



WORKING PAPER

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

Auckland, New Zealand, 4 to 8 May 2009

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

Agenda Item 2.3: Part 3 — Dangerous Goods List, Special Provisions and Limited and Excepted Quantities

Agenda Item 2.5: Part 5 — Shipper's Responsibilities

Agenda Item 2.7: Part 7 — Operator's Responsibilities

**SELF-REACTIVE SUBSTANCES AND ORGANIC PEROXIDES "KEEP AWAY FROM HEAT"
REQUIREMENTS**

(Presented by D. Brennan)

SUMMARY

This paper proposes removal of the additional documentation, labelling, storage, handling and loading requirements applicable to self-reactive substances and organic peroxides.

Action by the DGP-WG is in paragraph 2.

1. INTRODUCTION

1.1 At DGP-WG/08 a paper was submitted seeking the opinion of the Working Group of the Whole on the need for the additional requirements, including the statement on the dangerous goods transport document and the handling label for substances to which Special Provision A20 is assigned (DGP-WG/08-WP/51).

1.2 There was general support for a review of the additional requirements set out in Special Provision A20 particularly as these requirements do not exist in the UN Model Regulations or in the modal regulations for surface transport. Even more so that the only organic peroxides and self-reactive substances permitted in air transport are those that are less sensitive to heat.

1.3 Based on this indication of support, the specific additional requirements were reviewed with a view to removing the requirement from the Technical Instructions to align with the provisions contained in the UN Model Regulations.

1.4 However, in developing the specific proposal to align the text in the Technical Instructions, it was identified that even should the wording of the Technical Instructions be aligned to that in the UN Model Regulations there would still remain a mandatory obligation on an operator to protect packages containing these substances from sources of heat.

1.5 Having this requirement mandated brings back this issue of how an operator can comply without some clear indication that these packages are subject to additional handling requirements and hence the provision for the label and statement. On that basis it is proposed that rather than aligning exactly with the Model Regulations, that instead the provisions for the protection of the packages be made advisory through the use of “should”, rather than “must”.

2. ACTION BY THE DGP-WG

2.1 The DGP-WG is invited to:

a) revise the wording of Special Provision A20 as follows:

A20	During the course of transport this substance must should be protected from direct sunlight and all sources of heat and be placed in an adequately ventilated area. A statement to this effect must be included in the Dangerous Goods Transport Document.
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b) remove A20 from all permitted entries of self-reactive substances in Division 4.1 (UN Nos.: 3223, 3224, 3225, 3226, 3227, 3228, 3229 and 3230) and all permitted entries of organic peroxides (UN Nos.: 3103, 3104, 3105, 3106, 3107, 3108, 3109 and 3110). Special Provision A20, as revised, would remain assigned to UN 3241, **2-Bromo-2-nitropropane-1,3-diol**. This aligns with the assignment of SP 246 in the UN Model Regulations, which only applies to UN 3241;

c) revise the provisions of Part 5;3.2.11 to remove the requirement for the application of the “Keep away from heat” label, and to delete the “Keep away from heat” label (Figure 5-29) as follows:

3.2 APPLICATION OF LABELS

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3.2.11 In addition to the class hazard labels specified in 3.1, handling labels must also be affixed to packages of dangerous goods as follows:

a) the “Cargo aircraft only” label (Figure 5-25) must be affixed:

- 1) when the package containing the dangerous goods may only be transported on a cargo aircraft. However, where the packing instruction number and the permitted quantity per package are identical for passenger and cargo aircraft, the “Cargo aircraft only” label should not be used;
- 2) to each Type B(M) package of radioactive material and any freight container containing such a Type B(M) package;
- 3) on the same surface of the package near the hazard labels;

b) when required by the provisions of 4;1.1.13, 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, 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 words "Dangerous goods" may be inserted on the label below the line;

- c) for packages containing refrigerated liquefied gases, the "Cryogenic liquid" label (Figure 5-28) must be affixed on all packages;
- d) ~~for packages containing self-reactive substances of Division 4.1 or Division 5.2 organic peroxides, the "Keep away from heat" label (Figure 5-29) must be affixed on all packages. This label should be affixed on the same surface of the package near the hazard label(s);~~
- e) for excepted packages of radioactive material the "Radioactive material, excepted package" handling label (Figure 5-30~~29~~) must be affixed.

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A consequential amendment to the above would be to revise 5;3.5.2.2 to make the text on the second line in parentheses read "(Figure 5-30)". In addition the radioactive material, excepted package label would become Figure 5-29 and the lithium battery handling label would become Figure 5-30.

- d) revise the provisions of Part 5;4 to delete paragraph 4.1.5.8.3 that currently requires that a statement must be added to the dangerous goods transport document with an indication that self-reactive substances or organic peroxides being offered for transport must be protected from sunlight and sources of heat.

~~4.1.5.8.3 When self-reactive substances of Division 4.1, or organic peroxides of Division 5.2 or other substances having similar properties, are offered for transport, the shipper must indicate on the dangerous goods transport document that the packages containing such substances must be protected from direct sunlight and all sources of heat and be placed in adequately ventilated areas.~~

- e) revise the provisions of Part 7;2.13 to remove the mandatory requirement for operators to ensure that packages or ULDs containing self-reactive substances or organic peroxides be protected from sunlight and sources of heat during the course of transport. It's proposed that this be a recommendation only, as follows:

2.13 HANDLING OF SELF-REACTIVE SUBSTANCES AND ORGANIC PEROXIDES

During the course of transport, packages or unit load devices containing self-reactive substances of Division 4.1 or organic peroxides of Division 5.2 ~~must~~ **should** be shaded from direct sunlight, stored away from all sources of heat in a well-ventilated area.

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