

Appendix E

Packaging Instructions

P602	Packing Instruction	P602
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This packing instruction applies to infectious substances (cultures) assigned to UN 2814

1. Serum tubes, swabs, urines, tissues, etc. must be placed in a **sealed primary container**, sealed with parafilm.
2. Each sample must then be wrapped in cotton wool. The cotton wool should be sufficient to absorb the entire contents of the samples. Cotton wool is not required for solid substances.
3. Samples are then placed in **watertight secondary container**.
4. Request forms are placed in a separate biohazard bag with the relevant patient and referring Doctors details and urgent contact numbers. The request form is placed between the secondary and tertiary container.
5. Secondary container is then placed into the **outer tertiary cardboard packaging**. The outer packaging must comply and bear the compliance marks to satisfy UN 602 Packaging Requirements. Full performance testing includes pressure, water, drop and puncture testing, to required standards. Fully compliant packaging bears the marks UN 2814 and markings Class 6.2/year/differing marks according to country of production, together with relevant Control of Substances Hazardous to Health (COSHH) labelling. Packaging not bearing these marks must not be used.
6. The outer cardboard packaging must be labelled with:
 - a. Name and address of the consignee (destination of samples)
 - b. Name and address of sender.
 - c. A name and emergency contact telephone number.
 - d. All compliance testing markers and biohazard marking.

P650	Packing Instruction	P650
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This packing instruction applies to UN 3373

1. The packaging shall 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 or mechanical handling. Packagings shall be constructed and closed 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.

2. The packaging shall consist of three components:
 - a. a primary receptacle,
 - b. a secondary packaging, and
 - c. an outer packaging.
3. Primary receptacles shall 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 shall be secured in outer packagings with suitable cushioning material. Any leakage of the contents shall not compromise the integrity of the cushioning material or of the outer packaging.
4. For transport, the mark illustrated below shall be displayed on the external surface of the outer packaging on a background of a contrasting colour and shall be clearly visible and legible. The width of the line shall be at least 2mm; the letters and numbers shall be at least 6mm high.



5. The completed package shall be capable of successfully passing the drop test in 6.3.2.5 as specified in 6.3.2.3. and 6.3.2.4 of the Model Regulations except that the height of the drop test shall not be less than 1.2m.
6. For liquid substances
 - a. The primary receptacle(s) shall be leakproof.
 - b. The secondary packaging shall be leakproof.
 - c. If multiple fragile primary receptacles are placed in a single secondary packaging, they shall be either individually wrapped or separated to prevent contact between them.
 - d. Absorbent material shall be placed between the primary receptacle(s) and the secondary packaging. The absorbent material shall be in quantity sufficient to absorb the entire contents of the primary receptacle(s) so that any release of the liquid substances will not compromise the integrity of the cushioning material or of the outer packaging.

- e. The primary receptacle or the secondary packaging shall be capable of withstanding, without leakage, an internal pressure of 95 kPa (0.95 bar).
7. For solid substances
 - a. The primary receptacle(s) shall be siftproof.
 - b. The secondary packaging shall be siftproof.
 - c. If multiple fragile primary receptacles are placed in a single secondary packaging, they shall be either individually wrapped or separated to prevent contact between them.
 8. Refrigerated or frozen specimens: Ice, dry ice and liquid nitrogen
 - a. When dry ice or liquid nitrogen is used to keep specimens cold, all applicable requirements of these Regulations shall be met. When used, ice or dry ice shall be placed outside the secondary packagings or in the outside packaging or an overpack. Interior supports shall 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 shall be leakproof. If carbon dioxide, solid (dry ice) is used, the packaging shall be designed and constructed to permit the release of carbon dioxide gas to prevent a build-up pressure that could rupture the packagings and shall be marked “Carbon dioxide, solid” or “Dry ice”.
 - b. The primary receptacle and the secondary packaging shall maintain their integrity at the temperature of the refrigerant used as well as the temperatures and the pressures that could result in refrigeration were lost.
 9. Infectious substances assigned to UN 3373 which are packed and marked in accordance with this packing instruction are not subject to any other requirement in these regulations.

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