Category B – Biological substance
Definition – A pathogen (infectious substance) which does not meet the criteria for category A

UN3373 – Biological substance, category B

Packaging

Primary container
- Leak-proof
- Cushioned if multiple fragile primaries
- Limits per container: 1L per primary, 4L per package
- 4 Kg per primary or package
- <30 mls of class 3,8,9 is OK

Secondary container
- Absorbent between with liquids
- Secured and not rattling around
- Dry ice if needed (200 Kg limit – but only 5lbs for US postal)
- Itemized list of contents

Outer container
- Sturdy box – passes drop tests
- OK to use cat.A box for cat B shipment
- If dry ice – can breathe
- Min area-4x4 in

Labeling / Markings

Name, address, phone of shipper and consignee (or on paperwork) + IF contains dry ice
Only needed for air shipments + IF contains >50 mls of liquid per primary container

“UN1845 Dry Ice” + Net quantity in Kg.
Category A – Infectious substance 6.2

Definition – A pathogen (infectious substance) capable of causing permanent disability, life-threatening or fatal disease in otherwise healthy humans or animals. The most common examples are in appendix A at the end of this document copied from the training manual.

UN2814 - can cause disease in humans OR UN2900 - can cause disease in animals only

Packaging

Primary container

- Leak-proof
- Cushioned if multiple fragile primaries
- Limits per container: 50 ml or 50 g – air
  4 L or 4 Kg - cargo

Secondary container

- Either must pass pressure test – 13.8 psi
- Absorbent between with liquids
- Leak-proof

Secured and not rattling around
- Dry ice if needed (200 Kg limit – but only 5lbs for US postal)
- Itemized list of contents

Outer container

- Has certification marking

![Certification Marking](image)
- If dry ice – can breathe
  Min area 4x4 in

Labeling / Markings

- “Infectious substance, affecting humans UN2814”
- “Infectious substance, affecting animals only UN2900”
- UN1845 Dry Ice + Net quantity in Kg, IF contains dry ice
- Name, Address, phone of shipper and consignee (or on paperwork)
- IF contains dry ice
  Only for air shipments
- IF contains >50 mls of liquid per primary container
- IF exceeds quantity limits for air

![Danger Symbol](image)
Exempt - Patient specimens

Patient specimens that meet cat. A or B description must meet all shipping requirements of those categories.

A patient specimen may be EXEMPT from the regulations if there is a minimal likelihood that pathogens are present according to professional judgment based on known medical history, symptoms and individual circumstances or the source. Some examples of exempt patient specimens are: blood or urine tests to monitor things like cholesterol levels or glucose levels. Also, tests for organ function, therapeutic drug monitoring, pregnancy tests, etc. If a patient is being tested for a pathogen you should package it accordingly for the suspected pathogen.

This is also the best way to ship non-pathogenic cultures, pathogen free cells, recombinant DNA and other non-pathogenic biological items (note: pathogenic eukaryotic virus DNA that is more than 2/3 of the genome should be shipped category B).

If Patient specimens are exempt then the following apply:

Packaging

<table>
<thead>
<tr>
<th>Primary container</th>
<th>Secondary container</th>
<th>Outer container</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leak-proof</td>
<td>Secured and not rattling around</td>
<td>Sturdy box</td>
</tr>
<tr>
<td>Cushioned if multiple fragile primaries</td>
<td>Dry ice if needed (200 Kg limit – but only 5lbs for US postal)</td>
<td>If dry ice – can breathe Min area-4x4 in</td>
</tr>
</tbody>
</table>

Labeling / Markings

“Exempt Human Specimen” OR “Exempt Animal Specimen”

IF contains dry ice Only needed for air shipments

IF contains >50 mls of liquid per primary container

“UN1845 Dry Ice” + Net quantity in Kg. IF contains dry ice