



WORKING PAPER

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

Montréal, 15 to 19 April 2013

- 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 2015-2016 Edition**
- 2.3 : Part 3 — Dangerous Goods List, Special Provisions and Limited and Excepted Quantities**

CHEMICALS UNDER PRESSURE AUTHORIZATIONS

(Presented by J. McLaughlin)

SUMMARY

This working paper proposes to prohibit the transport of liquid and solid substances under the chemical under pressure entries (UN 3500 - UN 3505) in Table 3-1, Dangerous Goods List, when those substances are separately listed by name in Table 3-1 and are forbidden for transport by air.

Action by the DGP-WG is in paragraph 3.

1. INTRODUCTION

1.1 The chemical under pressure entries (UN 3500 - UN 3505) in Table 3-1 may be used to classify and transport packages containing certain combinations of substances on cargo aircraft and, with the approval of competent authorities, on passenger aircraft. Instructions on which substances may be classified and transported as a chemical under pressure are given in Special Provision A187.

1.2 Special Provision A187 provides provisions to classify liquid or solid substances and a propellant as a Class 2 gas when transported in a robust cylinder in accordance with Packing Instruction 218. Class 2 is assigned to chemicals under pressure in order to reflect the predominate pressure hazard associated with such cylinders. To reflect the chemical hazards of the transported substance, the chemical under pressure is assigned to Division 2.1 (flammable gas) or Division 2.2 (non-flammable gas) and may be assigned a subsidiary risk, either Class 8 or Class 6.1. Certain substances are prohibited from transport under the chemical under pressure entries including the following:

- Division 2.3 as a propellant;
- Gases with a subsidiary risk of Division 5.1 as a propellant;
- Class 1, explosives;
- Class 3, liquid desensitized explosives;
- Division 4.1, self-reactive substances and solid desensitized explosives;
- Division 4.2, substances liable to spontaneous combustion;
- Division 4.3, substances which, in contact with water, emit flammable gases;
- Division 5.1, oxidizing substances;
- Division 5.2, organic peroxides;
- Division 6.1, poisonous materials, PG I;
- Division 6.2, infectious substances;
- Class 7, radioactive materials; and
- Class 8, corrosive materials, PG I.

2. DISCUSSION

2.1 There are some substances that are forbidden for transport by air that could potentially be transported by air under the chemical under pressure description. For example, a shipper could classify a prohibited substance (UN 2442, **Trichloroacetyl chloride**, 8, PGII) and transport it by air as a chemical under pressure. Liquid or solid substances that are specifically listed as forbidden for transport by air should not be accepted when combined with a gas and described under a chemical under pressure entry.

3. ACTION BY THE DGP-WG

3.1 The DGP-WG is invited to amend Special Provision A187 of the Technical Instructions to ensure that substances forbidden for transport by air may not be transported under the chemical under pressure descriptions as shown in the appendix to this working paper.

— — — — —

APPENDIX

PROPOSED AMENDMENT TO PART 3 OF THE TECHNICAL INSTRUCTIONS

...

Part 3

DANGEROUS GOODS LIST,
SPECIAL PROVISIONS AND
LIMITED AND EXCEPTED QUANTITIES

...

Chapter 3

SPECIAL PROVISIONS

...

Table 3-2. Special provisions

<i>TIs</i>	<i>UN</i>	
...	...	
A187	(362)	This entry applies to liquids, pastes or powders, pressurized with a propellant which meets the definition of a gas in 2;2.1.1 and 2;2.1.2 a) or b). <i>Note.— A chemical under pressure in an aerosol dispenser must be transported under UN 1950.</i> The following provisions must apply: a) The chemical under pressure must be classified based on the hazard characteristics of the components in the different states: ... d) in addition, chemicals under pressure with components meeting the properties of: Class 1, explosives; Class 3, liquid desensitized explosives; Division 4.1, self-reactive substances and solid desensitized explosives; Division 4.2, substances liable to spontaneous combustion; Division 4.3, substances which, in contact with water, emit flammable gases; Division 5.1, oxidizing substances; Division 5.2, organic peroxides; Division 6.2, infectious substances; or Class 7, radioactive material, must not be used for transport under this proper shipping name. <u>e) This entry must not be used for chemicals under pressure containing liquid or solid components that are forbidden for transport by air.</u>
...	...	

...

— END —