

DHL EXPRESS

PACKING GUIDE



Protect your shipment with good and quality packaging

EXCELLENCE. SIMPLY DELIVERED.





INTRODUCTION

Thank you for using DHL Express for your international express shipping needs.

DHL is committed to delivering your shipments with speed and care. Since shipments are handled frequently through our different facilities, it is recommended that they are properly packed and secured. Here are some packaging tips and helpful advice on preparing your shipment.

Depending on shipment origin/destination, restrictions may apply for some commodities. Please contact the local DHL Customer Service team for more information.

Please note that DHL will accept no liability for the packaging advice it provides. The customer remains responsible in ensuring that their shipment's packaging is adequate for transportation.



SIMPLE STEPS FOR GOOD PACKAGING



1 Packaging Materials

To avoid damages to your article during transit, always pack with materials that give adequate protection and cushioning. Consider your article's size, weight, shape, fragility and value to help you choose the right packing materials.

Consider Content Size and Packaging Options

- Under-filled boxes may collapse
- Overloaded boxes may burst
- Do not exceed the weight specification of the shipment container



SIMPLE STEPS FOR GOOD PACKAGING

2 External Protection

Packaging	Features	Suitable for
Box	<ul style="list-style-type: none"> Most commonly used and suitable way to pack your shipment because of the range of sizes, shapes, materials and accessories used to strengthen and secure them Available in a variety of specifications for different loading capacity Triple-walled feature provides better strength and protection Protection level diminishes after use 	Printed materials Garments Light materials
Envelope	<ul style="list-style-type: none"> Cardboard envelopes for lightweight documents Use cushioned, padded or bubble envelopes to carry things like discs, tapes and small electronic parts Do not use envelopes made of fabric 	Lightweight documents Small electronic parts Discs
Flyer	DHL branded flyer bags are available in two sizes: <ul style="list-style-type: none"> Standard DHL Flyer: For flat documents and small binders with a maximum weight of 2kg Large DHL Flyer: For flat documents, ring binders and small boxes with a maximum weight of 4kg 	Binded documents Flat materials
Tubes	<ul style="list-style-type: none"> Designed to ship documents or printed materials that need to be rolled or cannot be folded 	Ship maps Blueprints and architectural plates Paintings or drawings Posters
Wooden Crate	<ul style="list-style-type: none"> Provides great protection for extremely fragile articles Works best for single-piece content which is heavy, and/or flat and exceeding 60cm x 60cm x 30cm 	Car engines Framed paintings Moulds
Metal Crate	<ul style="list-style-type: none"> Provides better security and greater protection for extremely fragile articles Works best for single-piece content which is heavy 	Aircraft engines Art pieces
Plastic Crate	<ul style="list-style-type: none"> Provides great protection for articles that are sensitive to temperature Good for holding content which is in semi-liquid/liquid form 	Medical instruments Musical instruments



SIMPLE STEPS FOR GOOD PACKAGING

3 Internal Protection

TYPE OF MATERIAL	USED FOR				
	Cushioning	Void Fill	Surface Protection	Divider	Other Specific Function
Bubble Wrap	✓	✓	✓		interleaving
-3/6 inch: good for lightweight products					blocking
-5/16 inch: good for medium weight products					bracing
Foam Wrap	✓	✓	✓		
Foam Peanuts		✓		✓	
Air Bags		✓			
Crumpled Paper		✓	✓		
Corrugated Inserts		✓	✓	✓	
Cardboard					shock absorption
Chipboard					



SIMPLE STEPS FOR GOOD PACKAGING

DHL PACKAGING AND SPECIFICATIONS

Description	Dimension	Maximum Weight of Contents
DISKETTE BOX	235x210x35mm	-
BIG BOX	480x330x320mm	20kg
SMALL BOX	320x235x310mm	15kg
SMALL BRIEFCASE BOX	328x245x80mm	-
BRIEFCASE BOX	460x340x90mm	10kg
DRAWING TUBE	76.5mmx991mmx1.6mm	-
EXPRESS EASY BOX 1*	350x275x10mm	0.5kg
EXPRESS EASY BOX 2*	337x182x100mm	1kg
EXPRESS EASY BOX 3*	337x322x100mm	2kg
EXPRESS EASY BOX 4*	337x322x180mm	5kg
EXPRESS EASY BOX 5	337x322x345mm	10kg
EXPRESS EASY BOX 6*	416x359x369mm	15kg
EXPRESS EASY BOX 7*	481x404x389mm	20kg
EXPRESS EASY BOX 8	541x444x409mm	30kg
JUMBO BOX 5	337x322x345mm	10kg
JUMBO BOX 8	541x444x409mm	30kg
EXPRESS PALLET	790x790x470mm	100kg
SNAP BOX	44x35x27cm	20kg
LARGE SNAP BOX	49.5x45.5x37.5cm	30kg

*Available at DHL Service Point outlets only

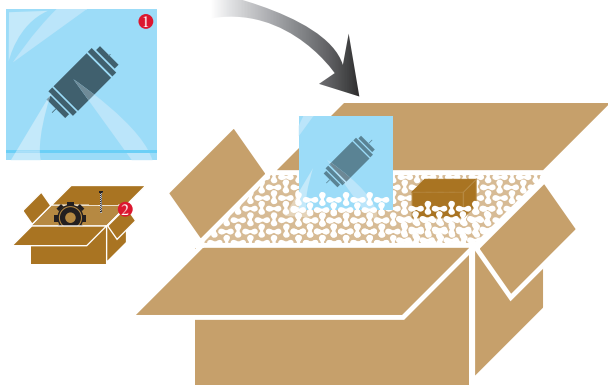
PACKAGING ADVICE AND TECHNIQUES

Packaging Quality Matters

- Avoid using damaged containers or boxes
- Always use high quality wrapping and cushioning/filler materials
- Consider the strength and durability of your chosen packaging
- Always remove old labels and stickers when re-using boxes
- Repack any gifts as decorative wrapping is not suitable for shipping

A. Basic Packing Protection Level: ●○○

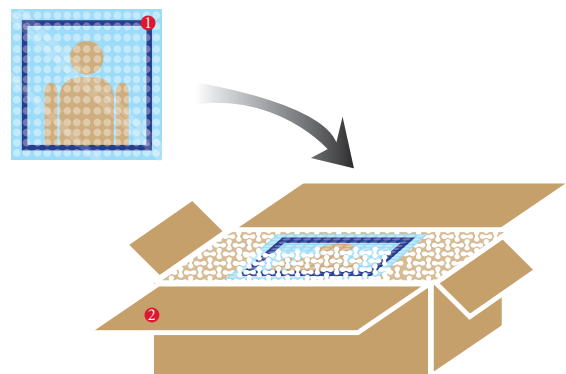
Suitable for non-fragile articles (e.g. printed matters, machinery parts, metal parts)



- 1 Put the article into a plastic bag to minimize effects of humidity and stains.
- 2 Collect small parts such as screws, nails, rails and bearings in a separate sealed container.
- 3 Place 1 and 2 in a container and fill any void space with crumpled paper / Bubble Wrap® / foam peanuts / pad.
- 4 Seal the container

B. Internal Packing Protection Level: ●●○

Suitable for fragile, large and flat articles (e.g. photo frames, marbles, clocks)



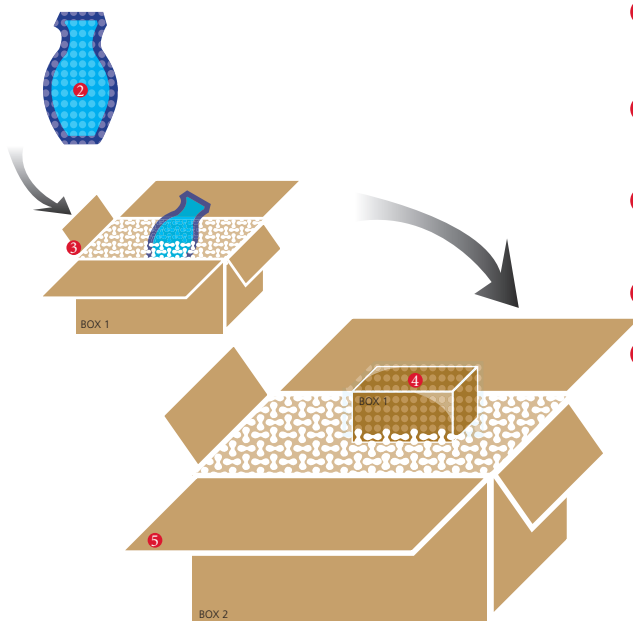
- 1 Fully wrap the article with at least 4-inch thick of Cohesive Bubble Wrap to provide adequate cushioning.
- 2 Place the wrapped article in a container and fill any void space with foam peanuts.
- 3 Seal the container.

PACKAGING ADVICE AND TECHNIQUES

C. Box-in-Box Packing

Protection Level: ●●●

Suitable for fragile, small, thin and irregular-shaped articles (e.g. vases, glasses, lamps, circuit boards)

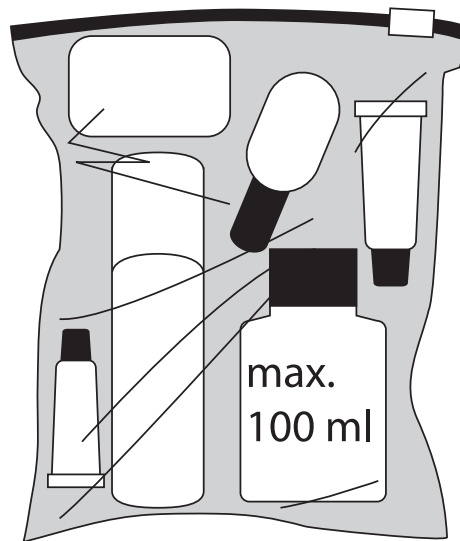


- 1 Prepare 2 boxes that are of at least 7-inch difference in all dimensions.
- 2 Pad all edges, corners and burrs of the article and wrap it fully with Bubble Wrap.
- 3 Place the article in Box 1 and fill any void space with foam peanuts, then seal it.
- 4 Cushion Box 1 with at least 4-inch thick of Bubble Wrap.
- 5 Place the sealed and wrapped Box 1 in Box 2, fill any void space with crumpled paper / Bubble Wrap / foam peanuts / pad, then seal it.

Tips:

- ! Put masking tape on any glass surface to prevent splintering, in case of breakage in transit.
- ! Use Anti-Static Bubble Wrap for television sets, computer monitors and printers.
- ! Remove all attachments and wrap individually. Wrap printer cartridges separately in a plastic bag to prevent ink or powder leakage.
- ! Use original manufacturer's packaging as Box 1, especially for computers, computer peripherals/servers, video and audio players/devices.

PACKAGING ADVICE AND TECHNIQUES



LIQUID AND POWDERS

- Ensure liquids are stored in leak-free containers, protected with a lightweight, strong, internal material such as styrofoam and sealed within a plastic bag
- Seal semi-liquids, greasy or strong-smelling substances with adhesive tape and wrap in grease-resistant paper
- Place powders and fine grains in strong plastic bags, securely sealed and then packed in a rigid fiberboard box
- Use “Arrow Up” stickers for non-solid materials
- Keep in mind that poor packaging may cause damage to surrounding items, machinery and other shipments

SEALING AND PALLETIZING TIPS

Seal your corrugated box with H-shape taping for maximum strength.



Tips:

- ! Use a strong tape with width of at least 2 inches
- ! Apply H-shape taping to the top and bottom of the box.

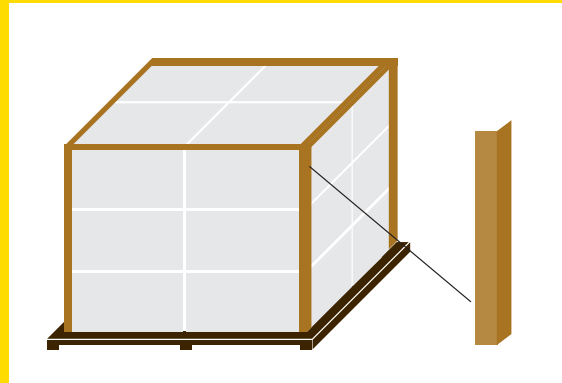
Pallets can provide additional exterior support to your shipment, particularly for items that require lifting by manual pallet truck or when there are multiple items in one lot.

Palletizing Guide

1. Do not stack cartons outside the pallet's edges



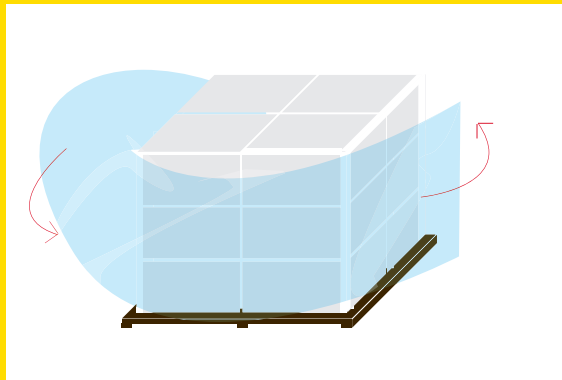
2. Protect the edges of the stack with paper edge protector



3. Use paperboards to protect all surfaces



4. Wrap stretch film around the pallet to avoid cartons falling apart





SEALING AND PALLETIZING TIPS

Securing Methods

- Shipments must be securely banded, bolted or stretched, shrink-wrapped to the forkliftable base
- Use 70 gauge minimum stretch or shrinkwrap and secure it to the base of the skid
- Banding material can include steel, rayon, polypropylene, nylon or polyester strapping
- Use a minimum of two bands (tightly secured) through the skid or pallet voids and around all boxes
- If applicable when bolting, consider using shock absorber connections or cushioned skids

Tips for Skid Loading and Stacking

- Attempt to follow all carton orientation symbols or verbiage (e.g., “TOP LOAD ONLY”, “DO NOT STACK”, “THIS SIDE UP”)
- Distribute weight evenly on the skid or pallet to avoid excess weight being placed on box contents
- Stack boxes squarely on the skid or pallet to the edge (do not overhang) and corner to corner to maximize compression strength
- Top of skid or pallet must be flat to minimize chances of lost or damaged boxes (pyramid stacking is unacceptable)
- Place angleboard (corner protectors) along the edges of boxes to prevent crushing
- Cover the top layer to protect the unitized load from the weather

SEALING AND PALLETIZING TIPS

- Provide clear Shipper and Receiver addresses completely on labels and stickers
- An extra address label placed inside the package is a good precaution
- All packages must be sealed but remember that they can be opened by customs authorities for inspection
- Avoid using masking tape, rope, string or wrapping paper to seal your shipment
- Never use black colored stretch film to seal or protect your shipments

Tapes

A good seal helps to strengthen your package. DHL recommends the following:

- Polypropylene tape
- Vinyl adhesive tape
- Fiber-reinforced paper

Avoid kraft paper tape, household cellophane tape, masking tape, string or rope. Using these materials may result in torn or missing labels and damage to the package.





SEALING AND PALLETIZING TIPS

Wrapping Paper and Films

The use of wrapping paper around boxes or non-contained objects is only recommended:

- for textile item
- to prevent damages caused by dust or oil-based substances
- Remember to enclose wrapped objects in a box for added protection
- Heated shrink wrap and stretch films may be used to consolidate multiple boxes on a pallet for stability and protection
 - They are not suitable for all commodities because the high temperatures used in the heat-shrinking technology may damage the contents of your shipment.
 - When using these films, affix the labels on the boxes and not on films.
 - Do not use black colored film.

Strapping

Strapping is an ideal way to strengthen your shipment when applied correctly.

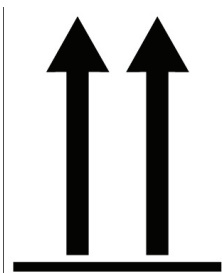
- Common types of strapping:
 - Polypropylene strapping is easier to handle and costs less, but it is not as strong as the following strapping:
 - Polyester strapping stretches less than polypropylene under high temperatures, it is stronger and maintains its properties when wet. It replaces steel in many cases because of its lower cost.
 - Metal strapping is best for extremely heavy loads, since it does not stretch. It is only recommended to be used on wooden crates.



HANDLING INSTRUCTIONS

Proper use of handling instruction labels can help ensure the appropriate handling of your shipment during transit. Here are examples of commonly used labels.

- A Up Arrows**
The upward arrows show the direction that the package must be transported, handled and stored in.
- B Fragile, Handle with Care**
The package should be handled carefully and never be tipped over or slung.
- C Keep Dry**
The package must be protected from excessive humidity and be stored under cover.



A

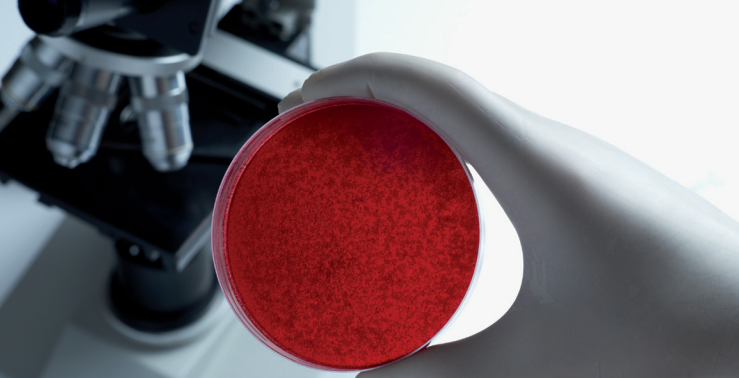


B



C





PACKAGING OPTIONS FOR EVERY TEMPERATURE

At DHL Express, we know how critical the maintenance of a defined temperature range is for your shipments. We therefore developed an extensive range of packaging solutions that you can choose from. The different box sizes within each temperature range allow you to choose the most efficient solution whilst ensuring temperature accuracy and stability.

Due to the sensitivity of shipments, DHL Thermo Packaging is designed to handle ambient, controlled at room temperature, chilled or frozen shipments, with capabilities in place for monitoring during transit in our network.

Where required, DHL Express can also provide Dry Ice or Coolant Wrap preconditioning service. Please contact your Sales Executive to find out more about these solutions.

AMBIENT TEMPERATURE SOLUTIONS

AMBIENT

Our ambient boxes are delivered as complete solutions that include Absorbent Sleeves, Pressure Bags, Coolant Wraps and packaging instructions within the box.

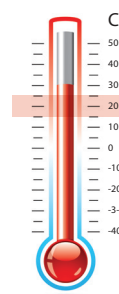
1 AMBIENT NON-INSULATED

For the shipment of non-temperature controlled UN 3373 Ecological Substances, Category B.

Ambient Non-insulated Temperature solutions in one size

Contents	External Dimensions	Product Space
1 x Outer Carton 1 x 95kPa Bag 1 x Absorbent Sleeve 1 x Bubble Bag	23.5 x 19.4 x 12.1 cm	6 x 10 ml vials

Ambient Non-insulated solution



AMBIENT TEMPERATURE SOLUTIONS

2 AMBIENT INSULATED

For the shipments of temperature controlled UN3373 Biological Substances, Category B. An additional insulated liner gives your ambient temperature shipments more protection against changes in outside temperature.

Ambient insulated Temperature solutions in one size		
Contents	External Dimensions	Product Space
1 x Outer Carton 1 x 95kPa Pressure Bag 1 x Absorbent Sleeve 1 x Air Pillow 2 x Coolant Wrap 1 x Insulated Liner	23.5 x 19.4 x 12.1 cm	6 x 10 ml vials



3 AMBIENT EXTREME

This unique packaging system provides thermal protection from extreme temperature fluctuations that might occur during transit, change of season or geography. Using DHL's ambient extreme packaging will keep the temperature of your ambient shipments above 0° C for 48 hours.

Ambient insulated Temperature solutions in one size		
Contents	External Dimensions	Product Space
1 x Outer Carton 1 x 95kPa Pressure Bag 1 x Absorbent Sleeve 2 x Coolant Wrap 1 x EPS Box	28.9 x 24.1 x 17.8 cm	6 x 10 ml vials





CONTROLLED ROOM TEMPERATURE SOLUTIONS

Designed to cope with a controlled room temperature environment between 15° and 25° C for up to 72 hours. The boxes are available in small, medium and large sizes and are supplied with different sized Pharmacool Cassettes. Handling instructions for summer and winter temperature profiles are provided to allow for correct preconditioning of the Pharmacool Cassettes.

Controlled Temperature solutions boxes available in Small, Medium and Large sizes

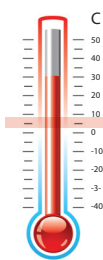
	Content	External Dimensions	Product Space	Temperature and Duration
Small	1 x Outer Carton 1 x EPS Insulated Cooler 6 x 1350g Pharmacool Cassettes 1 x Product Carton	47.5 x 44.0 x 37.0 cm	25.0 x 21.4 x 13.0 (7 litres)	15° to 25° C for 72 hours
Medium	1 x Outer Carton 1 x EPS Insulated Cooler 6 x 2400g Pharmacool Cassettes 1 x Product Carton	56.4 x 51.4 x 43.5 cm	34.4 x 26.4 x 15.3 (14 litres)	15° to 25° C for 72 hours
Large	1 x Outer Carton 1 x EPS Insulated Cooler 2 x 2000g Pharmacool Cassettes 4 x 3000g Pharmacool Cassettes 1 x Product Carton	63.2 x 53.2 x 50.5 cm	38.5 x 28.5 x 25.0 (28 litres)	15° to 25° C for 72 hours

CHILLED TEMPERATURE SOLUTIONS

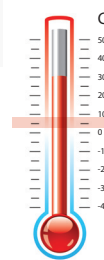
Designed to cope with a chilled temperature environment between 2° and 8° C for up to 108 hours. Box sizes are the same as those used to ship contents at controlled room temperatures. The preparation of the Pharmacool Cassettes will create a chilled environment which be maintained for the desired time. Instruction sheets guide you through the correct preparation process.

Chilled Temperature solutions available in Small, Medium and Large sizes				
	Content	External Dimensions	Product Space	Temperature and Duration
Small	1 x Outer Carton 1 x EPS Insulated Cooler 6 x 1350g Pharmacool Cassettes 1 x Product Carton	47.5 x 44.0 x 37.0 cm	25.0 x 21.4 x 13.0 (7 litres)	2° to 8° C for 85 hours
Medium	1 x Outer Carton 1 x EPS Insulated Cooler 6 x 2400g Pharmacool Cassettes 1 x Product Carton	56.4 x 51.4 x 43.5 cm	34.4 x 26.4 x 15.3 (14 litres)	2° to 8° C for 108 hours
Large	1 x Outer Carton 1 x EPS Insulated Cooler 2 x 2000g Pharmacool Cassettes 4 x 3000g Pharmacool Cassettes 1 x Product Carton	63.2 x 53.2 x 50.5 cm	38.5 x 28.5 x 25.0 (28 litres)	2° to 8° C for 96 hours

Chilled temperature solution with medium sized box



Inside of box showing Pharmacool Cassettes





FROZEN TEMPERATURE SOLUTIONS

Designed for sending contents at temperatures below minus 20° C. Dry Ice is the most commonly used refrigerant to keep product or samples frozen. Dry Ice is available in several shapes and forms such as pellets, sticks or plates. For transport by air, dry ice is regulated and considered a dangerous good. Dry Ice sublimates and displaces oxygen, boxes therefore should never be hermetically sealed when they contain dry ice. These frozen temperature solutions ensure that air pressure does not build up but also an environment below minus 20° C can be maintained for up to 129 hours.

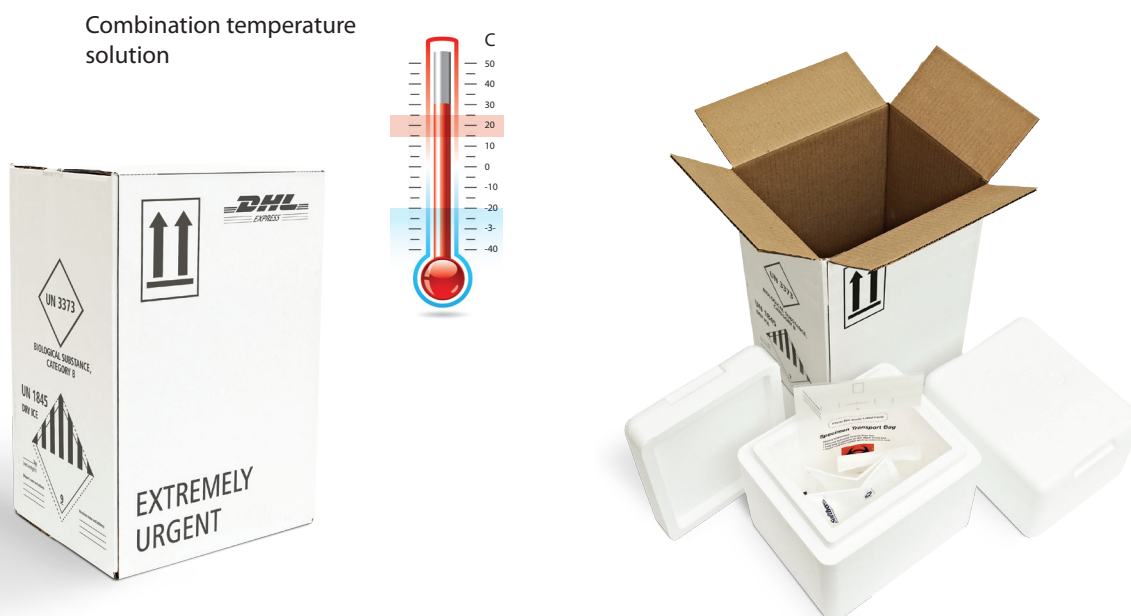
A Dry Ice supply service can be arranged separately. Please speak to your DHL Sales Executive to learn more about it.

Frozen Temperature solutions available in Small, Medium and Large sizes				
	Content	External Dimensions	Product Space	Temperature and Duration
Small	1 x Outer Carton 1 x EPS Insulated Cooler	31.0 x 31.0 x 32.0 cm	9.5 x 9.5 x 13.5 or 6 x 10 ml vials	<-20° for 124 hours
Medium	1 x Outer Carton 1 x EPS Insulated Cooler	34.8 x 34.8 x 36.4 cm	10.0 x 10.0 x 2.5 or 12 x 10 ml vials	<-20° for 122 hours
Large	1 x Outer Carton 1 x EPS Insulated Cooler	39.5 x 39.5 x 44.8 cm	18.0 x 14.5 x 15.0 or 36 x 10 ml vials	<-20° for 129 hours

COMBINATION TEMPERATURE SOLUTIONS

Combination: Frozen and Ambient

The combination temperature solution is an addition to the DHL Thermo Packaging range that can accommodate the shipping of frozen and ambient samples within a single box.



Combination Temperature solution in one size

Content	External Dimensions	Product Space	Temperature and Duration
1 x Outer Carton 2 x EPS Cooler 2 x Cooler Wraps	29.5 x 24.4 x 44.2 cm	6 x 10 ml vials Ambient and 6 x 10 ml vials Frozen	<-20° for 72 hours (for the Frozen element)

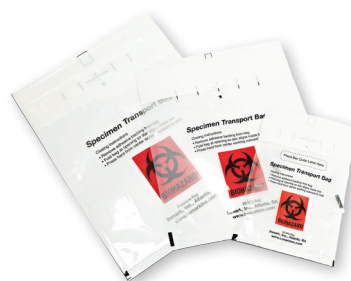
PACKAGING ACCESSORIES

All DHL Thermo Packaging items are delivered as box solutions containing all accessories that are needed to prepare and ship your temperature-sensitive contents. Should you require additional accessories, these can be ordered separately as well.

Accessories		
	External Dimensions	Internal Dimensions
Pressure Bag 95kPa Small	27.5 x 17.5 cm	6 x 10 ml vials
Pressure Bag 95kPa Medium	36.0 x 28.5 cm	36 x 10 ml vials
Pressure Bag 95kPa Medium	45.7 x 33.0 cm	48 x 10 ml vials
Absorbent Sleeve	N/A	N/A
Coolant Wrap	N/A	N/A



Absorbent sleeves



**Specimen Pressure
Bags in three sizes**



Coolant Wraps

A GREAT OPPORTUNITY TO COMBAT CLIMATE CHANGE



DHL recognizes that its business operations may impact the environment, and has therefore been actively pursuing environmental initiatives as part of its corporate social responsibility and service to customers.

Find out how you can help in by joining our environmentally friendly practices and initiative.

http://www.dhl.com/en/about_us/sustainability/gogreen.html

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