Module 7
Shipping Infectious Substances in Dry Shippers
Shipping in dry shippers using liquid nitrogen
Options when shipping with refrigerated liquid nitrogen
Shipping with refrigerated liquid nitrogen

⚠️ Samples which need to be kept frozen at very low temperature can be shipped using refrigerated liquid nitrogen

⚠️ When shipping with liquid nitrogen, "dry shippers" can be used

⚠️ Correctly prepared "dry shippers" do not contain free liquid nitrogen

⚠️ While refrigerated liquid nitrogen is a regulated dangerous good (class 2.2, UN 1977), when it is used to prepare a "dry shipper" it is not any more, as it is fully absorbed in a porous material

⚠️ In certain cases, Special Provision A152 applies:

When dry shippers are used to contain substances not subject to Dangerous Goods Regulations the words “Not Restricted” and the Special Provision number A152 must be included in the description of the substance on the Air Waybill, when an Air Waybill is issued.
Shipping with refrigerated liquid nitrogen (cont'd)

- When shipping with "dry shippers", the dangerous goods label for class 2 (non-flammable, non-toxic gases) is NOT required.
- Shippers must properly mark and label the outside of dry shipper packages containing infectious substances.
- When using dry shippers, the presence of infectious substances must be appropriately documented (for Category A packages this information will be included in the Dangerous Goods Declaration; for Category B and Exempt Human/Animal Specimen, this information is provided on the air waybill).
Marking, labelling and documenting Category A shipments in dry shippers
## Markings and labels for Category A samples in dry shippers

### Markings
- Shipper’s name and address
- Receiver’s name and address
- Name and telephone number of responsible person (who is available 24 hours a day until shipment arrives; emergency contact)
- Proper Shipping Name
- UN Number
- UN Specification Marking

### Labels (hazard and handling)
- Infectious substance label
- Orientation arrows (black or red; mandatory, on opposite sides, only when primary containers exceed 50 ml)
- Cargo Aircraft Only (when the package may only be transported on a cargo aircraft)

### MARKINGS

<table>
<thead>
<tr>
<th>SHIPPER</th>
<th>RECEIVER</th>
</tr>
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<tbody>
<tr>
<td>PETER PAN</td>
<td>AB NORMAL</td>
</tr>
<tr>
<td>TIMELY LOGISTICS</td>
<td>FRANKENSTONE LAB</td>
</tr>
<tr>
<td>BP 102</td>
<td>RUE DE L’ESSAI</td>
</tr>
<tr>
<td>I-0956666 NOLAND</td>
<td>F-9867 ADIEU</td>
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</tbody>
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<table>
<thead>
<tr>
<th>EMERGENCY CONTACT 24H/24H</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr RED PEPPER: +67 56 45 34 23</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>CLASS</th>
<th>UN NUMBER</th>
<th>CODE</th>
</tr>
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<tbody>
<tr>
<td>6.2/02</td>
<td>UN 2814</td>
<td>F/BVT 312103</td>
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<table>
<thead>
<tr>
<th>LABELS</th>
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<tbody>
<tr>
<td>INFECTION SUBSTANCE, AFFECTING HUMANS</td>
</tr>
<tr>
<td>UN 2814</td>
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</tbody>
</table>

- Infectious Substance label
- Cargo Aircraft Only
Examples of dry shippers bearing UN specification markings

1H2 is used for plastic drums with removable heads

4H2 is the code for solid plastic boxes
Documenting Category A shipments in dry shippers

Only dry shippers bearing a UN specification marking and approved for the transport of Class 6.2 infectious substances (triple package!) can be used to ship Category A substances. This marking provides the information on the type of external packaging. The information is coded. Codes like 4G (fibreboard box), 1H2 (plastic drum) or 4H2 (solid plastic box) may apply.

⚠️ No additional information is needed on the air waybill
Marking, labelling and documenting Category B shipments in dry shippers
Markings and labels for Category B samples in dry shippers

**Markings**
- Shipper’s name and address
- Receiver’s name and address
- Proper Shipping Name
- UN Number

**Labels (hazard and handling)**
- None are required
When shipping Category B biological substances in dry shippers, the Dangerous Goods Declaration is not required.

Shippers must include the words “Not Restricted” and the “Special Provision number” to the description of the substances, in the "Nature and Quantity of Goods" box:

1. Proper shipping name
2. UN number
3. Number of boxes
4. Not restricted,
5. Special Provision number
Documenting Category B shipments using dry shippers

Nature et quantité des marchandises (y compris dimensions ou volume)
Nature and Quantity of Goods (incl. Dimensions or Volume)

Biological Substance, Category B
UN 3373
1 dry shipper

Not restricted, as per Special Provision A152
Marking, labelling and documenting exempt shipments in dry shippers
Markings and labels for Exempt human/animal specimen in dry shippers

Markings

- Shipper’s name and address
- Receiver’s name and address
- Proper shipping name

Labels (hazard and handling)

- None are required
When shipping exempt substances the Dangerous Goods Declaration is not required.

Shippers must provide the following information in the "Nature and Quantity of Goods" box:

1. Exempt specimens
2. Not restricted,
3. Special Provision number
Documenting shipments of Exempt human/animal specimen using dry shippers

Exempt specimens
Not restricted, as per Special Provision A152
Questions and comments