

## Annex 5-G:

### UN 2814 Infectious Substances Affecting Humans Infectious substances included in Category A in any form unless otherwise indicated

*Bacillus anthracis* (cultures only)  
*Brucella abortus* (cultures only)  
*Brucella melitensis* (cultures only)  
*Brucella suis* (cultures only)  
*Burkholderia mallei* [*Pseudomonas mallei* – Glanders](cultures only)  
*Burkholderia pseudomallei* [*Pseudomonas pseudomallei*] (cultures only)  
*Chlamydia psittaci* [avian strains] (cultures only)  
*Clostridium botulinum* (cultures only)  
*Coccidioides immitis* (cultures only)  
*Coxiella burnetii* (cultures only)  
Crimean-Congo hemorrhagic fever virus  
Dengue virus (cultures only)  
Eastern equine encephalitis virus (cultures only)  
*Escherichia coli*, verotoxigenic (cultures only)  
Ebola virus  
Flexal virus  
*Francisella tularensis* (cultures only)  
Guanarito virus  
Hantaan virus  
Hanta virus pulmonary syndrome  
Hendra virus  
Hepatitis B virus (cultures only)  
Herpes B virus (cultures only)  
Human immunodeficiency virus (cultures only)  
Highly pathogenic avian influenza virus (cultures only)  
Japanese Encephalitis virus (cultures only)  
Junin virus  
Kyasanur Forest disease virus  
Lassa virus  
Machupo virus  
Marburg virus  
Monkeypox virus  
*Mycobacterium tuberculosis* (cultures only)  
Nipah virus  
Omsk hemorrhagic fever virus  
Poliovirus (cultures only)  
Rabies virus (cultures only)  
*Rickettsia prowasekii* (cultures only)  
*Rickettsia rickettsii* (cultures only)  
Rift Valley fever virus (cultures only)

**Russian spring-summer encephalitis virus (cultures only)**

**Sabia virus**

***Shigella dysenteriae type 1* (cultures only)**

**Tick-borne encephalitis virus (cultures only)**

**Variola virus**

**Venezuelan equine encephalitis virus (cultures only)**

**West Nile virus (cultures only)**

**Yellow fever virus (cultures only)**

***Yersinia pestis* (cultures only)**

Infectious substances, including new or emerging pathogens, which do not appear in the table but which meet the same criteria must be assigned to Category A.

### **UN 2900 Infectious substances affecting animals only**

**African horse sickness virus**

**African swine fever virus (cultures only)**

**Avian paramyxovirus Type 1 [Velogenic Newcastle disease virus (cultures only)]**

**Bluetongue virus**

**Classical swine fever virus (cultures only)**

**Foot and mouth disease virus (cultures only)**

**Lumpy skin disease virus (cultures only)**

***Mycoplasma mycoides* [Contagious bovine pleuropneumonia] (cultures only)**

**Peste des petits ruminants virus (cultures only)**

**Rinderpest virus (cultures only)**

**Sheep-pox virus (cultures only)**

**Goatpox virus (cultures only)**

**Swine vesicular disease virus (cultures only)**

**Vesicular stomatitis virus (cultures only)**

### **"Exempt" human or animal samples**

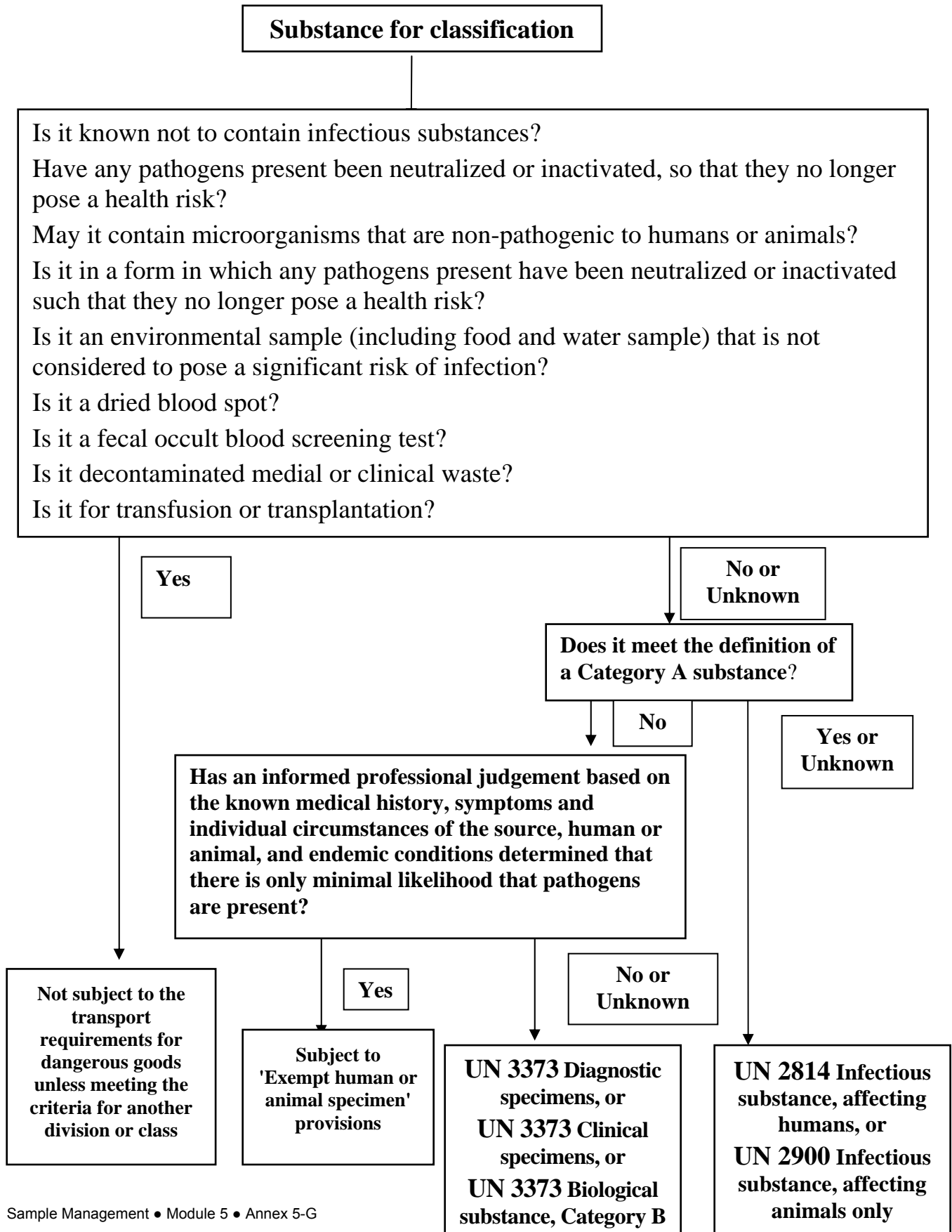
Samples that have a minimal likelihood that pathogens are present. These samples do not require the same level of packaging and shipping as Categories A and B.

- substances that do not contain infectious substances
- substances containing organisms that are non pathogenic
- substances containing neutralized or inactivated pathogens
- environmental samples that pose no risk of infection
- blood or blood components collected for transfusion
- tissues or organs cleared for transplantation
- dried blood spots and fecal occult blood screening tests
- decontaminated medical or clinical waste.

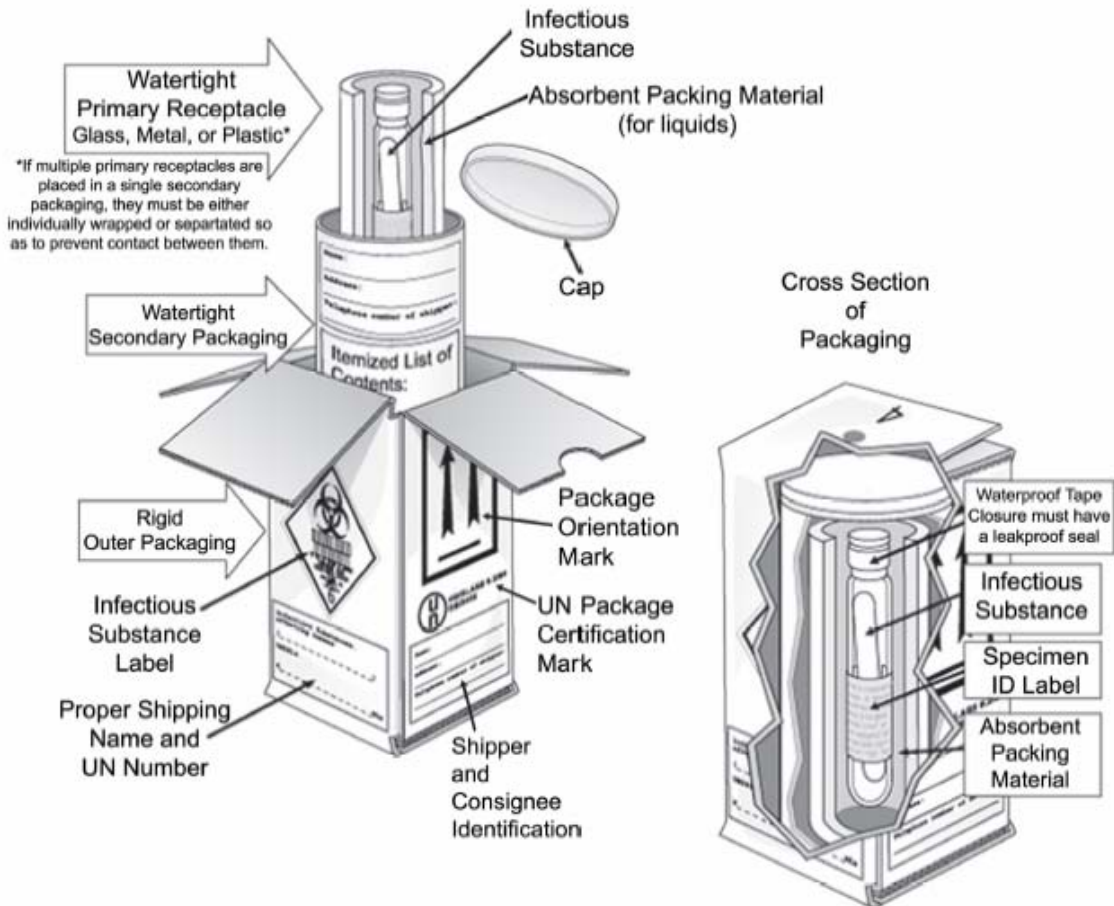
## Shipper's Declaration for Dangerous Goods Form

SHIPPER'S DECLARATION FOR DANGEROUS GOODS							
Shipper				Air Waybill No. Page ____ of ____ Pages Shipper's Reference Number <i>(optional)</i>			
Consignee							
<i>Two completed and signed copies of this Declaration must be handed to the operator</i>				<b>WARNING</b> Failure to comply in all respects with the applicable Dangerous Goods Regulations may be in breach of the applicable law, subject to legal penalties.			
TRANSPORT DETAILS							
This shipment is within the limitations prescribed for: <i>(delete non-applicable)</i>			Airport of Departure				
PASSENGER AND CARGO AIRCRAFT		CARGO AIRCRAFT ONLY		Airport of Destination			
				Shipment type: <i>(delete non-applicable)</i>			
				NON-RADIOACTIVE		RADIOACTIVE	
NATURE AND QUANTITY OF DANGEROUS GOODS							
Dangerous Goods Identification					Quantity and type of Packing	Packing Inst.	Author-ization
UN or ID No.	Proper Shipping Name	Class or Division	Pack-ing Group	Subsidi-ary risk			
Additional Handling Information							
I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. "I declare that all of the applicable air transport requirements have been met."					Name/Title of Signatory Place and Date Signature <i>(see warning above)</i>		

## Flowchart for Classification of Infectious Agents for Transport



## Packing and Labeling of Category A Infectious Substances

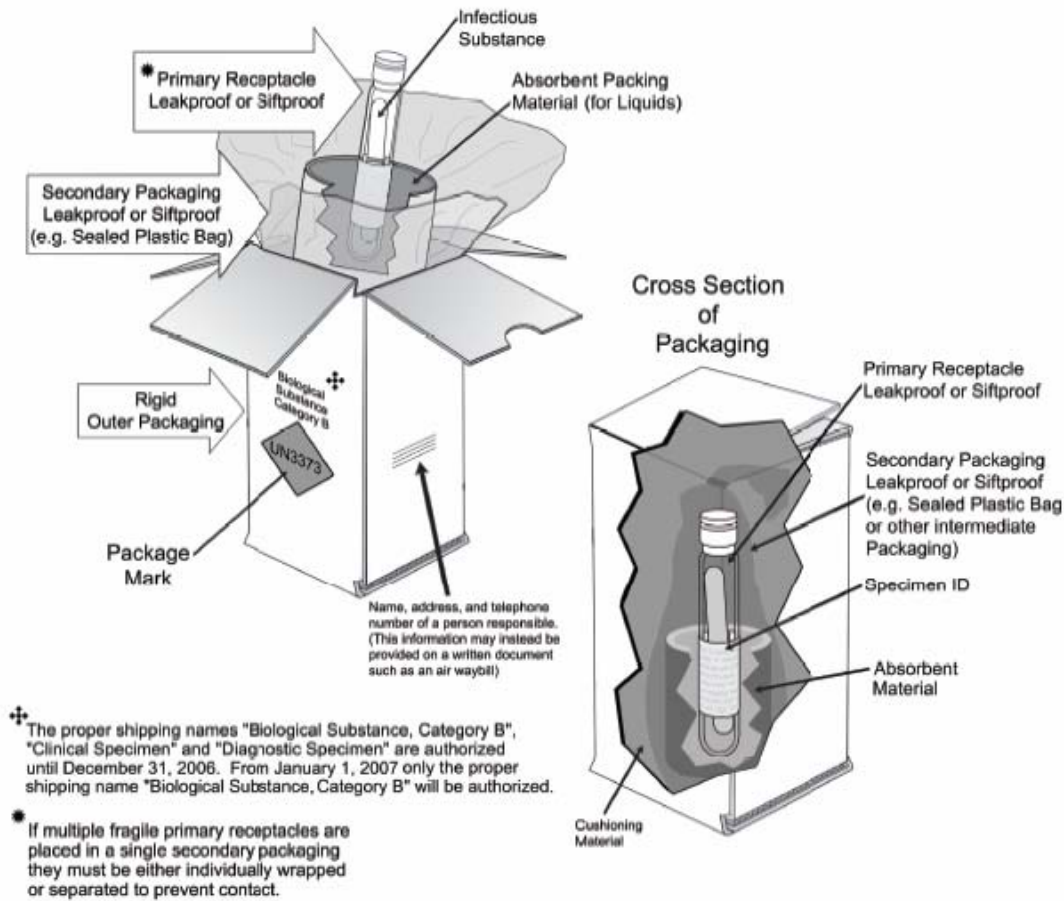


The outer container of a Category A infectious substance shipment must display the following information:

- Sender and recipient's full name and address;
- Infectious substance label (Figure 1);
- Proper shipping name, UN number and net quantity of infectious substance;
- Name and telephone number of a person responsible for the shipment;
- Class 9 label (Figure 2), including UN 1845 and net weight, if packaged with dry ice; and
- Cargo Aircraft Label, when shipping over 50 mL or 50 g (Figure 3).



<p><b>Figure 1</b></p>	<p><b>Figure 2</b></p>	<p><b>Figure 3</b></p>

## Packing and Labeling of Category B Infectious Substances

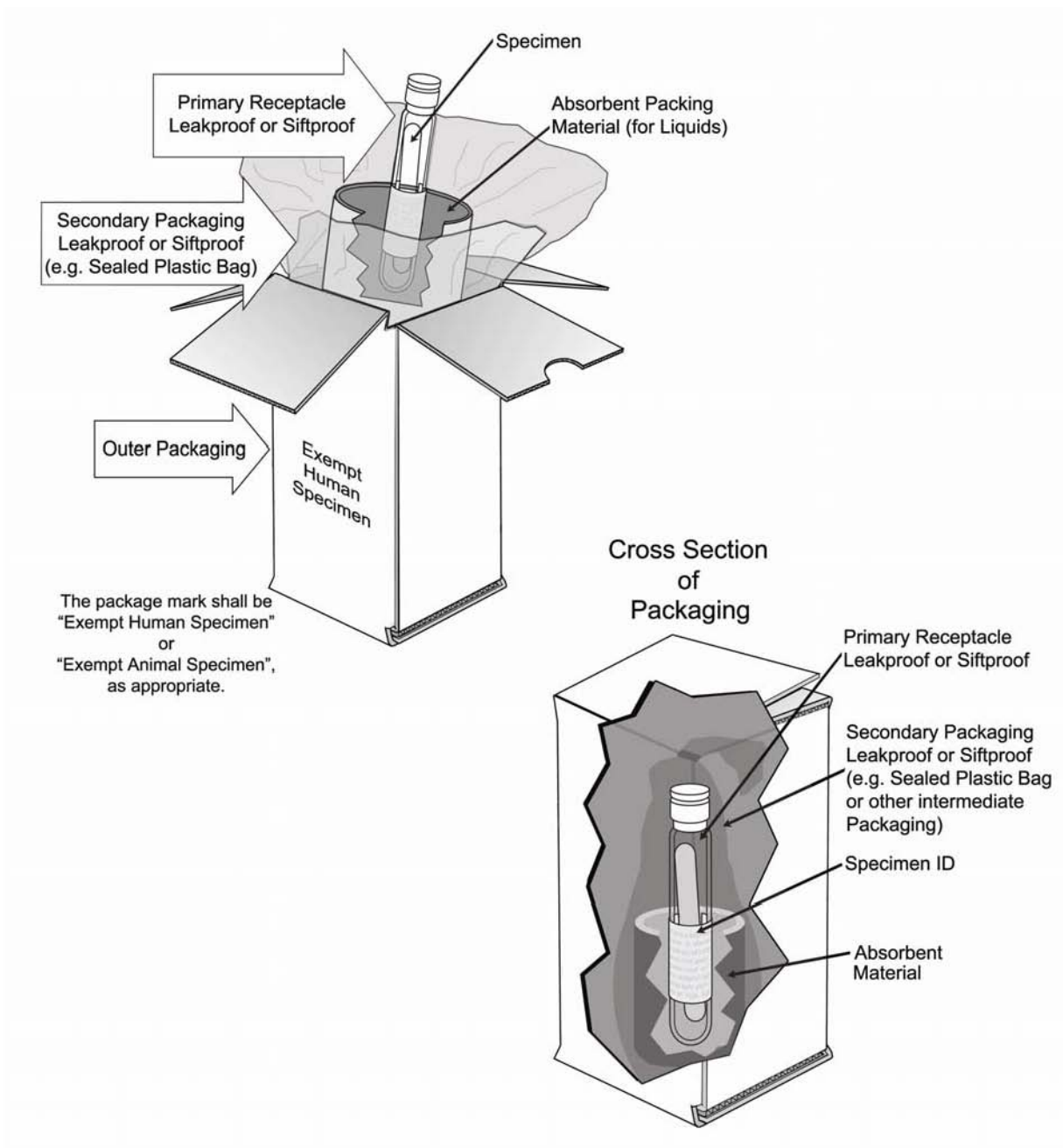


The outer container of a Category B infectious substance shipment must display the following information:

- the sender and recipient's full name and address;
- the words "Biological substance;"
- UN 3373 label (Figure 1);
- name and telephone number of a person responsible for the shipment; and
- class 9 label (Figure 2), if packaged with dry ice (also see Annex 5-G, page 9)

	
<b>Figure 1</b>	<b>Figure 2</b>

## Packing and Labeling of Exempt Substances

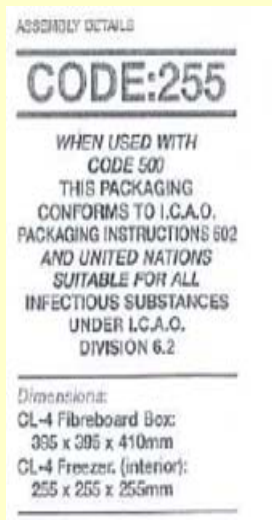


## Thermal Control Unit Example

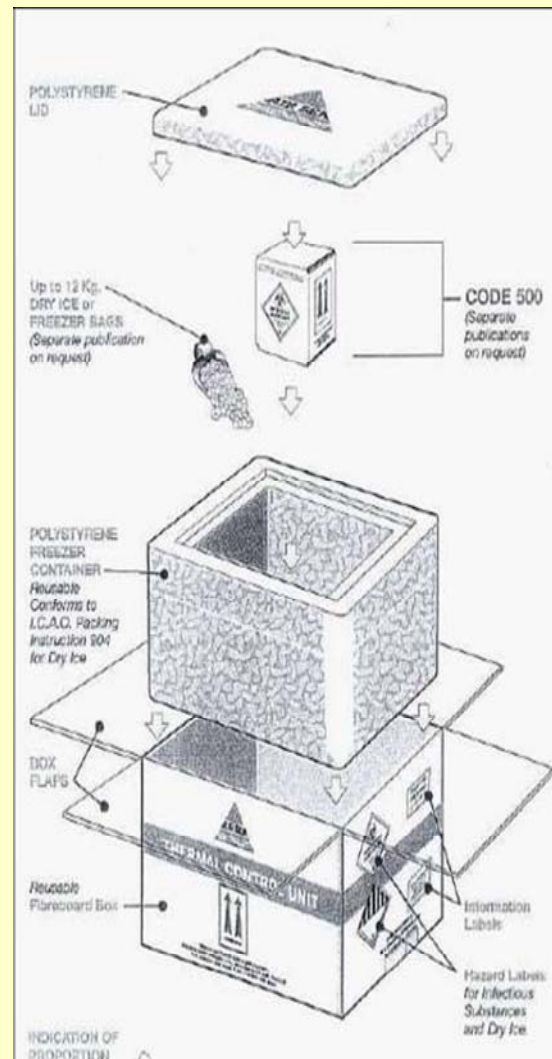
Specific procedures must be followed when packaging and shipping materials refrigerated with dry ice and a record of training must be kept. Dry ice is classified by IATA as a “miscellaneous” hazard, class 9 and is considered hazardous for three reasons:

1. **Explosion hazard:** dry ice releases a large volume of carbon dioxide gas as it sublimates (changes from a solid to a gas). Use a container (e.g., polystyrene) that allows for release of the gas. **Do not transport dry ice in a metal container** as it may explode, causing personal injury or property damage.
2. **Suffocation hazard:** a large volume of carbon dioxide gas emitted in a confined space may create an oxygen deficient atmosphere.
3. **Contact hazard:** dry ice is a cryogenic material that causes severe frostbite upon contact with skin.

## Thermal Control Unit - CL4



Using up to 12 Kilos of Dry Ice,  
Loss Rate: 78gms per hour  
TOTAL: 102 hrs





### Dry Ice Shipping Label

