



WORKING PAPER

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

The Hague, 3 to 7 November 2008

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 2011/2012 Edition

2.5: Part 5 — Shipper's Responsibilities

ORIENTATION ARROWS ON CRYOGENIC RECEPTACLES

(Presented by D. Brennan)

SUMMARY

This working paper proposes a revision to the text describing the requirements for orientation arrows on packagings containing refrigerated liquefied gases.

Action by the DGP-WG is in paragraph 2.

1. INTRODUCTION

1.1 Recently a question was posed by a shipper regarding the number of package orientation labels required on packagings containing refrigerated liquefied gases and a possible difference between the Technical Instructions and the UN Model Regulations.

1.2 The Technical Instructions have general text in Part 4;1.1.13 that sets out the requirements for the application of package orientation labels on packages. This text requires that combination packagings containing liquid dangerous goods, other than those specifically excluded, must bear "package orientation" labels placed on two opposite vertical sides of the package. As cryogenic receptacles used to contain refrigerated liquefied gases are not combination packagings, these provisions do not apply.

1.3 There are however specific requirements in Part 5;2.4.6 that set out the specific marking requirements for refrigerated liquefied gases. The wording of this paragraph includes the words "The upright position of each package must be indicated prominently by arrows or by using the 'Package orientation' label ...". The wording of this text would indicate that just a single package orientation label is required to be applied to the package.

1.4 A review of the UN Model Regulations identifies that provisions for orientation arrows to be marked on packagings containing refrigerated liquefied gases is part of the general text in 5.2.1.7.1 describing the requirements for orientation arrows. This text requires that packagings containing refrigerated liquefied gases must bear such orientation arrows on two opposite vertical sides of the package.

2. ACTION BY THE DGP-WG

2.1 The DGP-WG is invited to revise the provisions of Part 5;2.4.6 as follows:

2.4.6 Special marking requirements for refrigerated liquefied gas

The upright position of each package must be indicated prominently by ~~arrows or by using either the "Package orientation" label (Figure 5-26) or pre-printed package orientation labels meeting the same specification as either Figure 5-26 or ISO Standard 780-1997. The label must be affixed to or printed on at least two opposite vertical sides of the package with the arrows pointing in the correct direction.~~ The wording "KEEP UPRIGHT" must be placed at 120° intervals around the package or on each side. Packages must also be clearly marked "DO NOT DROP — HANDLE WITH CARE".

— END —