PACKING INSTRUCTION 650

STATE VARIATION: DQG-03

OPERATOR VARIATIONS: AF-04, AO-03, AS-08, CO-07, CS-07, FX-09, JJ-06, JW-03, LA-07, LH-12, PX-08, QF-03, US-09

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 trans-shipment between transport units and between transport units and warehouses as well as any removal from a pallet or overpack for subsequent manual or 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.

The packaging must consist of three components:
a) a primary receptacle;
b) a secondary packaging; and
c) a rigid outer packaging.

Primary receptacles must be packed in secondary packagings in such a way that, under normal conditions of transport, they cannot break, be punctured or leak their contents into the secondary packaging. Secondary packagings must be secured in outer packagings with suitable cushioning material. Any leakage of the contents must not compromise the integrity of the cushioning material or of the outer packaging.

Packages must be prepared as follows:

(a) For liquid substances:

- The primary receptacle(s) must be leak-proof and must not contain more than 1 L;
- The secondary packaging must be leak-proof;
- If multiple fragile primary receptacles are placed in a single secondary packaging, they must be either individually wrapped or separated to prevent contact between them;
- Absorbent material must be placed between the primary receptacle and the secondary packaging. The absorbent material, such as cotton wool, must be in sufficient quantity to absorb the entire contents of the primary receptacle(s) so that any release of the liquid substance will not compromise the integrity of the cushioning material or of the outer packaging;

☞ The primary receptacle or the secondary packaging must be capable of withstanding without leakage an internal pressure of 95 kPa in the range of -40°C to+55°C (-40°F to 130°F);

- The outer packaging must not contain more than 4 L. This quantity excludes ice, dry ice, or liquid nitrogen when used to keep specimens cold.

(b) For solid substances:

- The primary receptacle(s) must be sift-proof and must not exceed the outer packaging weight limit;
- The secondary packaging must be sift-proof;
- If multiple fragile primary receptacles are placed in a single secondary packaging, they must be either individually wrapped or separated to prevent contact between them;
- Except for packages containing body parts, organs or whole bodies, the outer packaging must not contain more than 4 kg. This quantity excludes ice, dry ice or liquid nitrogen when used to keep specimens cold;
- If there is any doubt as to whether or not residual liquid may be present in the primary receptacle during transport then a packaging suitable for liquids, including absorbent materials, must be used.

☞ An itemized list of contents must be enclosed between the secondary packaging and the outer packaging.

At least one surface of the outer packaging must have a minimum dimension of 100 mm x 100 mm.

The completed package must be capable of successfully passing the drop test described in 6.6.1 except that the height of the drop must not be less than 1.2 m.

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 an angle of 45°(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 at least 6 mm high. The proper shipping name “Diagnostic

specimen", "Clinical specimen" or "Biological substance category B" in letters at least 6mm high must be marked on the outer package adjacent to the diamond-shaped mark.

☞ Unless all package markings are clearly visible, the following conditions apply when packages are placed in an overpack:
- the overpack must be marked with the word "Overpack" ; and
- 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 packagings or in the outer packaging or an overpack. Interior supports must be provided to secure the secondary packagings in the original position after the ice or dry ice has dissipated. 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 packagings.
- 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 requirements in 9.6.1 must be met; and
- the inspection for damage or leakage requirements in 9.4.1 and 9.4.2.

Passengers and crew members are prohibited from transporting infectious substances either as or in carry-on baggage or checked baggage or on their person.

☞ If an air waybill is used, the "Nature and Quantity of Goods" box must show the text "DIAGNOSTIC SPECIMENS" "CLINICAL SPECIMENS" or "BIOLOGICAL SUBSTANCE CATEGORY B" and "UN 3373".

Clear instructions on filling and closing such packages must be provided by packaging manufacturers and subsequent distributors to the shipper or to the person who prepares the package (e.g. patient) to enable the package to be correctly prepared for transport.

Other dangerous goods must not be packed in the same packaging as Division 6.2 infectious substances unless they are necessary for maintaining the viability, stabilizing or preventing degradation or neutralizing the hazards of the infectious substances. A quantity of 30 mL or less of dangerous goods included in Classes 3, 8 or 9 may be packed in each primary receptacle containing infectious substances. When these small quantities of dangerous goods are packed with infectious substances in accordance with this packing instruction no other requirements in these Regulations need be met.