



WORKING PAPER

DANGEROUS GOODS PANEL (DGP)

TWENTY-THIRD MEETING

Montréal, 11 to 21 October 2011

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

**ORIENTATION ARROWS ON COMBINATION PACKAGINGS CONTAINING
“HERMETICALLY SEALED” INNER PACKAGINGS**

(Presented by D. Brennan)

SUMMARY

This working paper proposes a revision to language in Part 4;1.1.13 of the Technical Instructions with respect to “hermetically sealed” inner packagings.

Action by the DGP: The DGP is invited to revise Part 4;1.1.13 of the Technical Instructions as presented in the appendix to this working paper.

1. INTRODUCTION

1.1 During discussion of a proposal presented at the DGP Working Group of the Whole Meeting in Atlantic City (DGP-WG/11, 4 to 11 April 2011), concerns were raised at the exception from the application of orientation arrows on combination packagings where the inner packagings were “hermetically sealed” that was adopted into Part 4;1.1.13 of the Technical Instructions based on changes to the 16th revised edition of the UN Model Regulations (DGP/23-WP/3, paragraph 3.2.22 refers).

1.2 The proposal made at DGP-WG/11 was supported in principle, although there was concern that the term “hermetically sealed” was widely used in the UN Model Regulations, and therefore the Technical Instructions and any change would have to be carefully considered.

1.3 Based on comments received during DGP-WG/11 a paper was submitted to the 39th meeting of the UN Subcommittee raising the issue of the use of “hermetically sealed” in the exception from application of orientation arrows.

1.4 There was an amount of discussion at the Subcommittee meeting on the meaning of “hermetically sealed” and some acknowledgement that while the term is widely used in the Model Regulations, it does not appear to have a consistent meaning in all instances. The report of the 39th meeting reads “The general feeling was that this term meant an air and vapour tight sealed closure. It was noted that the term is used in a number of other places in the Model Regulations that might make a single definition difficult to achieve.”

1.5 Based on the requirements set out in the Technical Instructions all inner packagings containing liquid are expected to be securely sealed and to retain their contents throughout the transport process. This could clearly be seen by some shippers as the inner packagings being hermetically sealed.

1.6 Some existing provisions in the Technical Instructions may also reinforce that belief. For example in Packing Instructions 487 – 491 in the additional packing requirements for combination packagings for Packing Group I there is the requirement that “inner packagings must be hermetically sealed, e.g. by taping or by threaded closures.”. This language is not dissimilar to the requirement in Part 4;1.1.4.1 of the Technical Instructions for inner packagings containing liquids where one of the examples given for closures to be held in place by secondary means is “adhesive tape”.

1.7 For these reasons it is believed that simply referring to “hermetically sealed” in the exceptions from application of orientation arrows in Part 4;1.1.13 could lead shippers to believe that any combination package containing inner packagings with not more than 500 mL does not require application of orientation arrows.

1.8 Looking back to the original proposal to the UN Subcommittee and the types of inner packagings it is believed that these inner packagings are those where the packaging must actually be pierced or punctured to allow for the release of the contents. Accordingly, rather than trying to limit application to flammable liquids and environmentally hazardous substances as was originally proposed in DGP-WG/11-WP/3, it is proposed instead to make reference to the inner packaging being of the type that must be punctured or pierced.

APPENDIX

PROPOSED AMENDMENT TO THE TECHNICAL INSTRUCTIONS

Part 4

PACKING INSTRUCTIONS

Chapter 1

GENERAL PACKING REQUIREMENTS

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1.1 GENERAL REQUIREMENTS APPLICABLE TO ALL CLASSES
EXCEPT CLASS 7

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1.1.13 Combination packagings containing liquid dangerous goods, ~~excluding flammable liquids in inner packagings of 120 mL or less, or infectious substances in primary receptacles not exceeding 50 mL, or hermetically sealed inner packagings each containing not more than 500 mL,~~ must be packed so that the closures on the inner packagings are upward and the upright position of the package must be indicated on it by the "Package orientation" label described in 5.3.2.12 b). The words "This side up" or "This end up" may also be displayed on the top cover of the package.

1.1.13.1 The provisions of 1.1.13 do not apply to combination packagings containing:

a) flammable liquids in inner packagings of 120 mL or less;

b) infectious substances in primary receptacles not exceeding 50 mL;

c) dangerous goods in sealed inner packagings such as tubes, bags or vials that are opened by breaking or puncturing and once opened can only be resealed by an alternative or secondary closure. Each inner packaging must not contain more than 500 mL.

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