



WORKING PAPER

DANGEROUS GOODS PANEL (DGP)

THIRTIETH MEETING

Montréal, 6 to 10 October 2025

- Agenda Item 2: Managing air-specific safety risks and identifying anomalies (REC-A-DGS-2027)**
2.2: Develop proposals, if necessary, for amendments to the Technical Instructions for the *Safe Transport of Dangerous Goods by Air* (Doc 9284) for incorporation in the 2027-2028 Edition

AMENDMENT TO SPECIAL PROVISIONS

(Presented by T. Muller)

SUMMARY

Based on the guidance document to develop the Technical Instructions, the shipper must include a statement on the air waybill when a special provision allows a substance or article to be shipped as non-dangerous goods under the condition the shipper has performed certain actions as described in the special provision. The requirement to provide such a statement is missing in some special provisions.

Action by the DGP: The DGP is invited to add the sentence “The words “not restricted” and the special provision number must be provided on the air waybill when an air waybill is issued.” to Special Provisions A41, A59, A114, A186, A196 and A230 as shown in the appendix to this working paper.

1. INTRODUCTION

1.1 Certain special provisions allow substances or articles to be excepted from the provisions of the Technical Instructions and shipped as non-dangerous goods (not restricted).

1.2 In accordance with paragraph 3.4.5 of *Guidance for the Panel to Aid in Preparation of the Technical Instructions and Supporting Documents* (version 2, November 2023), when the shipper must perform certain actions, as described in the special provision, for the substance or article to be offered for air transport as “not restricted”, the special provision also contains a requirement that the shipper must include a statement on the air waybill, when one is used. The statement on the air waybill must include the words “not restricted” and the special provision number.

1.3 If a special provision allows a substance or article to be excepted from the provisions of the Technical Instructions only based on classification considerations and/or quantity limitations and no further actions are required by the shipper, the statement on the air waybill does not apply.

1.4 However, it has been brought to our attention by dangerous goods inspectors that the requirement to provide the required statement on the air waybill is missing in some provisions.

2. ACTION BY THE DGP

2.1 The DGP is invited to add the sentence “The words “not restricted” and the special provision number must be provided on the air waybill when an air waybill is issued.” to Special Provisions A41, A59, A114, A186, A196 and A230 as shown in the appendix to this working paper.

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APPENDIX

PROPOSED AMENDMENT TO PART 3 OF THE TECHNICAL INSTRUCTIONS

Part 3

DANGEROUS GOODS LIST, SPECIAL PROVISIONS AND LIMITED AND EXCEPTED QUANTITIES

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Chapter 3

SPECIAL PROVISIONS

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Table 3-2. Special provisions

<i>TIs</i>	<i>UN</i>
A41	Permeation devices that contain dangerous goods and that are used for calibrating air quality monitoring devices are not subject to these Instructions when carried as cargo provided the following requirements are met: a) Each device must be constructed of a material compatible with the dangerous goods it contains; b) The total contents of dangerous goods in each device is limited to 2 millilitres and the device must not be liquid full at 55°C; c) Each permeation device must be placed in a sealed, high impact-resistant, tubular inner packaging of plastic or equivalent material. Sufficient absorbent material must be contained in the inner packaging to completely absorb the contents of the device. The closure of the inner packaging must be securely held in place with wire, tape or other positive means; d) Each inner packaging must be contained in a secondary packaging constructed of metal, or plastic having a minimum thickness of 1.5 mm. The secondary packaging must be hermetically sealed; e) The secondary packaging must be securely packed in strong outer packaging. The completed package must be capable of withstanding, without breakage or leakage of any inner packaging and without significant reduction in effectiveness: i) the following free drops onto a rigid, non-resilient, flat and horizontal surface from a height of 1.8 m: — one drop flat on the bottom; — one drop flat on the top; — one drop flat on the long side; — one drop flat on the short side; — one drop on a corner at the junction of three intersecting edges; and ii) a force applied to the top surface for a duration of 24 hours, equivalent to the total weight of identical packages if stacked to a height of 3 m (including the test sample).

Note.— Each of the above tests may be performed on different but identical packages.

TIs UN

- f) The gross mass of the completed package must not exceed 30 kg.

The words "not restricted" and the special provision number A41 must be provided on the air waybill when an air waybill is issued.

- A59 A tire assembly unserviceable or damaged is not subject to these Instructions if the tire is deflated to a gauge pressure of less than 200 kPa at 20°C. A tire assembly with a serviceable tire is not subject to these Instructions provided the tire is not inflated to a gauge pressure exceeding the maximum rated pressure for that tire. However, such tires (including valve assemblies) must be protected from damage during transport, which may require the use of a protective cover.

The words "not restricted" and the special provision number A59 must be provided on the air waybill when an air waybill is issued.

- A114 (283) Articles, containing gas, intended to function as shock absorbers, including impact energy absorbing devices, or pneumatic springs are not subject to these Instructions provided:

- a) each article has a gas space capacity not exceeding 1.6 litres and a charge pressure not exceeding 280 bar where the product of the capacity (litres) and charge pressure (bars) does not exceed 80 (that is, 0.5 litre gas space and 160 bar charge pressure, 1 litre gas space and 80 bar charge pressure, 1.6 litre gas space and 50 bar charge pressure, 0.28 litre gas space and 280 bar charge pressure);
- b) each article has a minimum burst pressure of 4 times the charge pressure at 20°C for products not exceeding 0.5 litre gas space capacity and 5 times charge pressure for products greater than 0.5 litre gas space capacity;
- c) each article is manufactured from material which will not fragment upon rupture;
- d) each article is manufactured in accordance with a quality assurance standard acceptable to the appropriate national authority; and
- e) the design type has been subjected to a fire test demonstrating that pressure in the article is relieved by means of a fire-degradable seal or other pressure-relief device such that the article will not fragment and the article does not rocket.

The words "not restricted" and the special provision number A114 must be provided on the air waybill when an air waybill is issued.

- A186 (361) This entry applies to electric double layer capacitors with an energy storage capacity greater than 0.3 Wh. Capacitors with an energy storage capacity of 0.3 Wh or less are not subject to these Instructions. Energy storage capacity means the energy held by a capacitor, as calculated using the nominal voltage and capacitance. All capacitors to which this entry applies, including capacitors containing an electrolyte that does not meet the classification criteria of any class or division of dangerous goods, must meet the following conditions:

- a) capacitors not installed in equipment must be transported in an uncharged state. Capacitors installed in equipment must be transported either in an uncharged state or protected against a short circuit;
- b) each capacitor must be protected against a potential short circuit hazard in transport as follows:
 - i) when a capacitor's energy storage capacity is less than or equal to 10 Wh or when the energy storage capacity of each capacitor in a module is less than or equal to 10 Wh, the capacitor or module must be protected against a short circuit or be fitted with a metal strap connecting the terminals; and
 - ii) when the energy storage capacity of a capacitor or a capacitor in a module is more than 10 Wh, the capacitor or module must be fitted with a metal strap connecting the terminals;
- c) capacitors containing dangerous goods must be designed to withstand a 95 kPa pressure differential;
- d) capacitors must be designed and constructed to safely relieve pressure that may build up in use, through a vent or a weak point in the capacitor casing. Any liquid which is released upon venting must be contained by the packaging or by the equipment in which a capacitor is installed; and
- e) capacitors manufactured after 31 December 2013 must be marked with the energy storage capacity in Wh.

Capacitors containing an electrolyte not meeting the classification criteria of any class or division of dangerous goods, including when installed in equipment, are not subject to other provisions of these Instructions.

Capacitors containing an electrolyte meeting the classification criteria of any class or division of dangerous goods, with an energy storage capacity of 10 Wh or less are not subject to other provisions of these Instructions when they are capable of withstanding a 1.2 metre drop test unpackaged on an unyielding surface without loss of contents.

Capacitors containing an electrolyte meeting the classification criteria of any class or division of dangerous goods that are not installed in equipment and with an energy storage capacity of more than 10 Wh are subject to these Instructions.

Capacitors installed in equipment and containing an electrolyte meeting the classification criteria of any class or division of dangerous goods are not subject to other provisions of these Instructions provided the equipment is packaged in a strong outer packaging constructed of suitable material and of adequate strength and design in relation to the packaging's intended use and in such a manner as to prevent accidental functioning of capacitors during transport. Large robust equipment containing capacitors may be offered for transport unpackaged or on pallets when capacitors are afforded equivalent protection by the equipment in which they are contained.

The words "not restricted" and the special provision number A186 must be provided on the air waybill when an air waybill is issued.

Note.— Capacitors which by design maintain a terminal voltage (such as asymmetrical capacitors) do not belong to this entry.

- A196 (372) This entry applies to asymmetric capacitors with an energy storage capacity greater than 0.3 Wh. Capacitors with an energy storage capacity of 0.3 Wh or less are not subject to these Instructions.

Energy storage capacity means the energy stored in a capacitor, as calculated according to the following equation:

$$Wh = 1/2CN(UR^2-UL^2) \times (1/3600),$$

using the nominal capacitance (CN), rated voltage (UR) and rated lower limit voltage (UL).

All asymmetric capacitors to which this entry applies must meet the following conditions:

- a) capacitors or modules must be protected against short circuit;
- b) capacitors must be designed and constructed to safely relieve pressure that may build up in use, through a vent or a weak point in the capacitor casing. Any liquid which is released upon venting must be contained by packaging or by equipment in which a capacitor is installed;
- c) capacitors manufactured after 31 December 2015 must be marked with the energy storage capacity in Wh; and
- d) capacitors containing an electrolyte meeting the classification criteria of any class or division of dangerous goods must be designed to withstand a 95 kPa pressure differential.

Capacitors containing an electrolyte not meeting the classification criteria of any class or division of dangerous goods, including when configured in a module or when installed in equipment, are not subject to other provisions of these Instructions.

Capacitors containing an electrolyte meeting the classification criteria of any class or division of dangerous goods, with an energy storage capacity of 20 Wh or less, including when configured in a module, are not subject to other provisions of these Instructions when the capacitors are capable of withstanding a 1.2 m drop test unpackaged on an unyielding surface without loss of contents.

Capacitors containing an electrolyte meeting the classification criteria of any class or division of dangerous goods that are not installed in equipment and with an energy storage capacity of more than 20 Wh are subject to these Instructions.

Capacitors installed in equipment and containing an electrolyte meeting the classification criteria of any class or division of dangerous goods are not subject to other provisions of these Instructions provided that the equipment is packaged in a strong outer packaging constructed of suitable material, and of adequate strength and design, in relation to the packaging's intended use and in such a manner as to prevent accidental functioning of capacitors during transport. Large robust equipment containing capacitors may be offered for transport unpackaged or on pallets when capacitors are afforded equivalent protection by the equipment in which they are contained.

The words "not restricted" and the special provision number A196 must be provided on the air waybill when an air waybill is issued.

Note.— Notwithstanding the provisions of this special provision, nickel-carbon asymmetric capacitors containing Class 8 alkaline electrolytes must be transported as UN 2795, Batteries, wet, filled with alkali, electric storage.

A230 (403) Nitrocellulose (NC) membrane filters covered by this entry with NC content not exceeding 53 g/m² and an NC net weight not exceeding 300 g per inner packaging, are not subject to the requirements of these Instructions if they meet the following conditions:

- a) they are packed with paper separators of minimum 80 g/m² placed between each layer of NC membrane filters;
- b) they are packed to maintain the alignment of the NC membrane filters and the paper separators in any of the following configurations:
 - 1) rolls tightly wound and packed in plastic foil of minimum 80 g/m² or aluminium pouches with an oxygen permeability of equal or less than 0.1 per cent according to standard ISO 15105-1:2007;
 - 2) Sheets packed in cardboard of minimum 250 g per square metre or aluminium pouches with an oxygen permeability of equal or less than 0.1 per cent according to standard ISO 15105-1:2007; or
 - 3) round filters packed in disc holders or cardboard packaging of minimum 250 g per square metre or single packed in pouches of paper and plastic material of total minimum 100 g per square metre.

The words "not restricted" and the special provision number A230 must be provided on the air waybill when an air waybill is issued.

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