

IATA Dangerous Goods Regulations

50th Edition (English) Effective 1 January 2009

ADDENDUM II

Posted 30 March 2009

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 **DKG (Denmark)**

Add DKG-02 as follows:

DKG-02 National legislation in Denmark specifies that aircraft in the Danish FIR must not without permission from the Civil Aviation Administration — Denmark carry weapons, explosives, war equipment or munitions.

Written applications must be forwarded to:

Civil Aviation Administration Luftfartshuset Ellebjergvej 50 Box 744 DK-2450 Copenhagen SV

Applications must be received by the Civil Aviation Administration — Denmark five working days before the actual flight.

Amend JPG (Japan)

Amend JPG-11 as follows:

JPG-11 Radioactive material (Class 7), except for "Excepted radioactive material", must not be stowed in the same cargo compartment together with packages containing Class 1, 2, 3 or 8 dangerous goods (see 9.3.10).

Amend JPG-22 to "Not Used"

Amend RUG (Russian Federation)

Replace RUG-01 with the following:

RUG-01 For all domestic transports in the Russian Federation, the Russian language must be used for all dangerous goods markings and transport documents. For international transports originating in the Russian Federation, Russian and English must be used for dangerous goods markings and transport documents in addition to the languages required by the States of transit and destination.

Replace RUG-02 with the following:

RUG-02 An operator planning to transport high consequence dangerous goods indicated in 1.6.3.3 to, from, within or through the territory of the Russian Federation shall not accept such goods for transport without receiving confirmation from the airport (or from the ground handling agent) that such goods can be handled in the territory of the Russian Federation, as well as confirmation of the consignee's preparedness to accept such goods (if the goods are transported to the territory of the Russian Federation).



Add New RUG-03 as follows:

RUG-03 Fissile radioactive material in any quantity shall not be accepted in the Russian Federation for carriage on passenger aircraft, and shall not be transported into the Russian Federation, from its territory or through its territory without prior permission from:

Federal Environmental, Technological and Atomic Supervisory Body (ROSTECHNADZOR) UI. Taganskaya, 34 109147 Moscow Russia

Telephone: 495-411-60-22 Facsimile: 495-261-60-43

This variation covers fissile radioactive material and articles thereof containing uranium-233, uranium-235, plutonium and other isotopes of transuranic elements.

Amend USG (United States)

Revise USG-02 as shown:

USG-02 In addition to the dangerous goods included in the **Subsection 4.2 (List of Dangerous Goods)** (Table 4.2) with the word "Forbidden" shown in columns I / J and K / L and with no A1 or A2 **Special Provision indicated**, any material forbidden for transport by the United States' Regulations is also forbidden for transport under any circumstances to, from or within the United States (see 49 CFR 173.21 and the Hazardous Materials Table in 49 CFR 172.101).

Unless specifically authorized by the Hazardous Material Table in 49 CFR 172.101, the transport of a liquid with a vapour inhalation toxicity meeting the criteria of Division 6.1, Packing Group I or a gas meeting the criteria of Division 2.3 is forbidden for transport aboard passenger and cargo aircraft to, from or within the United States.

Primary (non-rechargeable) lithium metal batteries and cells (UN 3090) are forbidden for transportation aboard passenger-carrying aircraft. <u>Such batteries transported in accordance with Part 2 of Packing Instruction 968 must be labelled with the CARGO AIRCRAFT ONLY label. Such batteries transported in accordance with Part 1 of Packing Instruction 968 must be marked "PRIMARY LITHIUM BATTERIES — FORBIDDEN FOR TRANSPORT ABOARD PASSENGER AIRCRAFT" or "LITHIUM METAL BATTERIES — FORBIDDEN FOR TRANSPORT ABOARD PASSENGER AIRCRAFT".</u>

Primary (non-rechargeable) lithium metal batteries and cells contained in or packed with equipment (UN 3091) are forbidden for transportation aboard passenger-carrying aircraft unless:

- the equipment and the batteries and cells are transported in accordance with Packing Instruction 969 or 970, as appropriate;
- the package contains no more than the number of lithium metal batteries or cells necessary to power the intended piece of equipment;
- 3) the lithium content of each cell, when fully charged, is not more than 5 grams;
- 4) the aggregate lithium content of the anode of each battery, when fully charged, is not more than 25 grams; and
- 5) the net weight of lithium batteries does not exceed 5 kg (11 lb).

Primary (non-rechargeable) lithium metal batteries and cells contained in or packed with equipment (UN 3091) and transported in accordance with Part 2 of Packaging Instruction 969 or 970 that do not conform to the above provisions are forbidden for transportation aboard passenger-carrying aircraft and must be labelled with the CARGO AIRCRAFT ONLY label.

Primary (non-rechargeable) lithium metal batteries and cells contained in or packed with equipment (UN 3091) and transported in accordance with Part 1 of Packaging Instruction 969 or 970 that do not



conform to the above provisions are forbidden for transportation aboard passenger-carrying aircraft and must be marked "PRIMARY LITHIUM BATTERIES — FORBIDDEN FOR TRANSPORT ABOARD PASSENGER AIRCRAFT" or "LITHIUM METAL BATTERIES — FORBIDDEN FOR TRANSPORT ABOARD PASSENGER AIRCRAFT".

Note:

Dangerous goods that are forbidden on passenger aircraft by 49 CFR 172.101 (Column 9A) are also forbidden on passenger aircraft even when the IATA Dangerous Goods Regulations permit such carriage. Dangerous goods that are forbidden on cargo aircraft by 49 CFR 172.101 (Column 9B) are also forbidden on cargo aircraft even when the IATA Dangerous Goods Regulations permit such carriage.

New or Amended Operator Variations (Section 2.9.4)

Amend KZ (Nippon Cargo Airlines)

Amend KZ-04 to "Not Used"

Add OM (Mongolian Airlines)

OM-01 Advance arrangements must be made for all shipments of dangerous goods as defined in the IATA Dangerous Goods Regulations. Dangerous goods without booking will be rejected.

OM-02 Dangerous goods requiring a cargo aircraft only (CAO) label will not be accepted for carriage

OM-03 Dangerous goods in airmail will not be accepted for carriage.

OM-04 Dangerous goods in limited quantities ("Y" packing instructions) will not be accepted for carriage.

OM-05 Dangerous goods in excepted quantities will not be accepted for carriage.

OM-06 Dangerous goods in consolidations will not be accepted for carriage.

OM-07 Salvage packaging will not be accepted.

OM-08 Class 7 — Radioactive material of any kind will not be accepted for carriage.

Section 3

Pg. 91 – Add new 3.1.4.3

3.1.4.3 Certain Division 1.4S explosives, identified by Special Provision A165 in Subsection 4.2, are subject to Test Series 6(d) of Part I of the UN Manual of Tests and Criteria (see ST/SG/AC.10/36/Add.2) to demonstrate that any hazardous effects arising from functioning are confined within the package. Evidence of a hazardous effect outside the package includes:

a) denting or perforation of the witness plate beneath the package;

- b) <u>a flash or flame capable of igniting such as a sheet of 80 ± 3 g/m² paper at a distance of 25 cm from the package;</u>
- c) disruption of the package causing projection of the explosives contents; or
- d) <u>a projection which passes completely through the packaging (a projection or fragment retained or stuck in the wall of the packaging is considered as non hazardous).</u>

The appropriate national authority may wish to take into account the expected effect of the initiator when assessing the results of the test, if these are expected to be significant when compared to the articles being tested. If there are hazardous effects outside the package, then the product is excluded from Compatibility Group S.



Section 4

Pg. 121 – Amend 4.1.0 as follows:

4.1.0.1 Dangerous goods must be assigned to one of the proper shipping names shown in the List of Dangerous Goods. Such substances may contain technical impurities (for example those deriving from the production process) or additives for stability or other purposes that do not affect its classification. However, a substance listed by name containing technical impurities or additives for stability or other purposes affecting its classification must be considered a mixture or solution (see 4.1.3.1). The proper shipping name is used to identify the dangerous article or substance on the outside of the package and on the "Shipper's Declaration for Dangerous Goods". The proper shipping name is shown in the List of Dangerous Goods in bold type (plus any numbers, Greek letters, "sec", "tert", and the letters, m, n, o, p, which form an integral part of the name). Portions of an entry appearing in lightface type need not be considered as part of the proper shipping name but may be used.

Pg. 135 – In Table 4.1.A, Class 8, Specific Entries, add "Star Symbol" (technical name required) to UN2693 **Bisulphites, aqueous solution, n.o.s.** "*

Pg. 137 – Amend 4.1.3 as follows:

4.1.3 Mixtures and Solutions not Listed by Name

The following procedures are to be followed when determining the classification and proper shipping name for mixtures and solutions not specifically shown in the List of Dangerous Goods.

Note:

Where a substance is specifically listed by name, it must be identified in transport by the proper shipping name in the List of Dangerous Goods. Such substances may contain technical impurities (for example, those deriving from the production process) or additives for stability or other purposes that do not affect its classification. However, a substance listed by name containing technical impurities or additives for stability or other purposes affecting its classification must be considered a mixture or solution (see <u>4.1.3.1).</u>

4.1.3.1 Mixtures and or Solutions Containing One Dangerous Goods

A mixture or solution containing composed of a predominant substance listed identified by name in the List of Dangerous Goods together with one or more substances not subject to these Regulations and/or traces of one or more substances identified by name in the List of Dangerous Goods must be identified by the proper shipping name of the listed predominant substance listed in Subsection 4.2; the qualifying word "mixture" or "solution," as appropriate, must be added to the proper shipping name.

Example 6[...]

In addition, the concentration of the mixture of solution may also be indicated after the basic description of the mixture or solution e.g. Acetone 75% Solution.

The exceptions to this rule are when:

- the mixture or solution is specifically identified by name in Subsection 4.2 List of Dangerous Goods;
- the entry in the name and description of the substance named in the List of Dangerous Goods indicates that it applies only to the pure substance;
- the hazard class <u>or division, subsidiary risk(s)</u>, physical state (solid, liquid, gas) or packing group of the mixture or solution differs from that of the <u>substance named in listed Subsection 4.2 – List of</u> <u>Dangerous Goods entry</u>; or
- there is a significant change in the measures to be taken in emergencies the hazard characteristics and properties of the mixture or solution necessitate emergency response measures that are different from those required for the substance identified by name in Subsection 4.2 – List of Dangerous <u>Goods</u>.



In each of the above cases, the mixture or solution must be described by For a solution or mixture when the hazard class, the physical state or the packing group is changed in comparison with the listed substance, the most appropriate n.o.s. proper shipping name must be assigned, followed by the technical name of the substance in parentheses, unless it is a controlled substance and a national law or international convention prohibits its disclosure. Since qualifying words such as "containing", "mixture", "solution", etc. are helpful, it is advisable to add them.

Example 7: [...]

A mixture or solution that is not identified by name in Subsection 4.2 – List of Dangerous Goods and that is composed of two or more dangerous goods must be assigned to an entry that has the proper shipping name, description, hazard class or division, subsidiary risk(s) and packing group that most precisely describe the mixture or solution (see also Subsection 3.10, 4.1.2.1(c) and 4.1.2.1(d)).

Add Example 8

Delete 4.1.3.2

Renumber 4.1.3.3 as <u>4.1.3.2</u>

Subsection 4.2

Pg. 159 – Add "Star Symbol" (technical name required) to UN2693 **Bisulphites, aqueous solution, n.o.s.** "*"

Pg. 211 – 4.2: Add SP A165 against the following entries:

						Passenger and Cargo Aircraft				Cargo Aircraft Only			
		Class or			Ltd Qty		Max						
UN/ ID no.	Proper Shipping Name/Description	Div. (Sub Risk)	Hazard Label(s)	PG	EQ see 2.7	Pkg Inst	Max Net Qty/Pkg	Pkg Inst	Net Qty/Pk g	Pkg Inst	Max Net Qty/Pkg	S.P. see 4.4	ERG Code
А	В	С	D	Е	F	G	Н	Ι	J	К	L	М	Ν
0323	Cartridges, power device †	1.4S	Explosive 1.4		E0	-	—	134	25 kg	134	100 kg	<mark>A165</mark>	1L
0460	Charges, bursting, plastics bonded †	1.4S	Explosive 1.4		E0	_	_	130	25 kg	130	100 kg	<u>A165</u>	1L
	Charges, explosive, commercial † without detonator	1.4S	Explosive 1.4		E0	_	_	137	25 kg	137	100 kg	<u>A165</u>	1L
	Charges, shaped † without detonator	1.4S	Explosive 1.4		E0	_	_	137	25 kg	137	100 kg	<u>A165</u>	1L
	Detonator assemblies, non-electric † for blasting	1.4S	Explosive 1.4		E0	_	_	131	25 kg	131	100 kg	<u>A165</u>	1L
	Detonators, electric † for blasting	1.4S	Explosive 1.4		E0	_	_	131	25 kg	131	100 kg	<u>A165</u>	1L
0366	Detonators for ammunition †	1.4S	Explosive 1.4		E0	_	_	133	25 kg	133	100 kg	<u>A165</u>	1L
	Detonators, non-electric † for blasting	1.4S	Explosive 1.4		E0	_	—	131	25 kg	131	100 kg	<u>A165</u>	1L

Pg. 225 – Amend Column B of UN1972 as follows:

Methane, refrigerated liquid with high methane content



Subsection 4.4

Pg. 316 – Add "<u>(119)</u>" after A26.

Pg. 324 – Amend SP A158 as follows:

A158 Mixtures of solids which are not subject to these Regulations and <u>liquids or solids classified by the</u> <u>shipper as</u> environmentally hazardous <u>substances (UN 3077 and UN 3082)</u> <u>liquids or solids</u> <u>must be classified</u> <u>as UN 3077</u> and may be transported under this entry, provided there is no free liquid visible at the time the substance is loaded or at the time the packaging is closed. Sealed packets and articles containing less than 10 mL of an environmentally hazardous liquid, absorbed into a solid material but with no free liquid in the packet or article, or containing less than 10 g of an environmentally hazardous solid, are not subject to these Regulations.

Pg. 325 – Add new SP A165 as follows:

A165 This entry must not be used for transport on passenger aircraft when testing in accordance with the UN Manual of Tests and Criteria Test Series 6 (a), upon which classification was based, has shown evidence of a hazardous effect outside the package. This includes denting or perforation of the witness plate beneath the package. From 1 January, 2010, for transport aboard passenger aircraft, this entry may only be used if the results of Test Series 6 (d) of Part I of the UN Manual of Tests and Criteria have demonstrated that any hazardous effects arising from functioning are confined within the package (see 3.1.4.3).

Note:

If the 6(d) test is successfully completed before 1 January 2010, this entry may be used for transport on passenger aircraft.

Section 5

Pg. 353 – Amend PI 200 Bullet Point 3 as follows:

- 3. Gas mixtures containing any of the following gases must not be offered for transport in aluminium cylinders unless approved by the appropriate national authority of the State of origin and the State of the Operator:
 - UN 1037 Ethyl chloride
 - UN 1063 Methyl chloride
 - UN 1063 Refrigerant gas R40
 - UN 1085 Vinyl bromide, stabilized
 - UN 1086 Vinyl chloride, stabilized
 - UN 1860 Vinyl fluoride, stabilized
 - UN 1912 Methyl chloride and methylene chloride mixture.

[...]

Section 7

Pg. 555 – Amend 7.1.6.3.1 as follows:

7.1.6.3.1 Packages containing environmentally hazardous substances <u>or mixtures</u> meeting the criteria of 2.9.3 of the UN Model Regulations, <u>not presenting a danger covered by other classes</u>, <u>but classified by the shipper</u> <u>as</u> UN 3077 and UN 3082, must be durably marked with the environmentally hazardous substance mark, with the exception of single packagings and combination packagings where such <u>single packagings or the inner</u> <u>packaging of such combination packaging have</u> containing inner packagings with:

- <u>a net quantity of 5 L or less for liquids; or</u>
- <u>a net quantity of 5 kg or less for solids.</u>



Section 8

Pg. 580 - Amend 8.1.6.9.1 Step 4 as follows:

Any assigned subsidiary hazard class or division number(s) (from Column **PC**) must be entered following the numerical hazard class or division and must be enclosed in brackets. [...]

Pg. 580 – Amend 8.1.6.9.1 Step 5 as follows:

The applicable packing group (Column $\neq E$) for the substance or article which may be preceded by "PG" (e.g. "PG II"). For chemical kits and/or first aid kits the most stringent packing group assigned to any individual substance contained in the kit

Pg. 582 – Amend 8.1.6.9.4 (f) as follows:

for explosive substances, where Packing Instruction 101 has been adopted by an appropriate national authority, the distinguishing sign for motor vehicles in international traffic of the State for which the authority acts (as indicated in Appendix $\frac{E.4D.1}{D.1}$) must be marked on the Shipper's Declaration for Dangerous Goods as follows: "Packaging authorized by the competent authority of....";

Section 9

Pg. 610 – Amend 9.3.15.3 as follows:

9.3.15.3 Wheelchairs or other battery-powered mobility aids with non-spillable batteries, being carried with the approval of the operator as checked baggage only, must be loaded, to with the battery disconnected, the battery terminals insulated to prevent accidental short circuits, e.g. by being enclosed within a battery container, and the battery 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.

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.