

## PACKING INSTRUCTION 650

The packaging 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, and internal pressure of 95kPa in the range of -40degreesC to 55 degrees C (-40F to 130F).

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 100mm x 100mm (4" x 4")

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 meters (3.9feet).

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 a least 50mm (2"), the width of the line must be at least 2mm and the letters and the numbers must be at least 6mm high. The proper shipping name "Biological Substance, Category B" in letters at least 6mm high must be marked on the outer packaging adjacent to the diamond-shaped mark.



Unless all package markings are clearly visible, the following conditions apply when 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.

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