polyurethane .....	10
3.3 Pallets .....	10
3.4 Foam materials .....	10
3.5 Deep-drawn and blister packaging .....	10
3.6 Exceptions/deviations .....	11
4. Packaging technology/methods .....	11
4.1 Product protection .....	11
4.1.1 Protection against penetration .....	11
4.1.2 Protection against slipping .....	11
4.1.3 Protection of the surfaces .....	11
4.1.4 Protection of seals .....	11
4.1.5 Corrosion protection and methods .....	11
4.1.6 Container shipping/sea freight packaging: corrosion protection .....	12
4.1.7 Container shipping/sea freight packaging: transport protection .....	12
4.1.8 Overhangs and offsets .....	12
4.2 Dimensions/weights/outer packaging/handling .....	12
4.2.1 Cost of the packaging and shipping .....	12
4.2.2 Package sizes .....	13

4.2.3	Maximum weight of packages/pallet use .....	13
4.2.4	Material thicknesses of plywood boxes/hoods.....	13
4.2.5	Sealing boxes.....	13
4.2.6	Sealing cartons.....	14
4.2.7	Outer packaging .....	14
4.3	Transport monitoring .....	14
4.3.1	Transport monitoring systems.....	14
4.4	Dangerous goods/special packaging/container shipping/release of packaging material .....	14
4.4.1	Dangerous goods packaging .....	14
4.4.2	Special packaging .....	14
4.4.3	Container shipping/container storage .....	15
4.4.4	Release of packaging material for merchandise.....	15
Appendix: Packaging specification (customer and supplier side) .....		23

## 1. Prologue

To ensure maximum efficiency of a value chain, all processes must be in harmony with logistical and environmental requirements.

Deviations such as

- hazards to employees from problematic packaging materials and methods,
  - pollution of our environment by environmentally critical packaging materials,
  - additional repackaging expenses due to the use of unsuitable and/or inadmissible packaging materials or methods,
  - problematic turnaround times due to missing or incorrect markings and/or incomplete documents,
- ... impact negatively on operational processes and ecology and should therefore be avoided.

**Rather, the objective is to present the goods in their finished quality, i.e. without any kind of impairments.**

**To achieve this, safe and easy transport, storage and commissioning must be ensured, taking into account all environmental aspects.**

Special attention must be paid to the key aspects:

- SHEQ (Safety, Health, Environment, Quality).
- Use of environmentally friendly, sustainable and economically viable packaging materials.
- Product protection (protection against damage, contamination, environmental influences and theft)
- Transportability (e.g. by packaging design compatible with industrial trucks).
- Storage (to ensure a trouble-free storage process).

Leybold actively supports every kind of reduction of environmental impacts.  
For this reason use exclusively environmentally friendly and environmentally compatible as well as sustainable packaging materials for deliveries to and by Leybold.

Along with the reduction and avoidance of non-recyclable or non-reusable material, this also secures the environmentally compatible disposal of the packaging material being used.

For purposes of definition we differentiate here between permissible and impermissible packaging materials.

In addition to the present packaging and delivery regulations, product-specific specifications may apply, which will be sent to the supplier with the contract basis.

Leybold reserves the right to reject deliveries contrary to these regulations at a charge!

## 2. Permissible packing material

### 2.1 Packaging made of wood

If packaging (e.g. wooden boards, squared timber, battens, runners or frames) have solid wood component parts, they must comply with the IPPC/ISPM15 standard, i.e. be free of pests and bark.

Solid wood used from the certified manufacturer must be heat treated (HT-treated) and marked:

To identify the manufacturer and heat treatment, the packaging or its the packaging or its wood components must bear a HT stamp (see figure on the right), which indicates the country of origin and the certified manufacturer/processor. According to this regulation, packaging which exclusively comprises plywood or pressboard is exempted from wood treatment.

For ecological reasons, the materials and board thicknesses used must be adapted to the expected transport loads and product weight.



### 2.2 Wooden crates (solid wood and plywood boxes)

Lid-support members may be used as standard to stabilize the crate and additional compression members may be used to secure the cargo in the crate, which - unless they are made of plywood - must be heat-treated (see also 2.1).

In order to reduce hazards to employees when opening the boxes and to ensure that the wooden parts used can continue to be used, closing with nails is not permitted.

However, Spax and Torx screws are permissible, which ensure non-destructive dismantling of the boxes.



### 2.3 Pallets

For deliveries on pallets, only exchangeable Euro pallets in accordance with EN 13681-1, dim.: 1200 x 800 x 144 mm (l x w x h) may be used.

For the purpose of the documentation of heat treatment and of the manufacturer they must bear the relevant HT stamp. Exceptions to this are Euro pallets which are fabricated entirely from plywood.

Disposable pallets will not be accepted.

Product-specific packaging, which must be coordinated and approved with Leybold in advance, is exempted.

For ecological reasons or for return to the recovery cycle, the pallets must be in an undamaged, serviceable condition.



### 2.4 Pallet attachment frames

... consist of wooden boards that are connected by means of metal hinges and may be used.

Material deviations from this require approval from Leybold (Logistics Department).

If made of solid wood they must be heat treated as per IPPC/ISPM15 and marked with an HT stamp.



**2.5 Cartons and fillers**

...made of corrugated cardboard or hardboard are classified as recyclable and are allowed to be used. Additions of grass paper or hay are accepted as long as the protective function of the cardboard is not impaired.

It must be ensured that cardboard boxes are adapted to the product size and that as little, preferably even no filling material, is necessary. See 2.10 for accepted filling material!

**2.6 Delivery specification for oils/greases**

This specification contains the delivery conditions and technical data for lubricants and LEYBONOL products (special oil for vacuum pumps).

The LEYBONOL lubricant is purchased as "Private Label".

Recyclable packaging material should be used wherever possible.

Further details are regulated in the respective orders or delivery specifications.

**2.6.1 Accompanying documents**

- REACH registration is completed.
- Declaration of RoHS conformity (freedom from lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyl (PBB) or polybrominated diphenyl ether (PBDE)).  
The applicability is limited to electronic and electrical goods.
- Declaration of compliance with the current GADSL list (<http://www.gadsl.org/>),  
GADSL: Global Automotive Declarable Substance List.
- Declaration of freedom from VOC (volatile organic compounds) in accordance with the Ordinance on the Incentive Tax on Volatile Organic Compounds VOCV.
- COA (Certificate of Analysis): Batch-related proof of the oil specification.

**2.6.2 Duty to inform**

All information must be treated as confidential!

A transfer to third parties is only permitted with the consent of Leybold GmbH (as well as with an NDA).

The supplier is obliged to provide the following information:

- In the case of any changes to the product (e.g. ingredients, formulation, manufacturing process, technical data, containers and packaging, "Form and Function") Leybold must be informed at least 18 months in advance.  
Leybold must obtain approval or release for each of these changes before they are introduced.
- Enclose safety data sheets according to current legal requirements, at least required languages: German, English (UK).
- In case of changes, updated documents must be sent unsolicited.

## 2.6.3 Packing containers

Container sizes and properties

Container size	Container colour	Colour cap	Leybold Material number oil
< 1 litre			L XXX 00
1 litre	Silver/Grey	Red	L XXX 01
5 litres	Silver/Grey	Red	L XXX 05
20 litres	Silver/Grey	Red	L XXX 20
200- 208 litres	Grey/Black	-	L XXX 99

UN-qualified containers must always be used.

### Containers must be sealed with HEAT SEALING!

LEYBONOL products to be filled and packaged in glass bottles have a PTFE cap.

Exceptions are possible (only) by agreement, e.g. for pouring aids / filling spouts.

### Quality control of the closures:

- Random leakage and torque tests as well as
- cap screwing per filling batch with **4 containers each** per delivery

**Containers** should be repacked in neutral cartons (for glass bottles

with polystyrene, adhesive tape and arrow markings) and for "private label" products (see 2.6.4) the corresponding labels must be attached. In order to prevent transport stresses on the surrounding cardboard packaging from damaging the container, care must be taken to ensure that there is no direct contact with the cardboard (e.g. through cushioning material, see filling material 2.10). Arrow markings are depicted on the cartons to indicate correct orientation (vertical positioning of the cartons) and to prevent leakage of containers.

The cartons are designed for transport on EURO pallets,

strapped and secured with stretch film. Edge protection (preferably and for environmental reasons made of hardboard) should be used for strapping. The cartons must not exceed or project beyond the basic pallet dimensions.

**Drums** are fastened to Euro pallets and secured or strapped with stretch film. They must be secured against external damage (wooden board, wooden or corrugated cardboard cover) Further packaging examples:



Ready packed glass bottles pallet. Carton



Containers in Euro pallets - on a Euro



Example LVO 400: Packaging of a glass bottle in polystyrene and adhesive tape.



Pack the glass bottles (1 litre)

in the box



Packaging example glass bottles



Packaging example glass bottles in cartons on Euro pallet.



Packaging example cartons on Euro

pallet with stretch film and edge protection.

## 2.6.4 Labelling "Private Label"

The private label sticker is provided by Leybold.

The **barcode** is provided by the supplier on the label

(Front under the material number, see illustration) or printed / attached to the bottle.

For **containers**, the front of the label is attached so that the sealing cap is on the left.

For **containers**, the back of the label is attached so that the sealing cap is on the right.

For **glass bottles**, the round label is attached in the middle.

For **drums**, the back of the label is attached to the side of the drum,

... and the front of the label is attached on the drum lid.



Left: Front label  
Right: Rear label



Drum side: Back label



Drum lid: Front label



## 2.7 Materials handling equipment/returnable packaging/skeleton boxes

... must correspond to the special features of the product and the local process environment (e.g. clean room area).

Possible packaging materials are outer packaging made of wood (crates), plastic (boxes and pallets), metal (wire baskets) and corrugated board (cardboard boxes) with an inlay (e.g. contour parts) adapted to the product contour.

The products contained must be protected against impairment due to movement within the means of transport, e.g. slipping (bumping into each other) and vertical movement by means of fixing measures, e.g. by inlays.

The management of the materials handling (development, exchange, provision, etc.) is the responsibility of Leybold Logistics or - insofar as it is the property of the supplier - of the supplier or a commissioned service provider specialized in this field.

Where possible, we ask that you choose sustainable materials.



## 2.8 Bags, front box lids, films

... are fully recyclable, are accepted in HDPE and LDPE quality (also VCI coated ESD-compatible) and must be marked accordingly.



## 2.9 ESD packaging

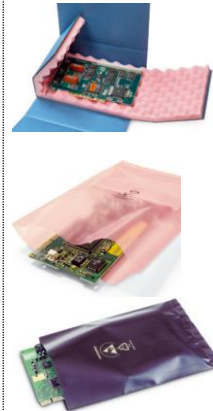
Products that must be protected against static charge (e.g. electronic parts) must be packed in ESD-compatible foam packaging or in PE bags.

If -against expectations- conflicts with -standard- inadmissible material or materials should exist, product protection is the priority.

In such cases, Leybold must be informed in advance and alternative materials must be searched for.

Packaging methods deviating from this regulation

must be approved in writing by Leybold (Logistics Department).



## 2.10 Filling material

Permissible filling materials are cushions made of (packing) paper (preferably as paper cushions, e.g. Padpak/Ranpak system) and polyethylene (PE) air bubble bags. For ecological reasons, paper is preferable wherever possible. To avoid dust formation, the use of wood wool, shredded corrugated cardboard, etc. should be avoided. The boxes used should be in reasonable proportion to the size of the product contained.



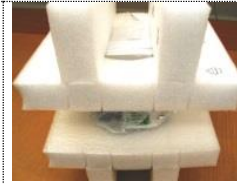
## 2.11 Structural packaging

...is specially designed packaging made of foam, plastic, wood or corrugated board, taking into account the special features of the product (usually as part of a packaging development including packaging testing), which ensures maximum transport and handling safety with minimum environmental impact.



### 2.11.1 Structural packaging foam (e.g.: PE/PP)

... is accepted as recyclable packaging materials.  
In case of doubt, the more environmentally friendly packaging that ensures the same product protection is preferred.



### 2.11.2 Structural packaging made of corrugated cardboard

... is also accepted as recyclable packaging materials.



### 2.12 Straps

...are exclusively permitted as plastic straps made of PE or PET. This is the only way occupational safety aspects (cut protection) and product protection (through the elasticity of the plastic strap used) can be taken into account. For merchandise, always use neutral tape, i.e. without branding (company logo). Unnecessary strapping is not allowed for environmental reasons (e.g. for parcels without pallet).



### 2.13 Edge protection

To prevent damages on crates or cartons while strapping packages preferably use brackets made of hardboard (Fig. 1). Plastic edge protectors should be avoided for environmental reasons.



Fig. 1



Fig. 2

### 2.14 Sealing adhesive tapes/security sealing tape

(Environmentally friendly) wet adhesive tapes should be preferably used for sealing cardboard boxes. Plastic tapes are also permissible.

If it involves a commercial product, use Leybold wet adhesive tapes. The adhesive tapes can be obtained in rolls from Leybold, Order Management Department in Cologne - for different brands (company logos) - (material numbers: 15703720, p15703730, p15703740).

Type of use (e.g. double-T bonding) and scope






must be implemented in accordance with the specifications and in an environmentally friendly manner!

These sealing tapes are used as evidence of initial opening according to the rules of the LBA (German Federal Office of Civil Aviation)! For that reason, use them exclusively for deliveries to or by Leybold, see also 4.26!

So-called security sealing tapes, which are to be used as standard for air freight, cannot be removed without leaving residues and leave writing on the package stating that it has been opened and possibly tampered with.

**Obtaining and placing on the market any packaging with the Leybold logo or emblem (without prior consultation with and approval by Leybold) is strictly prohibited!**



<p><b>2.15 Stretch foil</b> ...may be used as recyclable packaging material made of PE to protect the packages against slipping and soiling as well as against moisture. Film thicknesses of 16 µm are sufficient here. Adequate, pre-stretched qualities of lower film thickness are permissible. Do not wrap more than 2-3 times.</p>	
<p><b>2.16 Stickers/Labels</b> All packages must be labelled with the internationally prescribed warning labels (e.g. arrow, glass, umbrella, centre of gravity, stacking instructions, etc.) - see also DIN EN ISO 780-. If particular specifications go beyond that (e.g. as in the case of dangerous goods), in addition provide the packages with the warning information specified. Marking can be achieved by means of stickers or by applying paint. Shipping damage as a result of incorrect handling due to missing or incorrect warnings will be borne by the supplier.</p>	
<p><b>3. Impermissible packing material</b></p>	
<p><b>3.1 Filling material</b> The use of chips (flakes) e.g. from maize starch, hardboard or polystyrene is not wanted and impermissible. The same applies to wooden wool and paper or cardboard shredder material as well as PU foam (see also 3.4).</p>	
<p><b>3.2 Moulded parts made of polystyrene and polyurethane</b> Moulded parts made of polystyrene (PS, trade name: Styropor) and polyurethane (PU) are generally <u>not</u> accepted. Only in agreement with Leybold (!), packaging materials made of polystyrene (PS) or polyurethane (PU) - in the form of bags, hoods or moulded foam parts, which have no alternative for product protection (e.g. mechanical and electrical loads) and can be recycled as re-granulates (e.g. for containers) - are excluded from this.</p>	
<p><b>3.3 Pallets</b> Pressed chip pallets ("Inka" system), as well as pallets ("Falkenhain" system) are as one-way pallets not recyclable ("Inka") and/or not exchangeable and are therefore <u>not</u> accepted. If - for example for clean or white room areas - plastic pallets are to be used, this requires prior coordination with Leybold (Logistics Dept.).</p>	
<p><b>3.4 Foam materials</b> Disposable packaging made of foamed polyurethane (PU) or PU derivatives (e.g. "Sealed Air" foam cushions system) or polystyrene (PS) are not permitted, as they must be disposed of separately as hazardous waste.  The exception to this is returnable packaging (materials handling equipment).</p>	
<p><b>3.5 Deep-drawn and blister packaging</b> ... require the explicit release by Leybold (Logistics Dept.).</p>	

### 3.6 Exceptions/deviations

Exceptions or deviations from these packaging and delivery instructions are possible for reasons of product protection or better handling, but all require written approval from Leybold (Logistics Department) after consideration of all environmental risks.

## 4. Packaging technology/methods

### 4.1 Product protection

#### 4.1.1 Protection against penetration

In order to avoid damage to products inside the packaging (mutual damage) or outside of the packaging (penetration). Preferably, paper products such as tissue paper, wrapping paper or corrugated board end caps. The use of recyclable PE (polyethylene) based bubble wrap is permitted. Permissible materials see chapter 2 ff.



#### 4.1.2 Protection against slipping

To avoid damaging the product in the packaging, it must be restrained in each package. Appropriate methods are moulded parts, which envelop the product (contour inlays) as well as filler material (packaging paper, bubble foil, tensioning straps, anti-slip mats). With regard to the reliability of filling material see also 3.1.

#### 4.1.3 Protection of the surfaces

Surfaces must be protected against damage and soiling. Depending on the sensitivity of the products you can do this with film, paper, protective caps/plates or with spacers. Surface protection should preferably be provided with suitable papers (e.g. tissue paper or corrugated cardboard in rolls). With regards to the reliability of the material used see chapter 3. Further details may be regulated by the respective specific purchase order text or the corresponding delivery instructions (see relevant section).

#### 4.1.4 Protection of seals

Pack the seals - just as with comparable materials- so that they can neither be damaged (bent, broken, crushed, torn) nor soiled. Possible options include packaging (in a PE bag) in a hardboard shipping bag or in suitable cardboard boxes. With regards to the reliability of the material used see chapter 3.



#### 4.1.5 Corrosion protection and methods

Preferred preservation methods are:  
Desiccants (sealing of the goods in an evacuated PE bag - with the addition of desiccant) and VCI films, bags or hoods.  
Oils, greases, waxes, passivations, coatings etc.

for preservation require the approval of Leybold Köln, (Product Manger and/or Logistics Department).

See also "4.1.6 Sea freight (seaworthy) packaging".

For environmental reasons, avoid overdosing!



**4.1.6 Container shipping/sea freight packaging: corrosion protection**

Pack sea freight consignments to avoid transport damage and corrosion during container shipping (sea, rail).

To accomplish that, evacuate and immediately seal the material to be packed - in PE film (with the addition of sufficient amounts of desiccants and/or preservatives).

As an alternative method, VCI corrosion protection film, bags and hoods are accepted.

To extend the preservation period (> 6 months), the material can be evacuated and immediately sealed in aluminium compound foil (see Figure 6) in addition to or instead of the PE (see Figure 5) for prolongation of the corrosion protection.



Fig. 5



Fig. 6

**4.1.7 Container shipping/sea freight packaging: transport protection**

Freight space or loading area is scarce and expensive for all modes of transport (truck shipping, air freight, sea and rail containers).

For this, as well as for environmental reasons, maximum utilisation of the available space is required and efficient stowing and stacking is essential.

The focus here is on product protection and securing the cargo against slipping and damage to the consignment in the container. Packages that are limited in terms of stacking must be repackaged into suitable wooden crates or armoured cardboard boxes.

**4.1.8 Overhangs and offsets**

... are to be avoided as they impair transport and handling safety and product protection.

**4.2 Dimensions/weights/outer packaging/handling**

**4.2.1 Cost of the packaging and shipping**

Select the package sizes in a way that avoids unnecessary volume ("do not pack air").

The consequences of overly bulky packaging are excessive packaging costs (size and price of the packaging material) and freight costs (keyword: volume weight) as well as environmental aspects.

The packaging materials used must therefore be proportionate to the weight, sensitivity and value of the product. This means that both "underpacking" (product protection endangered) and "overpacking" (excessive handling and material costs, environment) must be avoided.

## 4.2.2 Package sizes

To be able to store and emplace the products compatibly with our warehouse concept - optimized use of space - we ask you to take our container concept into account.

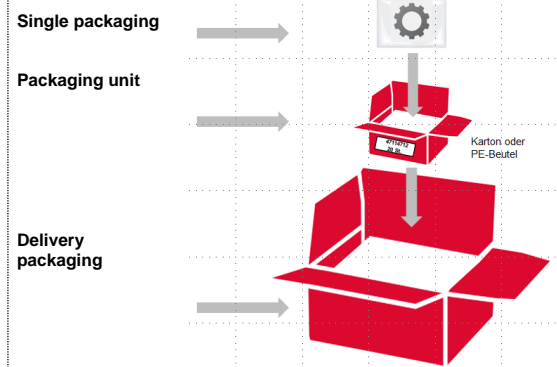
Please only use packaging material that can be accordingly stored (see figure on the right).

Maximum external dimensions of the delivery packaging:

Crate	max. size [LxWxH] [mm]
KP0	133x88x67
KP1	190x125x110
KP2	292x181x185
KP3	445x275x185
KP4	564x366x167
KP5/KP7	564x366x187
KP6/KP8	564x366x247

\* = Small parts container made of plastic.

The total weight for small parts (in delivery packaging) must not weigh more than 28 kg!



## 4.2.3 Maximum weight of packages/pallet use

For both handling and SHEQ (Security, Health, Environment, Quality) reasons, provide packages with a weight from 30 kg additionally with a pallet.

For ecological reasons or for reuse, the wooden pallets must be in an undamaged, serviceable condition. Preferably, exchangeable Euro pallets are to be used.



## 4.2.4 Material thicknesses of plywood boxes/hoods

The following wall thicknesses must be - depending on the packed weight and the receiving area - used:

- 10 mm < 300 kg,
- 12 mm > 300 – 10,000 kg,
- 15 mm > 10,000 kg.

So-called armoured cardboard boxes (made of reinforced corrugated cardboard layers) may only be used where stacking is ensured.

For specifics such as container shipping see 4.16 + 4.17!



## 4.2.5 Sealing boxes

To facilitate opening wooden crates and, if necessary, use them for direct forwarding to customers or from customer to customer, they should be closed for environmental reasons (reusability) using Torx (Fig. 3) or Spax screws (Fig. 4). Fastening with nails is not permitted.

Permitted are also so-called plywood folding boxes (fixation of the cover with clinching eyelets and/or strapping of lid on the folding frame).



Fig. 3



Fig. 4

### 4.2.6 Sealing cartons

Close cartons with double-T-bonding.  
For environmental reasons, so-called paper-based wet adhesive tapes are preferred as closure tapes; adhesive tapes with plastic backing material are also accepted. Air freight consignments must also be provided with tamper-proof security sealing tape, see also 2.14!



### 4.2.7 Outer packaging

If multiple packages will be shipped, they can be wrapped together.  
The same regulations as for individual packages apply.  
Marking and requirements of shipping documents are described in chapters 5+6.

## 4.3 Transport monitoring

### 4.3.1 Transport monitoring systems

Sensitive materials which could suffer damage even with solid outer packaging must be provided with a transport monitoring indicator in the interior of the packaging (E.g.: "Tiltwatch", "Shock Watch"). The indicators must correspond to the sensitivity of the packed product.  
If products must not be tilted over a defined angle on their way to the customer (e.g. helium-filled pumps), tamper-proof tilt indicators (e.g. "Tipp-N-Tell") must be used.



## 4.4 Dangerous goods/special packaging/container shipping/release of packaging material

### 4.4.1 Dangerous goods packaging

Dangerous goods must be packed and labelled in accordance with international regulations (ADR, IATA regulations, etc.).  
Use solely specially approved packaging materials for packaging (e.g. with UN certification).  
Duly mark the packages (e.g. with stickers/labels) (see also "2.15 Labels").



### 4.4.2 Special packaging

If there are further special features beyond the packaging and delivery instructions, these will be described separately in the purchase order text (as product specification) and/or separate delivery specification by Leybold (responsible: Procurement) and must be followed accordingly.

**4.4.3 Container shipping/container storage**

When shipping in containers, the following should be taken into account, among other things (here are the most important points):

1. Packages (boxes, cartons, pallets) must be secured against slipping and tipping in the container (e.g. by wooden dunnage in the container floor, stowage bags (see figure above), ropes, belts, chains, lashing).  
Comply with the regulations on load restraints here!
2. Arrange the packages inside the container with uniform weight distribution.
3. If packages are stacked in the container it must be ensured that the lower packages for stacking are able to withstand dynamic transport loads and are secured against falling down (e.g. by strapping, skinning, stowing).
4. Materials standing on the container floor must be secured on pallets or packed in boxes so that they can be unloaded without risk.
5. Never exceed the highest (container) load-bearing capacity.
6. Do not fumigate the container.
7. Containers must be sealed with a numbered seal.
8. Goods in the container must be protected against moisture and corrosion (see also sea freight (seaworthy) packaging 4.1.6).



In all other respects the provisions of IMO (International Maritime Organization) apply!

**4.4.4 Release of packaging material for merchandise**

Before the start of a regular delivery, have the intended packaging and packaging techniques approved by Leybold, Logistics Dept.

For this purpose, send a packaging sample and/or drawing.



## 4.5 Contamination of products

### 4.5.1 Contaminated material

Used and/or contaminated (chemically, biologically or radiation contaminated) products (e.g. pumps) may only be delivered to Leybold Dresden!

The risk of the escape of substances that are harmful to health or of radiation must be prevented prior to the unpacking process!

If contaminated materials (e.g. pumps for repair/maintenance) are delivered, these must be clearly visible (contamination declaration) before unpacking.

The Leybold Service/Return Form (Declaration of Contamination) which is absolutely necessary for this purpose is available on the Leybold website and must be used!

<https://www.leybold.com/en/downloads/download-documents/declaration-of-contamination/>

The internationally valid warning markings as well as the contamination certificate to be requested (from Leybold prior to shipment) must be attached to the outside of the package and directly to the material.

Leybold reserves the right to hold the originator liable for any kind of impairment (affecting people, goods or the environment)!

## 5. Special provisions for commercial goods

### 5.1 Shipping (ZEG)-capability

The product packaging must be suitable for the individual dispatch of the product (ZEG). I.e. forwarding must be possible without repackaging or additional outer packaging.  
For this purpose, there must be sufficient space on the packaging for address labels/delivery notes, etc.

### 5.2 Markings, labels, etc.

The pure product packaging must not be provided with any additional markings such as shipping stickers.

### 5.3 Secure the products within the packaging

Products or parts must be restrained in the packaging so that they are fixed and secured against movement e.g. bumping into each other (s. also 4.1 ..... Product protection).

### 5.4 Stackability of packed products

Packed products must be stackable.  
Avoid curved surfaces.

The maximum stacking height for our rack systems is (maximum):

In Köln: 110 cm,

in Dresden: 120 cm,

in Valence (France): 200 cm

in Tianjin (China): 110 cm.

### 5.5 Sealing packages

The product packaging must be sealed with adhesive tape and be protected against manipulation (s. 4.2.5+4.2.6+8.10) in compliance with the LBA (Federal Air Cargo Authority).

### 5.6 Product marking

On the face of the product packaging (top right) (as per the gluing instruction), the product must clearly bear the Leybold standard label (see 5.6.1).

## 5.6.1 Material: Double labels (Mat.no: 15703801)

In order to ensure the identification of the packed products and to carry out all storage and shipping processes smoothly, all delivered packages must bear the double labels shown below and comply with the regulations for content and form.

Your responsible purchaser will provide you with information regarding the respective branding (company logos)!

The labels can be obtained role-wise (1,500 pieces/role) from Leybold, Order Management Department in Köln.

### 5.6.1.1 Printed label without serial number ("Arial" font)

Header Leybold logo (38 x 9 mm):

Production date (height: 3 mm)

Note on single shipment (ZEG) (height: 5 mm),

if the package is suitable for individual shipment and

is stipulated by Leybold, see 5.1.

Line 1 Material no. of the product (in plain text) (height: 5 mm).

Line 2 Material no. of the product (in plain text) (height: 3 mm).

Line 3-5 Part number (Part No.) in barcode type 128

(height: 5 mm)

and in plain text (height: 2 mm).

#### **Attention!**

The label has two perforations (after Line 3 and Line 4).

Please always glue only the top part of the label to the product packaging.

The two lower parts must be enclosed with the product remaining on the carrier material of the label and are required for further processing at Leybold.



## 5.6.1.2 Printed label with serial number ("Arial" font)

Header Leybold logo (38 x 9 mm):  
Production date (height: 3 mm)

Note on single shipment (ZEG) (height: 5 mm),  
if the package is suitable for individual shipment and  
is stipulated by Leybold.

Line 1 Material no. of the product (in plain text) (height: 5 mm).

Line 2 Material text of the product (in plain text),  
(height: 3 mm)

Line 3-8 Part number (Part No.) in barcode type 128  
(height: 5 mm)

and in plain text (height: 2 mm) each  
left-aligned!

Serial number (S/N) number (Part No.) in barcode  
type 128

(height: 5 mm)

and in plain text (height: 2 mm) each right-aligned!

### **Attention!**

The label has two perforations (after Line 3 and Line 4).  
Please always glue only the top part of the label to the product  
packaging.

The two lower parts must be enclosed with the product  
remaining on the carrier material of the label and are required for  
further processing at Leybold.



## 6. Marking/accompanying documents (accompanying documents)

Mark the packages in accordance with DIN 55402.  
The required documents and their contents are defined below.

### 6.1 Delivery note

One delivery note per package/pallet/order outside (in a delivery note pocket) must be present on the  
(outer)packaging and inside the packaging.

It shall contain the following information:

- Address of Leybold, with place of unloading where applicable and, if known, consignee
- Delivery date/times, if applicable
- Leybold order number and position
- Leybold material number and name (if known)
- Delivery quantity/material incl. unit of measure
- Delivery quantity of the PU (if agreed)
- Serial number (in plain text and barcode 128), (for products requiring serial numbers);  
also possible as separate sheet)
- For goods with a limited shelf life: expiry date
- If there are several packages within one outer packaging, these must also be provided with a delivery note  
(outside and inside) for each order number.

### 6.2 Packing List (for deliveries with multiple items)

If a delivery comprises several packages, for reasons of a completeness check a packing list with  
information on the package number and the total number of packages ("Package n of nn") must be enclosed.

**6.3 Delivery on pallets**

If delivery is made on several pallets (e.g. oil containers), the following points are mandatory must be heeded:

- a) Never more than one material number per pallet, that is, no different materials per pallet
  
- b) A delivery note stating the quantity of this material number per pallet (pallet quantity)

**6.4 Packing Units (PU's)**

Leybold specific packaging units (PU) must be clearly identifiable and marked with the following data:

- a) Delivery quantity of the PU
- b) Leybold order no. and order line
- c) Leybold material no.
- d) Serial number in plain text and barcode 128
- e) Expiry date for goods with a limited shelf life

Compliance with the packing units agreed in the order text is mandatory!

**6.5 Delivery provisions**

Individual consignments with a max. weight < 30.0 kg can be delivered without Euro pallets. They should be provided with a hazard warning (sticker/label) regarding the weight. Packages ≥ 30.0 kg must be delivered on (Euro)pallets.

Technical data: EURO Pallet

Dimensions: 1,200 x 800 mm

Max. packing height: 1,100 mm

Max. weight: 1,200 kg

For ecological reasons or for reuse, the pallets must be in an undamaged, serviceable condition. Deliveries on damaged pallets will be rejected.  
Euro pallets must be in exchangeable condition!

**6.5.1 Delivery on Euro pallets and in wire mesh baskets**

Pallet accounts are undesirable, however there is pallet or skeleton box exchange during all deliveries.

**6.5.2 Delivery in Leybold means of transport**

Always deliver transportation equipment - boxes (TM) provided Leybold provided complete - i.e. including covers and inserts.  
Empty transportation equipment is available from in-company transport (Logistics Dept.).

**6.6 Single layers**

Individual layers within a packaging unit must have identical quantities; only the top layer may differ in quantity.



**7. Imports**

For import shipments, only wood packaging treated in accordance with IPPC/ISPM15 may be used, provided that the packaging used contains solid wood! See 2.1.

The corresponding HT (Heat-Treatment) certificate of the pallet or crate manufacturer must be enclosed.

To be able to prepare the delivery of imports in advance, you must transmit the following documents (simultaneously) to our "Forwarding Operations" (Logistics Dept.):

**7.1 Customs invoice**

It must contain the following information:

- Any possible preference information,
- The description of the material incl. goods tariff number and country of origin (for country of origin Germany: country of origin+ region of origin!)
- The Leybold order number and (if known)
- The Leybold material number

**7.2 Freight bill (waybill)**

It must be possible to infer the following details:

- Leybold order number
- Flight data or tracking number and the executing carrier.
-

**8. Rules to be respected****8.1 VerpackG (Packaging Act) (2022)**

The amended Packaging Act applies exclusively to shipments to private end consumers and does not apply to B2B (Business to Business) internal relationships!

**8.2 HPE policies**

In the case of packaging made of wood are the recommendations of the "Federal Association of wood packaging, pallet, export packaging e.V.", in collaboration with the BFSV Hamburg has been developed to take into account.

The relevant information can be found - also in English - on the HPE homepage: [. http://www.hpe.de](http://www.hpe.de).

**8.3 IATA (International Air Transport Association)**

For airfreight shipments the IATA regulations must be adhered to (especially for dangerous goods)!

**8.4 IPPC (International Plant Protection Convention)**

The related rules regulate for instance the treatment of solid wood (IPPC/ISPM15).

**8.5 DIN standards**

Attach warning signs (mark e.g. dangerous goods).

**8.6 IMO (International Maritime Organisation)**

Rules on container shipping.

**8.7 CEN (Comité Européen de Normalisation, s. Europ. Committee for Standardisation)**

Rules etc. for securing cargo.

**8.8 Legal Significance and Sanctions**

These rules and regulations have a status equal to our "General Terms and Conditions" and are an integral part of the contracts with the Leybold suppliers.

Non-compliance with these guidelines can lead to a financial burden for the supplier or to a return of the goods shipment or refusal of acceptance.

**8.9 ISTA (packaging tests)**

If packaging tests are required, these must be carried out in accordance with the internationally applicable ISTA standard.

Packaging tests in accordance with deviating standards (e.g. UPS) must be agreed in advance with Leybold (Logistics).

**8.10 LBA (Federal Air Cargo Authority)**

All airfreight consignments must be LBA-compliant, i.e. tamper-proof and packed by certified employees. Security seal labels are helpful here.

For sealing parcels, see 4.2.6!

As a known shipper, Leybold is obliged to take various precautionary measures to protect air cargo shipments.

This includes, among other things, packing consignments in such a way that they are sealed all around and do not offer any possibility of manipulation (e.g. subsequent insertion of objects).

Employees who have access to air cargo shipments must regularly pass a background check (ZÜP) with the competent authority or the certified service provider and be able to prove their knowledge in this regard by means of seminar participation and a positive examination result.

**9. Entry into force and validity**

These packing and delivery instructions replace the delivery and packing instructions of 22.03.2017, (Edition 04), come into force with immediate effect and are valid until further notice.

## 10. Transitional regulation

These regulations first apply upon transmission to the respective supplier, i.e. with the subsequent order from Leybold.  
Deliveries and contracts running until then are based on the known, previous delivery regulations.

## 11. Other

### 11.1 Delivery times (all times local)

All deliveries of goods are accepted

at the Cologne plant: Monday to Friday from 6:45 to 14:30

at the Dresden plant: Monday to Friday from 8:00 to 16:00

at the Valence plant: Monday till Friday, 7:30h to 16:00h

at Tianjin plant\*: 9 a.m. and 5 p.m. on workdays \*SCM CN670-warehouse

### 11.2 Current version of the packaging and delivery specifications:

The respectively valid, current version can be found (in 4 languages) on the homepage of Leybold GmbH, Köln

<https://www.leybold.com/de/about-us/suppliers>.

### 11.2 Questions:

If you have any questions regarding the packaging and delivery regulations, please contact your responsible buyer.

### 11.3 Photos:

Leybold Köln and - courtesy of - the company Ratioform Verpackungen, Köln.

## Epilogue

Our environment must be a matter close to all of our hearts.

We don't want to see images like this.

Let's make our contribution to a clean environment! Right now!



## Appendix: Packaging specification (customer and supplier side)

Atlas Copco Vacuum Technique Leybold GmbH Cologne		Anlieferspezifikation		Rev.	2	Seite	1/1
Projekt-/Produkt	V135C	Material-Nr.	110003508		Dok. Nr.		
PVB/Lagerort		Set-Nr.			Ersteller	S. Wollter	
Einzelgewicht	138,97 kg	Bezeichnung	Pumpengehäuse V135C		Teil-Nr.	1596	
Produkt-Hir.	100271001010000001				Datum	04.06.2021	
					Arbeitsvorgang/ zugehörige OP		
Allgemein		Einzelverpackung 1 STK (Bauteil)	Sammelverpackung	Versandverpackung/ Pendelverpackung			
Stück / Verpackungseinheit				3			
Behälter / Verpackungs-Typ		Nicht erforderlich	Nicht erforderlich	Europalette			
TM-Nummer/Material-Nr. (Behälter)		0	0	15703952			
Gesamtgewicht (Brutto)		0,00 kg	0,00 kg	442,71 kg			
Label		Einzelverpackung 1 STK (Bauteil)	Sammelverpackung	Versandverpackung/ Pendelverpackung			
Materialnummer				x			
Menge				x			
Produktionsdatum				x			
Position				Vorne			
Größe [mm]							
ZEG Spezifikation							
Sonstiges		Einzelverpackung 1 STK (Bauteil)	Sammelverpackung	Versandverpackung/ Pendelverpackung			
Besondere Ausrichtung der Bauteile				zwingend erforderlich			
Korrosionsschutz							
Bauteil-Reinheit							
Stückliste Transportmittel	Anzahl	Bezeichnung	TM-Nummer/Material-Nr. (Behälter)	Gewicht [KG]			
1	0	Nicht erforderlich	0	0,00			
2	0	Nicht erforderlich	0	0,00			
3	1	Europalette	15703952	25,80			
4	3	Sicherungsband	0	0,00			
5	2	Holz Rahmen 1200x800	6541255	20,00			
6	1	Holz Deckel 1200x800	6541254	5,00			
7	1		0	0,00			
8	0		0	0,00			
9	0		0	0,00			
10	0		0	0,00			
<b>Bemerkungen:</b>			<b>Gesamtgewicht (Brutto)</b> Bauteile + Transportmittel		<b>467,71 kg</b>		
<p>Paletten nach EPAL EURO Paletten Standard. Unbeschädigt und in Tadellosem Zustand. Anordnung der Bauteile nach Fotodokumentation. Unalit Platte 1x unter den Bauteilen. Bauteile mit Pos. 4 Sicherungsband einzeln gesichert (Material: Kunststoff).</p>							
Dokumentation / Fotos / 3D Modell / Zeichnung							



Atlas Copco Vacuum Technique Leybold GmbH Cologne		Packagingspecification		Rev	2	Page	1/1
Projekt-/Product	V135C	Material-No.	110003508		Doc No.		
PVB		Set-No.			Creator	S. Wolter	
Single Weight	138,97 kg	Name	Pump housing V135C		Tel. No.:	1596	
Product-Hir.	100271001010000001				Date	04.06.2021	
<b>General</b>		Unit Packaging 1 Piece (Part)	Collective Packaging	Shipping Packaging/ Pendulum Packaging			
Piece/Packaging Unit		0	0	3			
Type of Container/Packaging		Not required	Not required	Europalette			
TM-Number/Material-Number (Packaging)		0	0	15703952			
Total weight (Components)		0,00 kg	0,00 kg	442,71 kg			
<b>Label</b>		Unit Packaging 1 Piece (Part)	Collective Packaging	Shipping Packaging/ Pendulum Packaging			
Materialnumber				x			
Amount				x			
Production Date				x			
Position				Front			
Size [mm]							
ZEG Spezifikation							
<b>Others</b>		Unit Packaging 1 Piece (Part)	Collective Packaging	Shipping Packaging/ Pendulum Packaging			
Special alignment of the components				Absolutely Essential			
Anticorrosive							
Part Purity							
<b>BOM Delivery Box</b>	<b>Amount</b>	<b>Designation</b>	<b>TM-Number/Material-No. (Packaging)</b>	<b>Weight [KG]</b>			
1	0	Not required	0	0,00			
2	0	Not required	0	0,00			
3	1	Europalette	15703952	25,80			
4	3	Security Tape	0	0,00			
5	2	Wood Frame 1200x800	6541255	20,00			
6	1	Wood Cover 1200x800	6541254	5,00			
7	1		0	0,00			
8	0		0	0,00			
9	0		0	0,00			
10	0		0	0,00			
<b>Comments:</b>			<b>Total Weight (Brutto) Parts + Packaging</b>	<b>467,71 kg</b>			
<p>Pallets according EPAL EURO Pallet Standard (EPAL 1). Not damaged and in mint condition. Position the material as shown in the documentation. Strap material separately with pos. 4 Security Tape (plastic).</p>							
<b>Documentation / Photos / 3D Model / Drawing</b>							