



**WORKING PAPER**

**DANGEROUS GOODS PANEL (DGP)**

**THIRTIETH MEETING**

**Montréal, 6 to 10 October 2025**

**Agenda Item 1: Harmonizing ICAO dangerous goods provisions with UN Recommendations on the Transport of Dangerous Goods (REC-A-DGS-2027)**

**1.2: 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**

**PACKING INSTRUCTION TO BE USED FOR ARTICLES CLASSIFIED AS “ARTICLES CONTAINING DANGEROUS GOODS N.O.S.”**

(Presented by P. Tatin)

**SUMMARY**

This working paper invites the panel to consider clarifying which packing instruction should be applied to the various entries for articles containing dangerous goods, n.o.s. assigned to UN numbers 3537 through 3548.

**Action by the DGP:** The DGP is invited to:

- a) agree to one of the two options proposed in Appendix A to address challenges with determining which packing instruction applies to articles assigned to UN numbers 3537 through 3548;
- b) consider whether approvals and exemptions related to entries assigned to UN numbers 3537 through 3548 should be grouped into a single approval or exemption; and
- c) consider whether the provisions in Parts 2;0.6.2 and 2;0.6.5 are contradictory, as highlighted in paragraph 3.2 of this working paper.

**1. INTRODUCTION**

1.1 This working paper outlines overlaps between various parts of the Technical Instructions and the Supplement with respect to articles containing dangerous goods, which cause confusion when considering which packing instruction and/or conditions for issuing approvals apply. It also outlines

overlaps between approval provisions for these articles. The overlaps are described below and identified in Appendix B to this working paper.

## 2. MULTIPLE PACKGING INSTRUCTIONS

2.1 Part 2;0.6 of the Technical Instructions sets out the classification criteria for articles containing dangerous goods as a residue or as an integral element of the machinery or apparatus as either UN 3363 or one of the entries for articles containing dangerous goods (UN numbers 3537 through 3548) in accordance with 2;0.6.1 to 2;0.6.6. All the entries assigned to UN numbers 3537 through 3548 are forbidden for transport on both passenger and cargo aircraft under normal circumstances, but some are permitted through approvals or under specific conditions. This leads to potentially three packing instructions being applicable to a single entry, i.e.:

- a) A specific packing instruction for each class of articles is assigned to entries in the Supplement that can be transported through an approval issued by the States of Origin and the Operator in accordance with Special Provision A2.
- b) Packing Instruction 910 is applicable to some of the articles that are permitted to contain pre-production prototype or low production run lithium or sodium ion cells or batteries that have not been UN design-type tested through an approval issued by the States of Origin and the Operator in accordance with Special Provision A88
- c) Packing Instruction 222 and Packing Instruction 975 are applicable to UN Nos. 3538 and 3548, respectively, when articles identified as forbidden under normal circumstances through Table 3-1 are permitted on both passenger and cargo aircraft under certain circumstances in accordance with Special Provisions A224 for UN 3538 and Special Provision A225 for UN 3548. They may also be transported under an approval in accordance with Special Provision A2 in accordance with Packing Instruction 221 for UN 3538 and Packing Instruction 973 for UN 3548.

The packing instructions and special provisions assigned to all the entries for dangerous goods contained in articles, along with the basic classification criteria for them, are shown in Appendix A to this working paper.

2.2 Although all dangerous goods that are integrated into a machine or device that are necessary for its operation and cannot be removed for transport must be notified on the dangerous goods transport document (shipper's declaration) with reference to Part 5;4.1.5.1 c), the machine or device should be packaged in accordance with one and only one packing instruction that aligns with the requirements associated with the predominant hazard of the dangerous goods.

## 3. MULTIPLE APPROVAL/EXEMPTION PROVISIONS

3.1 Entries assigned to UN numbers 3537 through 3548 may be subject to more than one approval or exemption provision, i.e. Special Provision A2 to transport articles permitted on cargo aircraft through an approval granted by the States of Origin and the Operator, Special Provision A88 to transport articles containing pre-production prototype or low production run sodium ion or lithium cells or batteries through an approval granted by the States of Origin and the Operator, and Special Provision A333, where the articles can only be transported under an exemption. It is suggested that all should be grouped into a single approval or exemption.

3.2 In also suggested that Part 2;0.6.2, which states that “the requirements of Special Provision A88 apply” and Part 2;0.6.5 which states that “if dangerous goods classified as Class 9 are contained within the article, all other dangerous goods present in the article must be considered to present a higher hazard” are contradictory.

#### 4. ACTION BY THE DGP

4.1 The DGP is invited to:

- a) agree to one of the two options proposed in Appendix A to address challenges with determining which packing instruction applies to articles assigned to UN numbers 3537 through 3548;
- b) consider whether approvals and exemptions related to entries assigned to UN numbers 3537 through 3548 should be grouped into a single approval or exemption; and
- c) consider whether the provisions in Parts 2;0.6.2 and 2;0.6.5 are contradictory, as highlighted in paragraph 3.2 of this working paper.

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## APPENDIX A

### PROPOSED AMENDMENT TO THE TECHNICAL INSTRUCTIONS

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OPTION 1: Amend 2;0.6.2

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#### Part 2

### CLASSIFICATION OF DANGEROUS GOODS

#### INTRODUCTORY CHAPTER

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#### 6. CLASSIFICATION OF ARTICLES AS ARTICLES CONTAINING DANGEROUS GOODS N.O.S.

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6.2 Such articles may in addition contain cells or batteries. Lithium cells and batteries that are integral to the article must be of a type proven to meet the testing requirements of the UN Manual of Tests and Criteria, Part III, subsection 38.3. For articles containing pre-production prototype lithium cells or batteries transported for testing, or for articles containing lithium cells or batteries manufactured in production runs of not more than 100 cells or batteries, the requirements of Special Provision A88 apply. Irrespective of Packing Instruction 910, the appropriate packing instruction assigned to the article in Table S-3-1 of the Supplement must be given priority.

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OPTION 2: Amend Special Provision A88

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#### 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

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A88 Pre-production prototypes of lithium cells or batteries, or sodium ion cells or batteries, when these prototypes are transported for testing or low production runs (that is, annual production runs consisting of not more than 100 lithium cells or batteries, or sodium ion cells or batteries) of lithium cells or batteries, or sodium ion cells or batteries that have not been tested to the requirements in Part III, 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 State of the Operator and the requirements ~~in Packing Instruction 910 of the Supplement~~ of the applicable packing instruction are met. The following packing instructions apply:

- Packing Instruction 910 of the Supplement for UN 3090, UN 3091, UN 3480, UN 3481, UN 3551 and UN 3552;
- and
- Packing instructions assigned to the entries in the Table S-3-1 of the Supplement for UN 3537 to UN 3548.

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## APPENDIX B

### DANGEROUS GOODS CONTAINED IN ARTICLES/APPARATUS/MACHINERY

UN No.	Name	Special provisions (those higher than A299 are contained in the Supplement only)	Criteria	Table 3-1		Table S-3-1	
				Passenger and cargo aircraft	Cargo aircraft only	Passenger and cargo aircraft	Cargo aircraft only
3363	<b>Dangerous goods in apparatus or Dangerous goods in articles or Dangerous goods in machinery</b>	A48 A107 A332	Must meet the provisions of Packing Instruction 962 (maximum 0.5 L/1 kg/0.5 for gas (Division 2.2 only)  Through A107, can exceed these limits if permitted in limited quantities, within limits established by UN Model Regulations, through an approval of the States of Origin and Operator	See 962	See 962	See 962	See 962
3537	<b>Articles containing flammable gas, n.o.s.*</b>	A2 A88	In accordance with 2;0.6.1 to 2;0.6.6  May contain lithium batteries meeting UN 38.3 testing. Exception from UN 38.3 testing for pre-production prototypes or production runs 100 or less cells or batteries if in accordance with A88	Forbidden	Forbidden	Forbidden	221, 910  221 under A2 approval  910 under A88 approval

UN No.	Name	Special provisions (those higher than A299 are contained in the Supplement only)	Criteria	Table 3-1		Table S-3-1	
				Passenger and cargo aircraft	Cargo aircraft only	Passenger and cargo aircraft	Cargo aircraft only
3538	Articles containing non-flammable, non toxic gas, n.o.s.*	A2 A88 A225 A333 A335	May contain lithium cells or batteries complying with Section II of Packing Instruction 967 or 970	Forbidden except through application of A225 packed in accordance with Packing Instruction 222	Forbidden except through application of A225 packed in accordance with Packing Instruction 222	Forbidden except through application of A225 packed in accordance with Packing Instruction 222	221, 222, 910:  221 under A2 approval  222 through application of A225 (no approval needed)  910 under A88 approval  In some cases approval not permitted, only exemption (A333)
3539	Articles containing toxic gas, n.o.s.*	A333		Forbidden	Forbidden	Forbidden	Forbidden
3540	Articles containing flammable liquid, n.o.s.*	A2 A88 A333		Forbidden	Forbidden	Forbidden	378, 910  378 under A2 approval  910 under A88 approval  In some cases approval not permitted, only exemption (A333)
3541	Articles containing flammable solid, n.o.s.*	A2 A88 A333		Forbidden	Forbidden	Forbidden	400, 910  400 under A2 approval  910 under A88 approval  In some cases approval not permitted, only exemption (A333)



UN No.	Name	Special provisions (those higher than A299 are contained in the Supplement only)	Criteria	Table 3-1		Table S-3-1	
				Passenger and cargo aircraft	Cargo aircraft only	Passenger and cargo aircraft	Cargo aircraft only
3542	Articles containing a substance liable to spontaneous combustion, n.o.s.*	A333		Forbidden	Forbidden	Forbidden	Can only be transported under an exemption (A333)
3543	Articles containing a substance which emits flammable gas in contact with water, n.o.s.*	A333		Forbidden	Forbidden	Forbidden	Can only be transported under an exemption (A333)
3544	Articles containing oxidizing substance, n.o.s.*	A333		Forbidden	Forbidden	Forbidden	Can only be transported under an exemption (A333)
3545	Articles containing organic peroxide, n.o.s.*	A333		Forbidden	Forbidden	Forbidden	Can only be transported under an exemption (A333)
3546	Articles containing toxic substance, n.o.s.*	A2 A88		Forbidden	Forbidden	Forbidden	600, 910  600 under A2 approval  910 under A88 approval
3547	Articles containing corrosive substance, n.o.s.*	A2 A88		Forbidden	Forbidden	Forbidden	877, 910  877 under A2 approval  910 under A88 approval
3548	Articles containing miscellaneous dangerous goods, n.o.s.*	A2 A88 A224	May contain lithium cells or batteries complying with Section II of Packing Instruction 967 or 970	Forbidden except through application of A224 packed in accordance with Packing Instruction 975	Forbidden except through application of A224 packed in accordance with Packing Instruction 975	Forbidden except through application of A224 packed in accordance with Packing Instruction 975	973, 910, 975  973 under A2 approval  910 under A88 approval  975 through application of A224 (no approval needed)