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# Dangerous Goods Regulations

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## SIGNIFICANT CHANGES AND AMENDMENTS IN THE 64TH EDITION (2023)

The 64<sup>th</sup> edition of the IATA *Dangerous Goods Regulations* incorporates all amendments made by the ICAO Dangerous Goods Panel in developing the content of the 2023–2024 edition of the ICAO Technical Instructions as well as changes adopted by the IATA Dangerous Goods Board. The following list is intended to assist the user to identify the main changes introduced in this edition and must not be considered an exhaustive listing. The changes have been prefaced by the section or subsection in which the change occurs.

**Record of Addendum.** Notes have been added to the record of addendum table to clarify that the date entered in the table should be the date that the addendum changes were incorporated into the copy of the DGR and the name entered is that of the person who incorporated those changes.

### 2—Limitations

**2.3—Dangerous Goods Carried by Passengers or Crew**—The provisions for battery-powered mobility aids (2.3.2.2—2.3.2.4) have been revised to identify that batteries only need be removed when the design of the mobility aid does not provide adequate protection against damage to the battery.

**Note:**

*The requirement for mobility aids with spillable batteries (2.3.2.3) to be handled, loaded and stowed upright at all times, or the battery must be removed remains.*

**2.6—Dangerous Goods in Excepted Quantities**—Paragraph 2.6.5.1 has been revised to clarify that a package containing dangerous goods in excepted quantities may also contain goods not subject to the Regulations.

**2.8.1—State Variations**—The List (2.8.1) and List of State Variations (2.8.2) have been revised to include new States and amended variations for existing States.

### 3—Classification

3.4.1.2.4 and 3.5.2.2—The classification provisions for self-reactive substances and organic peroxides, respectively, have been revised to fully align to the wording in the UN Model Regulations.

3.8.3.2.3—This paragraph has been revised to clarify that substances or mixtures classified as corrosive must be assigned to Packing Group I if the test results do not indicate a different packing group.

3.9.2.6.1—The requirements of the lithium battery test summary have been revised to remove the need for the test summary for button cells installed in equipment.

### 4—Identification

#### 4.2—List of Dangerous Goods

The amendments to the List of Dangerous Goods include:

- change of the maximum net quantity per package on Cargo Aircraft Only for UN 2794, **Batteries, wet, filled with acid**, UN 2795, **Batteries, wet, filled with alkali** and UN 3292, **Cells, containing sodium** from “No limit” to 400 kg. These articles must be packed in a UN specification packaging, for which the limit is 400 kg.
- addition of Special Provision A154 to the entries for UN 3171, **Battery-powered vehicle**, UN 3528, UN 3529, UN 3530, engines and machinery, UN 2990 and UN 3072, life-saving appliances and UN 3166, vehicles.
- addition of a new entry, UN 3550, **Cobalt dihydroxide powder**.
- addition of Special Provision A4 to UN 2922, **Corrosive liquid, toxic, n.o.s.** and addition of A5 to UN 2923, **Corrosive solid, toxic, n.o.s.**
- reclassification of UN 1891, **Ethyl bromide**, from Division 6.1 to Class 3 with a Division 6.1 subsidiary hazard.
- deletion of UN 1169, **Extracts, aromatic, liquid** and change of the proper shipping name for UN 1197, to become **Extracts, liquid**, for flavour or aroma.
- addition of packing group(s), where applicable, to entries shown as “forbidden/forbidden” with a UN number and proper shipping name. The packing group, when assigned, forms part of the classification information.

## 4.4—Special Provisions

The amendments to the special provisions include:

- addition of a sentence to special provisions A1 and A2 specifying that when dangerous goods are being offered under an approval that A1 or A2, as applicable must be noted in the authorization column of the Shipper's Declaration.
- amendment to A176 specifying that when metal hydride storage systems are being offered that the special provision number must be noted in the authorization column of the Shipper's Declaration;

New special provisions include:

- A221—assigned to UN 1002, **Air, compressed** identifying that mixtures of nitrogen and oxygen in the concentrations specified may be transported as UN 1002 and that a Division 5.1 subsidiary hazard label is not required;
- A223—assigned to UN 2990, **Life-saving appliance, self-inflating** and UN 3072, **Life-saving appliance, not self-inflating** identifying that life-saving appliances packed in strong rigid outer packagings with no dangerous goods other than cartridges of a Division 2.2 compressed or liquefied gas, with no subsidiary hazard installed for the purposes of the activation of the device may be shipped as cargo as “not restricted”;

**Note:**

*the wording of A223 was previously included in Packing Instruction 955.*

- A224—assigned to UN 3548, **Articles containing miscellaneous dangerous goods, n.o.s.** This new special provision identifies that articles containing an environmentally hazardous substance may be shipped as cargo on a passenger or cargo aircraft in accordance with the provisions of Packing Instruction 975 and that Special Provision A2 assigned to the UN number then does not apply;
- A225—assigned to UN 3538, **Articles containing non-flammable, non-toxic gas, n.o.s.** This new special provision identifies that articles containing a Division 2.2 gas without a subsidiary hazard may be shipped as cargo on a passenger or cargo aircraft in accordance with the provisions of Packing Instruction 222 and that Special Provision A2 assigned to the UN number then does not apply.

## 5—Packing

### Packing Instructions

**Table 5.0.B—List of Inner Packagings**—Has been amended to remove reference to metal and plastic aerosols (IP7, IP7A, IP7B and IP7C).

**PI 203, PI Y203 and PI Y963**—Have been revised to remove all details of metal and plastic aerosols (IP7, IP7A, IP7B and IP7C). There is now a standard capacity of 1,000 mL for metal aerosols and receptacles, small containing gas (gas cartridges) and 500 mL for plastic receptacles in line with the provisions of the UN Model Regulations.

**PI 220, PI 378 and PI 972**—Have been revised to include additional packing requirements identifying that unless the design and construction of the engine or machinery is such that the containment for the dangerous goods is adequately protected then the engine or machinery must be packed in strong outer packagings or fixed in cradles, crates or other handling devices. Additional provisions have been added such that engines or machinery are forbidden for transport if lithium batteries in the engine or machinery are damaged or defective. There is also now a specific reference to engines or machinery that contain pre-production prototype lithium cells or batteries or low production runs of lithium cells or batteries that may be shipped on a cargo aircraft under an approval from the appropriate authority of the State of origin and the State of the operator.

**PI 222 and PI 975**—Have been added to address the packing provisions for UN 3538, **Articles containing non-flammable, non-toxic gas, n.o.s.** and UN 3548, **Articles containing miscellaneous dangerous goods, n.o.s.**, respectively, provided that the articles meet the conditions specified in Special Provision A224 or A225.

**PI 870**—Has been revised to remove reference to the packing provisions for batteries installed in equipment. Where batteries are installed in equipment, the correct classification is UN 3171, **Battery-powered equipment** and PI 952 applies.

**PI 950, PI 951 and PI 952**—Have been revised identifying that vehicles are forbidden for transport if lithium batteries in the vehicle are damaged or defective. There is also now a specific reference for vehicles that contain pre-production prototype lithium cells or batteries or low production runs of lithium cells or batteries

that may be shipped on a cargo aircraft under an approval from the appropriate authority of the State of origin and the State of the operator.

**PI 965 and PI 968**—Have been revised to require that each package prepared in accordance with Section IB must be capable of withstanding the 3 m stack test as applies to limited quantity packages.

**PI 966, PI 967, PI 969 and PI 970**—Section II have been revised to specify that when packages are placed into an overpack that the packages must be secured in the overpack and the intended function of each package must not be impaired by the overpack. This aligns to the general requirements for overpacks specified in 5.0.1.5.

## **6—Packaging Specifications and Performance Tests**

**6.1.7—6.1.9**—The requirements for aerosols have been deleted.

**6.4.1, 6.4.2**—The provisions for the design, construction, testing, initial and periodic inspection of cylinders, including UN cylinders have been revised.

**6.4.4**—The provisions for the test requirements for aerosols and gas cartridges have been revised.

## **7—Marking and Labelling**

**7.1.5.5**—The lithium battery mark has been revised to remove the requirement for a telephone number to be provided on the mark. There is a transition period until 31 December 2026 during which time the mark shown in the 63<sup>rd</sup> edition of the DGR may continue to be used.

## **8—Documentation**

**8.2.1**—The transitional period for the dangerous goods statement on the air waybill has been extended by a further two years until 31 December 2024.

## **9—Handling**

**9.3.7**—The provisions for replacements of labels on packages where the labels are found to be lost, detached or illegible after acceptance have been revised to include a requirement for marks, such as the excepted quantity mark and limited quantity mark to be replaced by the operator.

## **10—Radioactive Materials**

**10.8.3.9.2, Step 6**—The wording of Step 6 has been revised to include reference to mixtures of radionuclides for which relevant data are not available and where the shipper has determined the  $A_1$  or  $A_2$  value using Table 10.3.B that a statement must be added to the Shipper's Declaration.

**10.8.3.9.4**—Step 13 has been revised to include reference to mixtures of radionuclides for which relevant data are not available and where the shipper has used Table 10.3.B to determine the appropriate  $A_1$  or  $A_2$  value that reference must be made to the use of table 10.3.B as well as an indication of the radioactive contents as specified in the first column of table 10.3.B.

**Appendix A**—There are many changes to the defined terms shown in the Glossary.

**Appendix C**—There are additions to the list of currently assigned self-reactive substances on Division 4.1 in Table C.1 and to the list of organic peroxides in Table C.2.

**Appendix D**—Contact details for competent authorities have been updated.

**Appendix E**—Changes have been made to the list of UN Specification Packaging Suppliers (E.1) and the Package Testing Facilities (E.2).

**Appendix F**—The list of Sales Agents (F.2) has been revised. IATA Accredited Training Schools (F.3—F.5) have been updated to include entities that have joined the new CBTA Centre Program.

**Appendix H**—The guidance material on development and implementation of competency-based training for dangerous goods has been removed from the DGR and is now posted on the IATA website as a stand-alone document, [www.iata.org/dangerousgoods](http://www.iata.org/dangerousgoods).