International Civil Aviation Organization

DGP/20-WP/6
10/8/05

WORKING PAPER

DANGEROUS GOODS PANEL (DGP)

TWENTIETH MEETING

Montréal, 24 October to 04 November 2005

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 2007-2008 Edition

DRAFT AMENDMENTS OF THE TECHNICAL INSTRUCTIONS TO ALIGN TO THE UN RECOMMENDATIONS - PART 3

(Presented by the Secretary)

SUMMARY

Below are the draft amendments to Part 3, Chapter 3 to reflect the decisions taken by the UN Committee of Experts on the Transport of Dangerous Goods and the Globally Harmonized System of Classification of Labelling of Chemicals at the second session (Geneva, 10 December 2004) and as modified by the decisions of WG/04 and WG/05

Chapter 3

SPECIAL PROVISIONS

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Table 3-2 lists the special provisions referred to in column 7 of Table 3-1 and the information contained in them is additional to that shown for the relevant entry.

Table 3-2. Special provisions

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A7	~~Solutions with a flash point of 60.5°C or less must bear a FLAMMABLE LIQUID label~~. Not used

A8 When transported in non-friable tablet form, these goods are assigned to packing group III.

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A14 The label conforming to Figure 5-13 ~~the model prescribed in the 13th revised edition of the UN Recommendations on the Transport of Dangerous Goods, Model Regulations,~~ may be used until 1 January 2011.

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A23 In the case of non-fissile or fissile excepted uranium hexafluoride, the material must be classified under UN No 2978.

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A32 Air bags or seat-belts installed in ~~vehicles~~ conveyances or in completed ~~vehicle~~ conveyance components such as steering columns, door panels, seats, etc. are not subject to these Instructions.

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A44 Chemical kits or first aid kits include boxes, cases, etc. containing small amounts of one or more compatible items of dangerous goods which are used for example for medical, analytical or testing or repair purposes.

The only dangerous goods which are permitted in the kits are substances which may be transported as:

a) excepted quantities, under 1;2.4.2.2 provided the inner packagings and quantities are as prescribed in 1;2.4.3 a) and 1;2.4.4 a); or

b) limited quantities under 3;4.1.2.

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A46 Mixtures of solids which are not subject to these Instructions and flammable liquids may be transported under this entry without first applying the classification criteria of Division 4.1, providing there is no free liquid visible at the time the substance is packaged and the packaging must pass a leakproofness test at the Packing Group II level. Small inner packagings consisting of ~~s~~ealed packets and articles containing less than 10 mL of a Packing Group II or III flammable liquid absorbed into a solid material are not subject to these Instructions provided there is no free liquid in the packet or articles.

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A63 ~~Suspensions with a flash point of not more than 60.5°C must bear a flammable liquid subsidiary risk label.~~ Not used.

A66 ~~The organic peroxide included in a Polyester Resin Kit must be one of those listed in Table 3-1 as permitted for transport~~. Polyester resin kits consist of two components: a base material (Class 3, packing group II or III) and an activator (organic peroxide). Only organic peroxides that are authorized for transport on passenger aircraft are permitted in the kits. Those requiring temperature control are forbidden. Packing group PG II or III is assigned according to the criteria for Class 3, applied to the base material

Secretarial Note.— DGP-WG/05-WP/44

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A76 In the case of fissile uranium hexafluoride, the material must be classified under UN No. 2977.

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A88 Prototype lithium batteries and cells to be tested that are packed with not more than 24 cells or 12 batteries per packaging that have not been tested to the requirements in subsection 38.3 of the *UN Manual of Tests and Criteria* may be transported aboard cargo aircraft if approved by the appropriate authority of the State of Origin and the following requirements are met:

a) the cells and batteries must be transported in an outer packaging that is a metal, plastic or plywood drum or a metal, plastic or wooden box and that meets the criteria for Packing Group I packagings; and

b) each cell and battery must be individually packed in an inner packaging inside an outer packaging and surrounded by cushioning material that is non-combustible, and non-conductive. Cells and batteries must be protected against short circuiting.

Secretarial Note.— DGP-WG/05-WP/28

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A97 ~~The designation of this substance is to be decided by the appropriate national authority. Substances classified as UN 3077 or UN 3082 by the regulations of other modes of transport may also be transported by air under these entries. This designation~~ These entries may be used for substances ~~and mixtures~~ which are ~~dangerous~~ hazardous to the ~~aquatic~~ environment ~~or which are marine pollutants that~~ but do not meet the classification criteria of any other class or ~~an~~other substance within Class 9. This must be based on the criteria in the Regulations of other modes of transport or criteria recognized by the appropriate authority of the State of origin, transit or destination. This designation may also be used for wastes not otherwise subject to these Instructions, but which are covered under the *Basle Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal* ~~and for substances designated to be environmentally hazardous substances by the appropriate authority of the State of Origin, transit or destination~~.

Secretarial Note.— DGP-WG/05-WP/34

A98 Aerosols with a capacity not exceeding 50 ml, ~~and with a pressure not exceeding 970 kPa at 55 C~~, containing no constituents subject to these Instructions other than a Division 2.2 gas, are not subject to these Instructions unless their release could cause extreme annoyance or discomfort to crew members so as to prevent the correct performance of assigned duties.

Secretarial Note.— DGP-WG/04-WP/37

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A124 ~~Only~~ ~~m~~Mixtures ~~with~~ containing not more than 23.5 per cent oxygen by volume may be transported under this entry when no other oxidizing gases are present. A Division 5.1 subsidiary risk label is not required for any concentrations within this limit.

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A126 ~~Even though the substance has a flammability hazard, it only exhibits such hazards under extreme fire conditions in confined areas.~~ Not used.

A127 ~~Packages containing mixtures with a flashpoint of less than 60.5°C must bear a subsidiary risk label.~~ Not used.

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A138 This entry applies only to calcium hypochlorite, dry ~~or hydrated~~, when transported in non-friable.

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A141 ~~This entry applies to human or animal material including, but not limited to, excreta, secreta, blood and its components, tissue and tissue fluids, and body parts being transported for purposes such as research, diagnosis, investigational activities, disease treatment or prevention~~. Not used.

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A145 Waste aerosols are prohibited from air transport.

A146 This entry applies to fuel cell cartridges containing flammable liquids including methanol or methanol/water solutions. Fuel cell cartridge means a container that stores fuel for discharge into fuel cell powered equipment through a valve(s) that controls the discharge of fuel into such equipment and is free of electric charge generating components. The cartridge must be designed and constructed to prevent the fuel from leaking during normal conditions of transport.

This entry applies to fuel cell cartridge design types shown without their packaging to pass an internal pressure test at a pressure of 100 kPa (gauge).

A147 Where substances have a flash point of 60°C or less, the package(s) must bear a "FLAMMABLE LIQUID" subsidiary risk label in addition to the hazard label(s) required by these Instructions.

A148 Alcohols containing petroleum products (e.g. gasoline) up to 5 per cent must be transported under the entry UN 1987 **Alcohols, n.o.s**.

A149 For environmentally hazardous substances meeting the criteria of 2.9.3 of the UN Recommendations, an additional mark as specified in 5;2.4.9 must be applied.

A150 – An additional subsidiary risk hazard label may be required by a Note found adjacent to the technical name entry in Table 2-7.

Secretarial Note.— DGP-WG/04-WP/22

A151 When dry ice is used as a refrigerant for other than dangerous goods loaded in a unit load device or, other type of pallet , the quantity limits per package shown in columns 10 and 12 in table 3-1 for dry ice do not apply. In such case, the unit load device, or other type of pallet must be properly identified and must allow the venting of the carbon dioxide gas to prevent a dangerous build up of pressure.

Secretarial Note.— DGP-WG/04-WP/24 as modified

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Chapter 4

DANGEROUS GOODS IN LIMITED QUANTITIES

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4.1 APPLICABILITY

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Divisions 2.1 and 2.2	~~Aerosols~~ UN1950 and UN 2037 without subsidiary risk
~~Division 2.2~~	~~Gases without subsidiary risk but excluding refrigerated liquefied gases~~

Secretarial Note.— DGP-WG/05-WP/24

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4.3 QUANTITY LIMITATIONS

4.3.1 The net quantity per package must not exceed the quantity specified in column 10 of Table 3-1 against the packing instruction number identified by the prefix letter "Y" in column 9.

4.3.2 The gross mass per package must not exceed 30 kg.

4.3.3 When different dangerous goods are contained in one outer packaging, the quantities of such dangerous goods must be so limited that:

a) for classes other than Classes 2 and 9, the total net quantity in the package does not exceed the value of 1, where "Q" is calculated using the formula:

$$Q = \frac{n_1}{M_1} + \frac{n_2}{M_2} + \frac{n_3}{M_3} + \ldots$$

where n_1, n_2 etc., are the net quantities of the different dangerous goods and M_1, M_2 etc., are the maximum net quantities for these different dangerous goods shown in Table 3-1 against the relevant "Y" packing instructions; and

b) for Classes 2 and 9:

1) when packed together without goods of other classes, the gross mass of the package does not exceed 30 kg; or

2) when packed together with goods of other classes, the gross mass of the package does not exceed 30 kg and the total net quantity in the package of goods other than in Classes 2 or 9 does not exceed the value of 1 when calculated according to a) above.

c) carbon dioxide, solid (dry ice), UN 1845 may be packed together with goods of other classes, provided that the gross mass of the package does not exceed 30 kg. The quantity of dry ice does not need to be taken into account in the calculation of the "Q" value. However, the packaging containing the carbon dioxide, solid (dry ice) and the outer packaging must permit the release of carbon dioxide gas.

Secretarial Note.— DGP-WG04-WP/43

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