



WORKING PAPER

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

Abu Dhabi, United Arab Emirates, 7 to 11 November 2010

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 2013/2014 Edition

2.4: Part 4 — Packing Instructions

**REQUIREMENT FOR SECONDARY MEANS OF SECURING
CLOSURES ON PACKAGINGS**

(Presented by D. Brennan)

SUMMARY

This working paper proposes a clarification to the text requiring secondary means of securing closures on packagings for liquids.

Action by the DGP-WG is in paragraph 2.

1. INTRODUCTION

1.1 As part of the reformatting of the packing instructions that was carried out in the last few biennia the DGP also reviewed and revised the provisions for closures on packagings, including those for liquids.

1.2 The text as revised was adopted into Part 4;1.1.4 in the 2011-2012 Edition of the Technical Instructions and reads as follows:

1.1.4 The body and the closure of any packaging must be so constructed as to be able to adequately resist the effects of temperature and vibration occurring in normal conditions of transport. The closure device must be so designed that it:

- a) is unlikely that it can be incorrectly or incompletely closed, and must be such that it may be checked easily to determine that it is completely closed; and
- b) remains securely closed during transport.

1.1.4.1 In addition, for liquid substances, closures must be held securely, tightly and effectively in place by secondary means. Examples of such methods include: adhesive tape, friction sleeves, welding or soldering, positive locking wires, locking rings, induction heat seals and child-resistant closures. When secondary means of closure cannot be applied to an inner packaging containing liquids, the inner packaging must be securely closed and placed in a leakproof liner and then placed in an outer packaging.

1.3 The issue has just been raised with respect to the provisions of paragraph 1.1.4.1 and if the requirement for closures to be securely in place by secondary means only applies to inner packagings containing liquids or if single packagings containing liquids must also have such secondary means.

1.4 It is the opinion of the author that this paragraph is only intended to apply to inner packagings and not to single packagings. The basis for this opinion is that the alternative provided in paragraph 1.1.4.1 where secondary means cannot be applied then specifically refers to inner packagings and the use of a leakproof liner.

2. ACTION BY THE DGP-WG

2.1 The DGP-WG is invited to revise Part 4;1.1.4.1 as follows:

1.1.4 The body and the closure of any packaging must be so constructed as to be able to adequately resist the effects of temperature and vibration occurring in normal conditions of transport. The closure device must be so designed that it:

- a) is unlikely that it can be incorrectly or incompletely closed, and must be such that it may be checked easily to determine that it is completely closed; and
- b) remains securely closed during transport.

1.1.4.1 In addition, for inner packagings containing liquids ~~substances~~, closures must be held securely, tightly and effectively in place by secondary means. Examples of such methods include: adhesive tape, friction sleeves, welding or soldering, positive locking wires, locking rings, induction heat seals and child-resistant closures. When secondary means of closure cannot be applied to an inner packaging containing liquids, the inner packaging must be securely closed and placed in a leakproof liner and then placed in an outer packaging.

2.2 If the opinion of the DGP-WG is that paragraph 1.1.4.1 is intended to apply to all packagings containing liquids, then it is believed that this must be taken to the UN Subcommittee for their consideration as any revision to the requirements for single packagings will have an impact on multi-modal transport.

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