

## **IATA PACKING INSTRUCTION 602 - 2001**

STATE VARIATIONS: AUG-03, CAG-04, USG-13, VUG-02

OPERATOR VARIATIONS: AF-04, AS-02/08, CI-01, CO-07/08, CS-07, FX-09, SW-01, US-08

The General Packing Requirements of Subsection 5.0.2 must also be met.

### **General Requirements:**

Shippers of Infectious substances must comply with these regulations and must ensure that shipments are prepared in such a manner that they arrive at their destination in good condition and that they present no hazard to persons or animals during shipment. The packaging must include:

- (a) inner packagings comprising:
  - (1) a watertight primary receptacle(s),
  - (2) a watertight secondary packaging, .
  - (3) other than for large body parts and whole organs which require special packaging, an absorbent material which must be placed between the primary receptacle(s) and the secondary packaging. Absorbent material is not required for solid substances.

Multiple primary receptacles placed in a single packaging must be wrapped individually or for infectious substances transported in liquid nitrogen, separated and supported to ensure that contact between them is prevented.

The absorbing material, for example cotton wool, must be sufficient to absorb the entire contents of all primary receptacles.

- (b) an outer packaging of sufficient strength meeting the design type tests found in Subsection 6.5 and bearing the Specification Markings as required by 6.0.6 for shipments of infectious substances other than those containing large body parts and whole organs which require special packaging. Also infectious substances shipped on liquid nitrogen in packagings that meet the requirements of Packing Instruction 202 are excluded from the testing requirements of Subsection 6.5 and the marking requirements of 6.0.6.

Note: Packagings of the type known as "dry shipper" when used to ship infectious substances must meet the testing requirements of Subsection 6.5 and the marking requirements of 6.0.6.

Packages must be at least 100mm (4 in) in the smallest overall external dimension.

For all packages containing infectious substances other than those containing large body parts or whole organs which require special packaging, an itemized list of contents must be enclosed between the secondary packaging and the outer packaging. The primary receptacle or the secondary packaging used for infectious substances must be capable of withstanding, without leakage, an internal pressure which produces a pressure differential of not less than 95 kPa (0.95 bar, 13.8lb/in<sup>2</sup>) in the range of -40° C to + 55° C (- 40° F to 130° F).

All packages containing infectious substances must be marked durably and legibly on the outside of the package with the NAME and TELEPHONE NUMBER OF A PERSON RESPONSIBLE FOR THE SHIPMENT.

Shipments of Infectious Substances of Division 6.2 require the shipper to make advance arrangements with the consignee and the operator to ensure that the shipment can be transported and delivered without unnecessary delay. The following statement required by 8.1.6.11.2 must be included in the Additional Handling Information area of the Shipper's Declaration:

"Prior arrangements as required by the IATA Dangerous Goods Regulations 1.3.3.1 have been made."

#### **Specific Requirements:**

Although in exceptional cases, for example, the shipment of large body parts and whole organs, may require special packaging, the great majority of infectious substances can and must be packed according the following requirements.

Substances shipped at ambient temperatures or higher. - Primary receptacles may only be of glass, metal or plastic. Positive means of ensuring a leak-proof seal must be provided, such as heat seal, skirted stopper or metal crimp seal. If screw caps are used, these must be reinforced with adhesive tape.

Substances shipped refrigerated or frozen (wet ice, pre-frozen packs, carbon dioxide solid [dry ice]): ice, carbon dioxide solid (dry ice) or other refrigerant must be placed outside the secondary packaging(s) or alternatively in an overpack with one or more complete packages marked in accordance with 6.0.6. Interior support must be provided to secure the secondary packaging(s) in the original position after the ice or carbon dioxide solid (dry ice) has been dissipated. If ice is used, the packaging must be leak-proof. If carbon dioxide solid (dry ice) is used, the outer packaging must permit the release of carbon-dioxide gas. The primary receptacle and the secondary packaging must maintain their containment integrity at the temperature of the refrigerant used as well as at the temperatures and pressure(s) of air transport to which the receptacle could be subjected if refrigeration were to be lost

Substances shipped in liquid nitrogen: Plastic primary receptacles capable of withstanding very low temperatures must be used. Secondary packaging must also withstand very low temperatures and in most cases will need to be fitted over individual primary receptacles. Requirements for shipment of liquid nitrogen must also be observed. The primary receptacle must maintain its containment integrity, at the temperature transport to which the receptacle could be subjected if refrigeration were to be lost. Where multiple primary receptacles are contained in a single secondary packaging, they must be separated and supported to ensure that contact between them is prevented.

Lyophilized substances: Primary receptacles must be either flame-sealed glass ampoules or rubber-stoppered, glass vials with metal seats.