

COMMITTEE OF EXPERTS ON THE TRANSPORT OF DANGEROUS GOODS

Sub-Committee of Experts on the
Transport of Dangerous Goods
(Eighteenth session, 3-12 July 2000,
agenda item 5 (e))

MISCELLANEOUS DRAFT AMENDMENTS TO THE MODEL REGULATIONS ON THE TRANSPORT OF DANGEROUS GOODS

Comments on ST/SG/AC.10/C.3/2000/15

Classification and packaging of diagnostic specimens

Transmitted by the Expert from the United States

Background

With respect to the paper submitted by the Experts from Germany and the United Kingdom, the expert from the United States offers the following comments concerning the proposed Packing Instruction, P650:

- 1.) The quantity limits proposed for liquid diagnostic specimens are 100 ml for inner receptacles and 500 ml for outer packagings (for solids 100 g/500 g limits are specified). These limits are substantially lower than the limits currently authorized by the International Civil Aviation Organization's Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO TI), which allow up to 500 ml in each primary receptacle and up to 4 L per outer packaging (500 g/4 kg for solids). U.S. industry has commented that the higher ICAO limits are necessary in order to continue to transport diagnostic specimens. It is recommended that the limits of 500 ml/4 L for liquids and 500 g/4 kg for solids be adopted and the proposed P650 be modified accordingly.
- 2.) In sub-paragraph (iv) of the General Provisions of the proposed P650, paper, fibreboard, plastics or metal outer packagings are specifically authorized. The expert from the United States favors the use of performance criteria as opposed to authorizing specific packaging. The ICAO TI apply a 1.2 m drop test requirement (see Part 7;6.2.2 of the ICAO TI). This drop test can be found in 6.3.2.5 of the Recommendations and includes provisions for ensuring that packagings are water resistant. It is therefore recommended that these tests be referenced and required by P650.

Proposal

It is proposed that the P650 as found in ST/SG/AC.10/C.3/2000/15 be modified as noted below:

P 650	PACKING INSTRUCTION	P 650
This instruction applies to UN XXXX		
General Provisions		
<p>(i) Diagnostic specimens shall be packed in good quality packagings, which shall be strong enough to withstand the shocks and loadings normally encountered during transport, including trans-shipment between transport units and/or warehouses as well as any removal from a pallet or overpack for subsequent manual or mechanical handling. Packagings shall be constructed and closed so as to prevent any loss of contents when prepared for transport which might be caused under normal conditions of transport, by vibration, or by changes in temperature, humidity or pressure.</p> <p>(ii) Primary receptacles shall be packed in secondary packaging 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 substantially impair the protective properties of the cushioning material or of the outer packaging.</p> <p>(iii) For carriage each package shall be clearly and durably marked with the words DIAGNOSTIC SPECIMENS.</p> <p>(iv) Outer packagings may consist of [paper], [fibreboard], plastics or metal. The completed package must 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 except that the height of the drop must not be less than 1.2 m.</p>		
<u>For Liquids</u>		
<p>(i) The primary receptacle(s) shall be leakproof and not contain more than 400ml500 ml.</p> <p>(ii) There shall be absorbent material placed between the primary receptacle and the secondary packaging; if several fragile primary receptacles are placed in a single secondary packaging, they shall be either individually wrapped or separated so as to prevent contact between them. The absorbent material, such as cotton wool, shall be in sufficient quantity to absorb the entire contents of the primary receptacles; and there must be a secondary packaging which must be leakproof.</p> <p>(iii) The primary receptacle or the secondary packaging shall be capable of withstanding without leakage an internal pressure producing a pressure differential of not less than 95 kPa (0.95 bar).</p> <p>(iv) The outer packaging shall not contain more than 500ml4 L.</p>		
<u>For Solids</u>		
<p>(i) The primary receptacle(s) shall be siftproof and not contain more than 400g500 g.</p> <p>(ii) If several fragile primary receptacles are placed in a single secondary packaging, they shall be either individually wrapped or separated so as to prevent contact between them and there must be a secondary packaging which must be leakproof.</p> <p>(iii) The outer packaging shall not contain more than 500g4 kg.</p>		
Provided that diagnostic specimens are packed in accordance with this Packing Instruction, no other requirements of these Model regulations shall apply.		