



Category B infectious substances are infectious but do not meet the criteria for Category A. Category B infectious substances have:

proper shipping name of **Biological Substance, Category B**

identification number **UN 3373**

Training from EH&S on how to ship biological materials

Packaging\*:

Category B infectious substances must be tripled packaged and compliant with IATA Packing Instruction 650 detailed in Figure 1. Packing notes include:

The maximum quantity for a primary receptacle is 500 ml or 500g and outer packaging must not contain more than 4 L or 4 kg.

Include an itemized list of contents between the secondary and outer container.

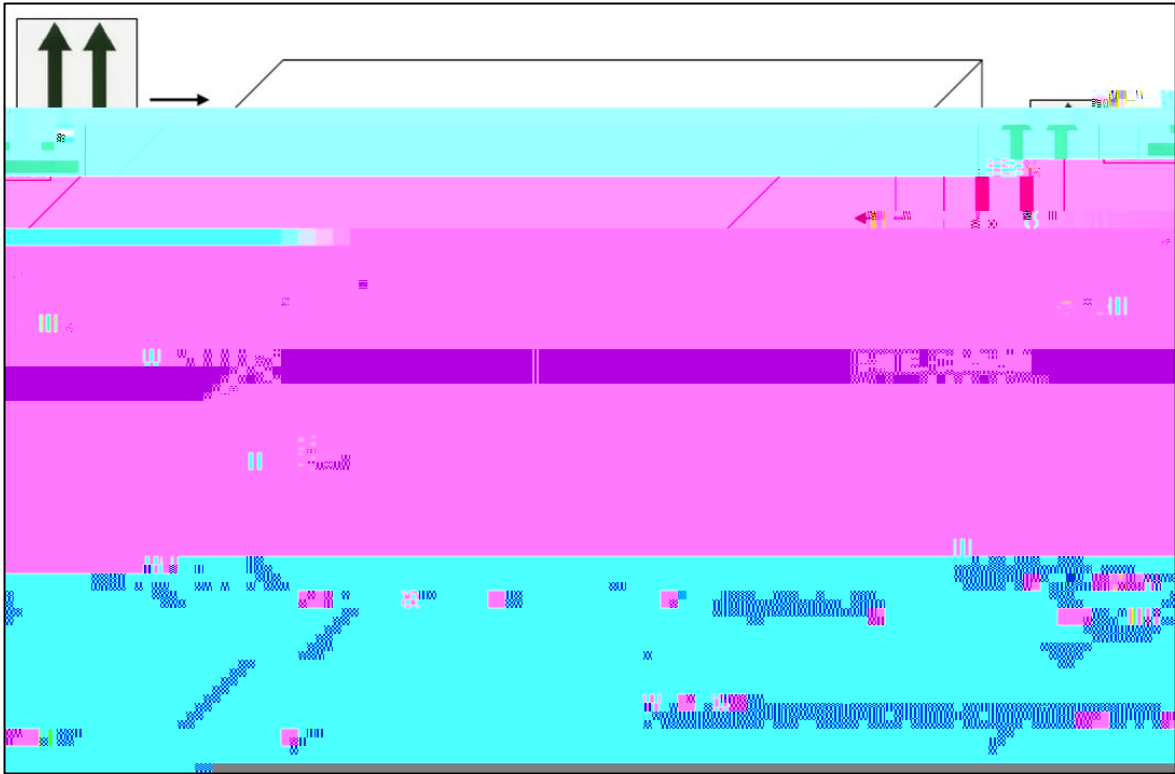
The package must include an itemized list of contents between the secondary and outer container.

x

Figure 1: Cross Section of Triple Packaged Shipment



Figure 2: Marking/Labeling for Cat. B on Dry Ice



## PACKING INSTRUCTION 650 Biological Substances, Category B

STATE VARIATION: ~~DOC~~

OPERATOR VARIATIONS: ~~SA, AG03, AS08, CG07, CS07, FX09, J06, JW03, LA07, LH12, PX08, QF03, US09~~

This packing instruction applies to UN 3373 on passenger and cargo aircraft and CAO.

### General Requirements

The packagings must be of good quality, strong enough to withstand the shocks and loadings normally encountered during transport, including transshipment between transport units and between transport units and warehouses as well as any removal from a pallet or overpack for subsequent manual mechanical handling. Packagings must be constructed and closed so as to prevent any loss of contents that might be caused under normal conditions of transport, by vibration, or by changes in temperature, humidity or pressure.



For transport, the mark illustrated below must be displayed on the external surface of the outer packaging on a background of a contrasting colour and must be clearly visible and legible. The mark must be in the form of a square set at an angle of 45 degrees (diamond shaped) with each side having a length of at least 50 mm, the width of the line must be at least 2 mm, and the letters and numbers must be in a sans-serif font. The letters and numbers must be in a bold, black font. The letters and numbers must be in a bold, black font. The letters and numbers must be in a bold, black font.

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- Unless all package markings are clearly visible, the following conditions apply when packages are placed in an overpack:
  - the package markings must be reproduced on the outside of the overpack.

A Shipper's Declaration for Dangerous Goods is not required.

## Specific Requirements

Refrigerated or frozen specimens: Ice, dry ice and liquid nitrogen

- When dry ice or liquid nitrogen is used to keep specimens cold, all applicable requirements of these Regulations must be met. When used, ice or dry ice must be placed outside the secondary packaging or in the outer packaging or an overpack. Interior supports must be provided to secure the secondary packaging in the original position after the ice or dry ice has melted. If ice is used, the outside packaging or overpack must be leak-proof. If carbon dioxide, solid (dry ice) is used, the packaging must be designed and constructed to permit the release of carbon dioxide gas to prevent a build-up of pressure that could rupture the packaging.
- The primary receptacle and the secondary packaging must maintain their integrity at the temperature of the refrigerant used as well as the temperatures and the pressures, which could result if refrigeration were lost.

Infectious substances assigned to UN 3373, which are packed and marked in accordance with this packing instruction are not subject to any other requirement of these Regulations except for the following:

- the name, address and telephone number of a responsible person must be provided on the air waybill or on the package;
- classification must be in accordance with 3.6.2;
- the incident reporting requirement (class 8 (infectious substances) - 4 (T) / F3 9.96 Tf 1 0 0 1 54 276.89 Tm [<00]-a T / F3 9.96972.024 2719A



# PACKING INSTRUCTION 904 t Class 9 t Miscellaneous Dangerous Goods

STATE VARIATIONS: BEG05 SAC04 USG12

OPERATOR VARIATIONS: BMS01 CA08 CG09 CS09 HP02 IG08 KE06 US02 VN11

This instruction applies to UN 1845 on passenger and cargo aircraft and CAO. The General Packing Requirements 5.0.2 must be met.

Carbon dioxide, solid (dry ice) in packages, when offered for transport by air, must be in packaging designed and constructed to permit the release of carbon dioxide gas and to prevent a buildup of pressure that could rupture the packaging.

Arrangements between shipper and operator(s) must be made for each shipment, to ensure ventilation safety procedures are followed.

The Shipper's Declaration requirements of Subsections 8.1 and 10.8.1 are only applicable when the ice or solid (dry ice) is used as a refrigerant for dangerous goods that require a Shipper's Declaration.

When a Shipper's Declaration is not required, the following information, as required by 8.2.3 for the Carbon dioxide, solid (dry ice), should be provided:

- x UN 1845;
- x proper shipping name (Dry ice or Carbon dioxide, solid);
- x Class 9;
- x the number of packages; and
- x the net quantity of dry ice in each package.

The net weight of the Carbon dioxide, solid (dry ice) must be marked on the outside of the package.

Dry ice used as a refrigerant for other than dangerous goods may be shipped in a unit load device or other type of pallet prepared by a single shipper provided that the shipper has made prior arrangements with the operator. In such case, the unit load device, or other type of pallet must allow the venting of the carbon dioxide gas to prevent a buildup of pressure. The shipper must provide the operator with written documentation stating the total quantity of the dry ice contained in the unit load device or other type of pallet.

## Notes

1. Refer to the relevant airline's loading procedures for Carbon dioxide, solid (dry ice) limitations.
2. For Air Waybill requirements see 8.2.3. For loading instructions see 9.3.12.
3. For cooling purposes, an overpack may contain Carbon dioxide, solid (dry ice), provided that the overpack meets the requirements of Packing Instruction 904.