

## SIGNIFICANT CHANGES AND AMENDMENTS TO THE 60TH EDITION (2019)

The 60<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 2019–2020 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.

### General

Throughout the 60<sup>th</sup> edition there are many instances where the word “risk” has been changed to “hazard”, e.g. “subsidiary risk” is now “subsidiary hazard”. This change has been made to reflect the correct usage of the term “risk” to align to the meaning of risk in accordance with safety management systems (SMS) where safety risk is defined as: “the predicted probability and severity of the consequences or outcomes of a hazard”.

### 1—Limitations

#### 1.5—Training Requirements

**1.5.0.3**—Examples have been added to provide an explanation of the 3-month “window” for recurrent training and the application of the original training expiry.

### 2—Limitations

#### 2.3—Dangerous Goods Carried by Passengers or Crew

**2.3.0**—New text has been introduced to clarify that the most appropriate entry in 2.3 that describes the item must be used and where an article contains more than one item of dangerous goods, all applicable provisions must be met. In addition, 2.3.0.5 requires that where a passenger's carry-on baggage cannot be accommodated in the cabin, the operator must verify with the passenger that the carry-on baggage item does not contain dangerous goods forbidden in checked baggage.

**2.3.0.8**—Identifies that radiopharmaceuticals contained in a person following medical treatment and energy efficient lamps in retail packagings are not subject to these Regulations, consequently the provisions applicable have been deleted from 2.3 and Table 2.3.A.

**2.3.2.2, 2.3.2.3 and 2.3.2.4**—The provisions applicable to battery-powered mobility aids have been revised to simplify and standardise the requirements for loading in an aircraft where the operator is responsible for ensuring that the mobility aid is properly restrained and protected against damage from baggage or other cargo. The term “collapsible” that was applied to lithium ion battery powered mobility aids has been deleted.

#### 2.8—State and Operator Variations

There are a number of additions, deletions and amendments to variations submitted by States and operators.

### 3—Classification

**3.5.1.2.2**—Clarification on the classification of ammonium nitrate fertilizers.

**3.6.2.6**—Classification of infected animal material has been deleted.

**3.8**—Significant changes to the provisions for the classification of corrosive substances and in particular the methods to assign packing groups to mixtures. These changes reflect the work of the UN Subcommittee with the GHS Subcommittee to better align the classification provisions for transport for Class 8 substances with those for supply and use.

**3.9.2.6**—(f) new classification criteria have been added to address hybrid lithium batteries that are comprised of lithium metal and lithium ion cells. (g) identifies that manufacturers and subsequent distributors of lithium cells or batteries must make available a summary of the UN 38.3 tests with effect from 1 January 2020.

**3.11.4**—New classification criteria have been added for energetic samples.

**3.12**—New provisions for the classification of articles containing dangerous goods, n.o.s. This addresses the classification of articles where the type or quantity of dangerous goods that are an integral part of the article exceed that allowed as UN 3363.

## 4—Identification

### 4.2—List of Dangerous Goods

Amendments to the List of Dangerous Goods include:

- addition of twelve new UN numbers, UN 3537 to UN 3548, that have been assigned to articles containing dangerous goods in Classes 2, 3, 4, 5, 8 and 9 and Division 6.1;
- modification to the entries for UN 3316—Chemical kit and First aid kit to delete reference to packing groups II and III. The shipper must assign the appropriate packing group based on the most restrictive packing group in the kit as specified in special provision A44;
- addition of “stabilized” to UN 3302, **2-Dimethylaminoethyl acrylate**;
- assignment of ID 8001 to Disilane. This has been done as a placeholder until the UN Subcommittee addresses a gap in the existing regulations for pyrophoric gases. The entry for disilane identifies that it is completely forbidden;
- addition of a new entry, UN 3536, **Lithium batteries installed in cargo transport unit**. This entry is to address multi modal containers with installed lithium ion batteries, battery management systems and other electronics that function as a large fixed-base battery;
- the emergency response drill code, ERG Code shown in column N, for all lithium battery entries has been changed from “9FZ” to “12FZ”. This reflects a change agreed by the ICAO DGP to identify that the inherent hazard for lithium batteries is not “9—No general inherent risk” and a new drill number “12—Fire, heat, smoke, toxic and flammable vapour”, was adopted.
- addition of a new entry, UN 3535, **Toxic solid, flammable, inorganic, n.o.s.** ★.

### 4.4—Special Provisions

Amendments to the special provisions include:

- replacement of A21, A134, A203 and A207, assigned to vehicles, which all become “not used” with a new special provision **A214**;
- revision to A59 to include reference to a maximum gauge pressure under which the exception for unserviceable or damaged tyre assemblies applies;
- revision to A67 to include the test requirements for classification of non-spillable batteries from Packing Instruction 872;
- revisions to A79 and A90 and change to A89 to become “not used”, to clarify the classification of ammonium nitrate fertilizers;
- revision to A107 to address the transport of UN 3363, **Dangerous goods in apparatus** or **Dangerous goods in machinery** where the quantity of the dangerous goods exceeds the allowance in PI 962;
- revision to A201 to include provisions permitting the transport of lithium metal or lithium ion batteries as cargo on passenger aircraft with the approval of the States of Origin, destination and operator.

New special provisions have been added as follows:

- A213—Identifies that hybrid lithium batteries, which are comprised of lithium metal cells and lithium ion cells, must be assigned to UN 3090 or UN 3091 and the limits that apply when assigned to Section II;
- A334—Identifies the conditions that apply to lithium batteries shipped under approval as provided by special provision A201;
- A806—Provides information on how a shipper must determine the subsidiary hazard(s) for articles containing dangerous goods, n.o.s. and identifies that any subsidiary hazard must be shown on the Shipper's Declaration;
- A807—Identifies that the assigned entry must not be used for disilane or other pyrophoric gases.

## 5—Packing

### Packing Instructions

**PI 200** and **PI 218**—Have been revised to clarify the terminology associated with the calculation of the pressure in the cylinder.

**PI 361** and **PI 364**—Has been revised to restrict UN 1308, **Zirconium suspended in a flammable liquid** in packing groups I and II to combination packagings with a maximum of 75 kg gross weight of the completed package.

**PI 459**—Packing provisions for small quantities of energetic samples have been added.

**PI 620** and **PI 650**—The conditions for the pressure differential test and the temperature ranges have been separated to be stand-alone requirements.

**PI 958**—Changes have been made to introduce the use of combination packagings, in addition to single packagings.

**PI 966** and **PI 969**—Clarification has been introduced into these packing instructions on the number of spare cells or batteries that may be in a package with equipment.

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

**6.4.2**—This subsection has been revised to bring in reference to new ISO standards and also to identify the period during which the ISO standards may be applied for manufacture and also after which time the standards may no longer be used.

## **7—Marking & Labelling**

**7.2.1**—A note has been added to draw attention to the correct application of GHS pictograms on packages.

**7.2.2.3.2(a)**—The specification for hazard labels has been revised to remove the requirement for the outside line to be a minimum of 2 mm in thickness.

**7.2.2.3.2(c)**—Clarification has been added that the new Class 9 lithium battery hazard label must not have any text in the bottom half other than the class number “9”.

**Lithium battery handling label**—The provisions that previously existed in 7.2.4.7 and Figure 7.4.H have been deleted as the lithium battery handling label is no longer valid in air transport.

## **8—Documentation**

**8.1.1** and **8.1.7**—Notes have been added under these paragraphs to identify that Shipper's Declaration form in the format as shown in the 59<sup>th</sup> edition of the DGR remain valid until 31 December 2024. These notes have been added as the design of the Shipper's Declaration form has been revised to replace “subsidiary risk” by “subsidiary hazard” in association with the class or division. The form has also been modified to remove reference to the title of the signatory and the place that the document was signed. These requirements were removed in the 58<sup>th</sup> edition of the DGR, but the form had not been revised as these changes were not considered significant enough to warrant a change to the form. However, with the change of risk to hazard it was thought appropriate to make changes to the form.

**8.1.9**—All example Shipper's Declarations have been modified as described above.

## **9—Handling**

**9.3.2.1.4**—A new provision has been added to identify that engines or machinery assigned to Class 3, UN 3528, do not require segregation from dangerous goods with a primary or subsidiary hazard of Division 5.1.

**9.3.4.3**—An additional exception for accessibility on loading of Cargo Aircraft Only dangerous goods has been included to allow loading of UN 3528 or UN 3529 in any location on a cargo aircraft.

**9.5.1.1.3**—The information required on the written information to the pilot-in-command has been revised to also require that the date of the flight be shown.

**Appendix A**—There are a number of changes to the defined terms in the glossary.

**Appendix B**—In Appendix B.2.2.4 new Cargo IMP codes have been added for UN 3090, Section II of PI 968—EBM and UN 3480, Section II of PI 965—EBI. These two new IMP codes facilitate the differentiation of Section II lithium batteries (UN 3090 and UN 3480) from those lithium batteries in Section II packed with equipment or contained in equipment (UN 3091 and UN 3481), which are currently assigned to ELM and ELI respectively.

**Appendix C**—There are revisions to the list of self-reactive substances in Table C.1 and 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), IATA Accredited Training Schools (F.3—F.5) and IATA Authorised Training Centres (F.6) have been revised.

**Appendix H**—The content of 1.5 in Appendix H has been revised to reflect the changes to the provisions for dangerous goods training as agreed by the ICAO Dangerous Goods Panel for competency-based training. At this time the new provisions will be adopted with effect 1 January 2021 with a 2-year transition. Appendix H also contains extensive guidance material for competency-based training. This guidance material is draft and industry is invited to review and comment as appropriate.