



IATA Dangerous Goods Regulations

50th Edition (English)
Effective 1 January 2009

ADDENDUM

Posted 23 December 2008

Users of the IATA Dangerous Goods Regulations are asked to note the following amendments and corrections to the 50th Edition, effective from 1 January 2009.

Where appropriate, changes or amendments to existing text have been highlighted (in yellow - PDF or grey - hardcopy) to help identify the change or amendment.

New or Amended State Variations (Section 2.9.2)

Amend **BEG (Belgium)**

Amend BEG-05 to read:

BEG-05 The following requirements apply to aircraft registered:

- a) in Belgium no matter where they are operating; and
- b) in a State other than Belgium and which are not required to operate under and in accordance with Annex III to Council Regulation (EC) NO. 3922/1991 of 16 December 1991 on the harmonization of technical requirements and administrative procedures in the field of civil aviation ("EU-OPS"), when they are operating in Belgium:

Aircraft may only carry dangerous goods with the prior approval of the Civil Aviation Authority. Carriage of such goods must be in compliance with the ICAO Technical Instructions.

Application for a general or special authorisation must be submitted to:

Belgian Civil Aviation Authority
Operations Department-Dangerous Goods
CCN – 2nd Floor
Vooruitgangstraat 80 –Bus 5
B-1030 Brussels
Belgium

Telephone: + 32 2 277 43 58

Fax: +32 277 42 57

E-mail: koenraad.clerbout@mobilif.fgov.be

This variation does not apply:

- a) to aircraft registered in a State other than Belgium and which are required to operate under and in accordance with EU-OPS providing an approval granted by such a State is held and a copy of this approval is submitted to the Belgian Civil Aviation Authority
- b) unless otherwise specified in the ICAO Technical Instructions, to dangerous goods in the case of overflight of the Belgian territory by foreign operators, provided the operator has a permission from its State of Registry to carry dangerous goods in accordance with the provisions of these Instructions.
- c) to the transport of Dry Ice (carbon dioxide, solid), UN 1845, when used for cooling purposes in combination with goods not subject to the ICAO Technical Instructions. All other requirements of these Instructions concerning the transport of Dry Ice remain applicable.



New or Amended Operator Variations (Section 2.9.4)

Amend 5X (United Parcel Service)

5X-02 Shipments of Dangerous Goods in the UPS Small Package service with an origin and/or destination outside the USA, including shipments of Excepted Quantities, and Biological Substances, Category B, will be accepted by contract only. Combination packagings must be used and packages must not exceed 30 kg gross weight. **When applicable, not more than three compatible different dangerous goods may be contained in one outer packaging (5.0.2.11).** Other than specifically approved shipments of Dangerous Goods in Excepted Quantities, the following classes/divisions of Dangerous Goods are prohibited from UPS international small package service:

- Class 1 (Explosives)
- Division 2.3 (Toxic Gas)
- Division 4.2 (Spontaneously Combustible)
- Division 4.3 (Dangerous When Wet)
- Division 5.1 (Oxidizer)
- Division 5.2 (Organic Peroxide)
- Division 6.1—Substances requiring a “Toxic” label
- Division 6.2 (Infectious Substances, Category A)
- Class 7—Substances requiring a “Radioactive” White–I, Yellow–II, Yellow–III, or Fissile label.
 - Radioactive Material, Excepted Package shipments are also prohibited.

Add new BZ (BLUE DART AVIATION LTD)

BZ-01 Dangerous goods falling under Class 1, explosives will not be accepted for carriage or handling by Blue Dart Aviation.

BZ-02 Dangerous goods in airmail will not be accepted.

BZ-03 Class 7, only the following radioactive materials will be accepted with effect from June 2009.

- Radioactive material in “excepted packages”;
- “Other form” radioactive material packaged in Type A packagings, not exceeding the A₂ values or Transport Index 10;
- The Shipper’s Declaration accompanying each shipment of radioactive material in categories I, II or III, must show the following endorsement “This radioactive material is intended for use in, or incidental to, research or medical diagnosis or treatment.”

BZ-04 Radioactive & fissile wastes will not be accepted for carriage

BZ-05 The shipper must provide a 24-hour emergency telephone number of a person/agency who is knowledgeable of the hazards, characteristics & actions to be taken in case in the case of an accident or incident concerning each of the dangerous goods being transported. This telephone number, including the country & area code, preceded by the word “Emergency Contact” or “24-Hour number” must be inserted in the Shipper’s Declaration for Dangerous Goods, in the “handling information” box.

A “24 hour” emergency telephone number is not required for shipments that do not require a Shipper’s Declaration for Dangerous Goods.

BZ-06 Prior clarification must be taken from the operator for sending shipments containing magnets under UN 2807. Refer to instructions under Packing Instruction 902.

BZ-07 Infectious substances, patient specimens, diagnostic specimens, clinical specimens & biological substances (human or animal) will only be accepted if assigned to UN 2814 or UN 2900, as appropriate. The only exceptions to this variation are:



- Dried blood spots, collected by applying a drop of blood onto absorbent material.
- Pathogen –free blood or blood components collected for transfusion or for the preparation of blood products to be used for human or animal transfusion or transplantation.
- Any tissue or organs intended for use in human or animal transplantation.

In these cases, the air waybill must bear a detailed description to enable identification as non regulated material (see Packing Instruction 602 & 8.2)

Amend LH (Deutsche Lufthansa / Lufthansa Cargo AG)

Amend LH-03

LH-03 Infectious substances, UN 2814, UN 2900 and UN3373 will not be accepted in air mail.

Delete LH-07 to LH-13.

Amend SQ (Singapore Airlines / Singapore Airlines Cargo)

Amend SQ-06

SQ-06 UN3356 Oxygen Generator, Chemical will not be accepted.

Amend US (US Airways)

Amend US-01

US-01 US Airways will not accept shipments for carriage which contain articles and substances listed in these regulations and / or DOT Hazardous Materials Regulations, and revisions thereto, except for the following:

- Articles listed as not restricted or non-regulated in said regulations.
- Carbon dioxide, solid (Dry Ice) in individual packages with 5.5 pounds per package / 2.5 kilos or less cooling non-restricted contents.
- Environmenter - Unit Load Device equipment with Dry Ice cooling non-restricted contents.
- US Airways Company Material transported as aircraft replacement items.

ACKNOWLEDGEMENTS

Pg. xvii – Insert Dangerous Goods Board member as shown:

Mr. A. McCulloch, United Parcel Service, Louisville, USA

Section 1

Pg. 6 – In Table 1.5.A insert “x” into column 8 for row “Limitations”.

Section 2

Pg. 12 – Amend 2.3.2.2 as shown:

2.3.2.2 Wheelchairs/Mobility Aids with Non-spillable Batteries

Wheelchairs or other battery-powered mobility aids with non-spillable batteries (see Packing Instruction 806 and Special Provision A67), provided that the battery is disconnected, the battery terminals are protected from short circuits, e.g. by being enclosed within a battery container, and the battery is securely attached to the wheelchair or mobility aid (see 9.3.15.4 and Figure 9.3.G).

Operators must ensure that wheelchairs or other battery-powered mobility aids are carried in such a manner so as to prevent unintentional operation and that the wheelchair/mobility aid is protected from being damaged by the movement of baggage, mail, stores or cargo.

Note:

~~Wheelchairs/mobility aids with gel-type batteries do not require the battery to be disconnected provided the battery terminals are insulated to prevent accidental short circuits.~~

Pg. 14 – Amend Table 2.3.A as follows:

| NO | YES | NO | YES | NO | |
|----|-----|----|-----|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | | | <p>Wheelchairs or other battery-powered mobility devices with non-spillable batteries (see Packing Instruction 806 and Special Provision A67), provided the battery terminals are insulated to prevent accidental short circuits, e.g. by being enclosed within a battery container, and the battery is securely attached to the wheelchair or mobility aid. Operators must ensure that wheelchairs or other battery-powered mobility aids are carried in such a manner so as to prevent unintentional operation and that the wheelchair/mobility aid is protected from being damaged by the movement of baggage, mail, stores or cargo.</p> <p>Note: Wheelchairs/mobility aids with gel type batteries do not require the battery to be disconnected provided the battery terminals are insulated to prevent accidental short circuits.</p> |

Section 4

Pg. 214 – Add EQ Codes against UN 2478, Isocyanate solution, flammable, toxic, n.o.s.. For PG II add “E2” and for PG III add “E1”.

Pg. 214 – Add EQ Codes against UN 2206, Isocyanates solution, toxic, n.o.s.. For PG II add “E4” and for PG III add “E1”.

Pg. 222 – Add EQ Codes against UN 3336, Mercaptans, liquid, flammable, n.o.s.. For PG I add “E3”, for PG II add “E2” and for PG III add “E1”.

Pg. 247 – Add EQ Codes against UN 3259, Polyamines, solid, corrosive, n.o.s.. For PG I add “E0”, for PG II add “E2” and for PG III add “E1”.

Pg. 317 – Amend Special Provision A44 as follows:

A44 The entry chemical kits or first aid kits is intended to apply to boxes, cases, etc. containing small quantities 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:

- excepted quantities as specified in Column F of Table 4.2, providing the inner packagings and quantities are as prescribed in 2.7.5.1 Table 2.7.A and 2.7.8.22.7.5.1(a);
- limited quantities under 2.8.1 2.8.2.1.

Pg. 320 – Amend Special Provision A99 as follows:

A99 Irrespective of the limit specified in Column L of the List of Dangerous Goods (Subsection 4.2), a lithium battery or battery assembly that has successfully passed the tests specified in the UN Manual of Tests and Criteria, Part III, sub-section 38.3 and that meets the requirements of Packing Instruction 903 965 for lithium ion batteries, and Packing Instruction 968 for lithium metal batteries as prepared for transport may have a mass exceeding 35 kg G, if approved by the appropriate authority of the State of origin. A copy of the document of approval must accompany the consignment.

Pg. 322 – Amend Special Provision A123 as follows:

A123 This entry applies to Batteries, electric storage, not otherwise listed in Subsection 4.2 – List of Dangerous Goods. Examples of such batteries are: alkali-manganese, zinc-carbon, nickel-metal hydride and nickel-cadmium batteries. Any electrical battery or battery powered device, equipment or vehicle having the potential of a dangerous evolution of heat must be prepared for transport so as to prevent

- (a) a short-circuit (e.g. in the case of batteries, by the effective insulation of exposed terminals; or, in the case of equipment, by disconnection of the battery and protection of exposed terminals) ~~is forbidden from transport~~; and
- (b) accidental activation.

Pg. 322 – Amend Special Provision A130 as follows:

A130 When this material meets the definitions and criteria of other classes or divisions as defined in Section 3, it must be classified in accordance with the predominant subsidiary risk. Such material must be declared under the proper shipping name and UN number appropriate for the material in that predominant class or division, with the addition of the name applicable to this radioactive material according to Column B in Subsection 4.2 – List of Dangerous Goods, and must be transported in accordance with the provisions applicable to that UN number. In addition, all other requirements specified in ~~10.5.9 must apply, except 10.8.3.9.1, Step 3 10.3.11 apply.~~

Pg. 325 – Amend Special Provision A163 as follows:

A163 (340) Chemical kits, first aid kits and polyester resin kits containing dangerous goods in inner packagings which do not exceed the quantity limits for excepted quantities applicable to individual substances as specified in Column F of Table 4.2 may be transported in accordance with 2.7. Division 5.2 substances, although not individually authorized as excepted quantities in Table 4.2, are authorized in such kits and are assigned Code E2 (see ~~2.7.4.1 2.7.4.1~~).

Section 5

Pg. 330 – Amend 5.0.2.3 as follows:

Unless otherwise provided for, the UN specification packagings detailed in the packing instructions must meet the performance test requirements of the relevant packing group shown in Column ~~F~~ **E** of the List of Dangerous Goods for the particular article or substance.

Pg. 373 – Amend Packing Instruction 306 to add the following two new UN numbers:

INNER PACKAGINGS

| Desc. | Glass, Earthenware | Plastic | Metal (not aluminium) | Aluminium | Glass ampoule | PPR (see below) |
|---------|-----------------------|---------|--------------------------|-----------|---------------|-----------------|
| Spec. | IP1 | IP2 | IP3 | IP3A | IP8 | |
| Unit | L | L | L | L | L | |
| UN 1250 | 1.0 | F | 1.0 | F | 0.5 | 5 |
| UN 1305 | 1.0 | F | 1.0 | F | 0.5 | 5 |

Pp. 437/438 – Amend Packing Instruction 602 as follows:

This instruction applies to UN 2814 and UN 2900.

Packagings must meet the requirements of 6.5 and must be marked as required by ~~6-0-6~~ **6.5.3.1**.

...

Substances consigned refrigerated or frozen (wet ice, prefrozen packs, Carbon dioxide, solid [dry ice]): Ice, Carbon dioxide, solid (dry ice) or other refrigerant must be placed around the secondary packaging(s) or alternatively in an overpack with one or more complete packages marked in accordance with ~~6-0-6~~ **6.5.3.1**. Interior support must be provided to secure the secondary packaging(s) or packages in the original position after the ice or Carbon dioxide, solid (dry ice) has dissipated. If ice is used, the outer packaging or overpack must be leak-proof. If Carbon dioxide, solid (dry ice) is used, the outer packaging or overpack must permit the release of carbon dioxide gas. The primary receptacle and the secondary packaging must maintain their integrity at the temperature of the refrigerant used.

Pg. 511, 512, 514, 515, 517, 519 – Amend Part 1 of Packing Instructions 965 to 970 as follows:

General requirements

Cells and batteries must be packed in strong outer packagings that conform to 5.0.2.4, 5.0.2.6.1 and **5.2.12.1 5.0.2.12.1.**

Insert the following new text into Part 1 of Packing Instructions 965, 967, 968 and 970 as follows:

Overpacks

Individual packages each complying with the requirements of Part 1 may be placed in an overpack. The overpack may also contain packages of dangerous goods or goods not subject to these Regulations provided that there are no packages enclosing different substances which might react dangerously with each other. An overpack must be marked with the word “Overpack” and labelled with the lithium battery label (Figure 7.4.1), unless the label(s) on the package(s) inside the overpack are visible.

Any person preparing or offering cells or batteries for transport must receive adequate instruction on these requirements commensurate with their responsibilities.

Pg. 513 – Amend Packing Instruction 966 as follows:

Part 2

Part 2 requirements apply to each cell or battery type that has been determined to meet the criteria for assignment to Class 9.

Each cell or battery must:

1. Be of the type proven to meet the requirements of each test in the UN *Manual of Tests and Criteria*, Part III, subsection 38.3.
2. Incorporate a safety venting device or be designed to preclude a violent rupture under conditions normally incident to transport and be equipped with an effective means of preventing external short circuits.

Each battery containing cells or series of cells connected in parallel must be equipped with an effective means, as necessary, to prevent dangerous reverse current flow (e.g. diodes, fuses).

Additional requirements

- all lithium ion cells and batteries prepared for transport as Class 9 must be protected against short circuits;
- the completed package for the cells or batteries must meet Packing Group II packaging standards;
- ~~each completed package containing lithium cells or batteries must be marked and labelled in accordance with the applicable requirements of Section 7;~~
- the equipment and the packages of lithium cells or batteries must be placed in an overpack. The overpack must bear applicable marks and labels as set out in 7.1.4 and 7.2.7;
- for the purpose of this packing instruction, “equipment” means apparatus requiring the lithium batteries with which it is packed for its operation.

COMBINATION PACKAGINGS

| | Quantity per package Passenger aircraft | Quantity per package Cargo Aircraft Only |
|-----------------------------------------------------------------------------------------|--------------------------------------------|---------------------------------------------|
| Quantity of lithium ion cells and batteries per overpack, excluding weight of equipment | 5.0 kg | 35.0 kg |

OUTER PACKAGINGS

| Type | Drums | | | | | | Jerricans | | | Boxes | | | | | | |
|------|-------|----------------|--------------|-------|---------|----------------|-----------|----------------|-------------|-------|----------------|------------|--------------|----------------------------|-----------------|------------|
| | Steel | Alum- inium | Ply- wood | Fibre | Plastic | Other metal | Steel | Alum- inium | Plasti c | Steel | Alum- inium | Wood | Ply- wood | Recon- stituted wood | Fibre- board | Plastic |
| Desc | Steel | Alum- inium | Ply- wood | Fibre | Plastic | Other metal | Steel | Alum- inium | Plasti c | Steel | Alum- inium | Wood | Ply- wood | Recon- stituted wood | Fibre- board | Plastic |
| Spec | 1A2 | 1B2 | 1D | 1G | 1H2 | 1N2 | 3A2 | 3B2 | 3H2 | 4A | 4B | 4C1 4C2 | 4D | 4F | 4G | 4H1 4H2 |

Pg. 518 – Amend Packing Instruction 969 as follows:

Part 2

Additional requirements

- all lithium metal cells and batteries prepared for transport as Class 9 must be protected against short circuits;
- the completed package for the cells or batteries must meet Packing Group II packaging standards;
- ~~each completed package containing lithium cells or batteries must be marked and labelled in accordance with the applicable requirements of Section 7;~~
- the equipment and the packages of lithium cells or batteries must be placed in an overpack. The overpack must bear applicable marks and labels as set out in 7.1.4 and 7.2.7;
- for the purpose of this packing instruction, “equipment” means apparatus requiring the lithium batteries with which it is packed for its operation.

Lithium metal cells and batteries prepared for transport on Passenger Aircraft as Class 9:

- must be packed in rigid metal intermediate or outer packaging;
- cells and batteries must be surrounded by cushioning material that is non-combustible and non-conductive, and placed inside an outer packaging.

COMBINATION PACKAGINGS

| | Quantity per package Passenger aircraft | Quantity per package Cargo Aircraft Only |
|-------------------------------------------------------------------------------------------|--------------------------------------------|---------------------------------------------|
| Quantity of lithium metal cells and batteries per overpack, excluding weight of equipment | 5.0 kg | 35.0 kg |

OUTER PACKAGINGS

| Type | Drums | | | | | | Jerricans | | | Boxes | | | | | | |
|------|-------|----------------|--------------|-------|---------|----------------|-----------|----------------|--------------|-------|----------------|------------|--------------|----------------------------|-----------------|------------|
| | Steel | Alum- inium | Ply- wood | Fibre | Plastic | Other metal | Steel | Alum- inium | Plasti- c | Steel | Alum- inium | Wood | Ply- wood | Recon- stituted wood | Fibre- board | Plastic |
| Spec | 1A2 | 1B2 | 1D | 1G | 1H2 | 1N2 | 3A2 | 3B2 | 3H2 | 4A | 4B | 4C1 4C2 | 4D | 4F | 4G | 4H1 4H2 |

Section 7

Pg. 576 – Revise requirements for lithium battery label as follows:

Colour: The border of the label must have red diagonal hatchings. Text and symbols black on a white contrasting background.

Section 10

Pg. 645 – In paragraph 10.3.11.1.3(b) and 10.3.11.1.3(c) amend “Table 10.3.C” to read “Table 10.3.D”.

Pg. 645 – Amend paragraph 10.3.11.1.5 as follows:

10.3.11.1.5 Empty Packages

An empty packaging which had previously contained radioactive material with an activity not exceeding the limit specified in the column headed “~~Instruments and Articles Materials~~ — Package Limits” in Table ~~10.3.C~~ **10.3.D** may be classified as UN 2908, Radioactive material, excepted package empty packaging, provided that:

Appendix G.3

Pg. 815 – Add **Austrian Airlines** to the list of currently validated airlines.