



**WORKING PAPER**

**DANGEROUS GOODS PANEL (DGP)  
MEETING OF THE WORKING GROUP OF THE WHOLE**

**Beijing, China, 25 October to 3 November 2006**

**Agenda Item 2: Development of recommendations for amendments to the Technical Instructions for the Safe Transport of Dangerous Goods by Air (Doc 9284) for incorporation in the 2009/2010 Edition**

**2.4: Part 4 — Packing Instructions**

**PACKING INSTRUCTION 910**

(Presented by D. Brennan)

**SUMMARY**

This paper proposes an amendment to Packing Instruction 910 in order to include a requirement for orientation arrows for consumer commodities.

Action by the DGP-WG is in paragraph 2.

**1. INTRODUCTION**

1.1 Packing Instruction 910 sets out the requirements for the packaging of ID 8000 Consumer commodity. The first paragraph of PI 910 states that dangerous goods packed in accordance with PI 910 do not have to comply with Part 4, Chapter 1 and Part 6 of the Technical Instructions.

1.2 These exclusions are the General Packing Requirements — Part 4, Chapter 1 and Packaging Requirements and Tests — Part 6. The basis for the exclusion would appear to be that PI 910 describes in some detail the packaging requirements, including many of the provisions from the general packing requirements such as the requirement for sufficient ullage in inner packaging containing liquids and absorbent material for fragile inner packagings containing liquids.

1.3 However, by excluding all of the requirements of Part 4, Chapter 1, this includes the conditions under which a combination packaging containing liquids must bear a “Package orientation” label as set out in 4;1.1.13.

1.4 Leakage from inner packagings containing liquids continues to be a recurring issue from dangerous goods incident reports. It would therefore appear to run contrary to the objective of the Technical Instructions as per the changes to 4;1.1.9, which reinforced packing requirements for liquids (DGP/20 report, page 2B-40), to exclude the requirement for orientation arrows for consumer commodities.

## 2. ACTION BY THE DGP-WG

### 2.1 Amend Packing Instruction 910 as follows:

...

- e) Inner packagings must be tightly packed in strong outer packagings and must be so packed, secured or cushioned as to prevent any breakage, puncture or leakage of contents ~~or significant movement within~~ into the outer packaging(s) during normal conditions of transport. Absorbent material must be provided for glass or earthenware inner packaging(s) containing consumer commodities in Class 2 or 3 or liquids of Division 6.1, in sufficient quantity to absorb the liquid contents of the largest of such inner packagings contained in the outer packaging. Absorbent and cushioning material must not react dangerously with the contents of the inner packagings. Notwithstanding the above, absorbent material may not be required if the inner packagings are so protected that breakage of the inner packagings and leakage of their contents from the outer packaging will not occur during normal conditions of transport.

f) Inner packagings containing liquids, excluding flammable liquids in inner packagings of 120 mL or less, must be packaged with their closures upward and the upright position of the package must be indicated by on it by "Package orientation" labels (Figure 5-24). These labels, or pre-printed package orientation labels meeting the same specification as either Figure 5-24 or ISO Standard 780-1985, must be affixed to , or printed on, at least two opposite vertical sides of the package with the arrows pointing in the correct direction.

### 2.2 Alternately, amend Packing Instruction 910 as follows:

Consumer commodities are materials that are packaged and distributed in a form intended or suitable for retail sale for purposes of personal care or household use. These include items administered or sold to patients by doctors or medical administrations. Except as otherwise provided below, dangerous goods packed in accordance with this Packing Instruction do not need to comply with Part 4, Chapter 1, except 4.1.1.13, or Part 6 of these Instructions; they must, however, comply with all other applicable requirements.

...

- e) Inner packagings must be tightly packed in strong outer packagings and must be so packed, secured or cushioned as to prevent any breakage, puncture or leakage ~~or significant movement within~~ of contents into the outer packaging(s) during normal conditions of transport. Inner packagings containing liquids must be packaged with their closures upward and placed within outer packagings consistent with the orientation markings prescribed in 5.3.2.11 b) of these Instructions. Absorbent material must be provided for glass or earthenware inner packaging(s) containing consumer commodities in Class 2 or 3 or liquids of Division 6.1, in sufficient quantity to absorb the liquid contents of the largest of such inner packagings contained in the outer packaging. Absorbent and cushioning material must not react dangerously with the contents of the inner packagings. Notwithstanding the above, absorbent material may not be required if the inner packagings are so protected that breakage of the inner packagings and leakage of their contents from the outer packaging will not occur during normal conditions of transport.