BIOLOGICAL SUBSTANCE SHIPPING GUIDELINES
What are Biological Substances

Biological substances are classed as a restricted commodity for transport and criteria and restrictions around their transport are set by the World Health Organisation (WHO).

Biological substances must be categorised as either **Category A or B** by the person transporting the goods taking into account the following:
What are Biological Substances

Category A: **Not acceptable in DHL Express**
An infectious substance which is transported in a form that, exposure to it, is capable of causing permanent disability, life-threatening or fatal disease in otherwise healthy humans or animals.

In other words anything classified as either **UN2814** or **UN2900** or listed in Table 3.6.D of the IATA Dangerous Goods Regulations
Category B: Acceptable in DHL Express

An infectious substance which is Not Listed in Table 3.6.D of the IATA Dangerous Goods Regulations or classed as UN2900 or UN2814

Category B shipments are shipped as UN3373
As with all restricted commodities, the customer is responsible for:

- Identification
- Classification
- Packaging
- Labelling
- Documentation

of all biological substance shipments, DHL can not complete any of the above

These goods can be sent packed as Ambient, Chilled or on *Dry Ice

Dry Ice:

- Used instead of Normal Ice / Cooler packs as it last longer and stays colder
- Used instead of Liquid Nitrogen as it’s easier / cheaper to ship and not as cold

*Dry Ice requires further account approval and further specific IATA packaging requirements will also apply
IATA Regulations

For air transport, UN3373 has the following restrictions:

- The account must be approved for UN3373 (or UN3373 on dry Ice)
- Must be packed in line with IATA packing instruction PI 650
- Packers need to be trained in the correct packaging procedures
- Biological substances must be contained in a 95kPa bag, inside a container with enough absorbent material to absorb entire contents of substance being shipped
PACKING INSTRUCTIONS
IATA P.I.650 SHIPPING SYSTEM FOR UN3373

The package must be prepared as follows:

- Insert the primary receptacle, containing the Category B substance, into the Absorbent Sleeve. The Sleeve allows individual wrapping of maximum 6 primary receptacles.
- Place the Absorbent Sleeve into the watertight secondary receptacle (Bag) and seal it.
- The outer package (Box) can contain maximum one secondary receptacle (Bag). The shipper shall ensure that the content is securely placed inside the outer packaging.
- Complete the itemised list of contents and place it into the outer packaging, outside of the secondary receptacle.
- Close the outer packaging (Box) in the appropriate manner and apply the Tamper Evident seal supplied.
- Apply any additional marking and labelling as required.
- Check that all markings and labels are visible.
- Complete the shipping documents in accordance with current legal requirements.
Packaging DHL Ambient Biological Substance

DHL AMBIENT INSULATED SOLUTION

TEMPERATURE CONTROLLED SHIPPING UNIT
SUMMER AND WINTER PACK OUT

<table>
<thead>
<tr>
<th>ITEM #</th>
<th>DESCRIPTION</th>
<th>QTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CORRUGATED OUTER CARTON</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>LDPE FOAM LINER</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>16 OZ GEL WRAP</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>AQUIPAK ABSORBENT SLEEVE</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>95 kPa PRESSURE BAG</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>BUBBLE BAG</td>
<td>1</td>
</tr>
</tbody>
</table>

DHL AMBIENT INSULATION SOLUTION OVERVIEW

PRODUCT SPACE: 196mm X 146mm X 76mm
EXTERNAL DIMS: 235mm X 194mm X 121mm
TARE WEIGHT: 1.1 KG
VOLUMETRIC WEIGHT: 1.5 KG

16OZ GEL WRAP
Room Temperature Gel Packs
Marking and Labeling on the Package

- Shipper and Cnee name and address
- UN3373 label (or marking)
- Label can be in either 100 X 100mm or 50 X 50mm diamond format
- All labels must be sufficiently durable to withstand normal transport conditions
- Labels must not cover any other marking or label
- Must not be folded over two sides of the package
- Labels must be located on the same surface of the package as the Proper Shipping Name
Required in description of Goods on the Waybill

- UN3373
- Biological substance, Category B
- Emergency Contact number
IATA Checklist performed on the carrier (DHL) on all UN3373 shipments

• Each question must pass in order for the shipment to pass and be exported same day
• Failed shipments will be returned to the customer along with the completed checklist outlining the failure

---

DANGEROUS GOODS CHECKLIST – UN 3373 Biological Substances, Cat. B
V 2.2 Feb 2013

I hereby declare that following requirements comply with the shipments described as below:

APPROVAL
01. ACP booking confirmation or TD account approved (see approved country list)

DOCUMENTATION – Air Waybill
02. The “Nature and Quantity of Goods” or the “Description of Contents” field shows the following sentence:
   - UN 3373, Biological Substances, Category B and nr. of packages
03. The name and phone number of a responsible person is provided on the air waybill or on the package

PACKAGE
04. The proper shipping name shown: Biological Substances, Category B
05. The full name and address of the shipper and consignee is provided on each package
06. The packaging is conform with PI 650
07. For overpacks all marks are visible and the word “OVERPACK” is used
08. The UN3373 marking affixed on the package (min.50x50 mm)
09. Irrelevant marks and labels removed or obliterated
10. Same number of packages as mentioned on the Air Waybill, not damaged and in proper condition for carriage

STATE AND OPERATOR VARIATIONS
11. State and operator variations complied with

<table>
<thead>
<tr>
<th>Air Waybill</th>
<th>Orig.</th>
<th>Dest.</th>
<th>Pieces</th>
<th>Accepted (A), Rejected (R)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Where Can I Learn More

Training and Helpful You tube videos
Mayo Clinic training Module, shipping Specimens and Biological samples
http://www.mayomedicallaboratories.com/education/online/dangerousgoods/

http://www.youtube.com/channel/UCfXKxo5E5KJGndpJNHX9kVg?feature=watch

Packaging Supplies
DHL Packaging Supplies  http://www.dhlireland.ie/IETools/IEOrderSupplies.html
Dry Ice  http://dryice.ie/

Label Supplies
Trident Safety Group (ORK)  http://www.tridentsafety.com
Southern Tapes & Packaging (ORK)  http://southerntapes.ie
Radionics (DUB)  http://radionics.rs-online.com
EXCELLENCE. SIMPLY DELIVERED.