



Economic and Social Council

Distr.: General
12 November 2015
English
Original: English and French

Economic Commission for Europe

Inland Transport Committee

Working Party on the Transport of Dangerous Goods

**Joint Meeting of Experts on the Regulations annexed to the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN)
(ADN Safety Committee)**

Twenty-eighth session

Geneva, 25–29 January 2016

Item 5 (a) of the provisional agenda

Proposals for amendments to the Regulations annexed to ADN: Work of the RID/ADR/ADN Joint Meeting

Draft amendments to ADN proposed by the Ad Hoc Working Group on the Harmonization of RID/ADR/ADN with the United Nations Recommendations on the Transport of Dangerous Goods and modified by the Joint Meeting of the RID Committee of Experts and the Working Party on the Transport of Dangerous Goods

Note by the secretariat¹

The report of the Ad Hoc Working Group on the Harmonization of RID/ADR/ADN with the United Nations Recommendations on the Transport of Dangerous Goods can be found in document ECE/TRANS/WP.15/AC.1/2015/23.

The draft amendments proposed by the Ad Hoc Working Group (ECE/TRANS/WP.15/AC.1/2015/23/Add.1) were considered by the Joint Meeting of the RID Committee of Experts and the Working Party on the Transport of Dangerous Goods at its autumn session in 2015 (Geneva, 15–25 September 2015) and the Joint Meeting proposed modifications that can be found in ECE/TRANS/WP.15/AC.1/140/Add.1).

¹ Distributed in German by the Central Commission for the Navigation of the Rhine under the symbol CCNR-ZKR/ADN/WP.15/AC.2/2016/1.

The proposed amendments as modified by the Joint Meeting that could be considered relevant for ADN can be found below.

Chapter 1.2

1.2.1 In the definition of "*Aerosol or aerosol dispenser*", insert "an article consisting of" after "means" and replace "6.2.6 of ADR" by "6.2.4 of ADR".

1.2.1 Under the definition of "*CGA*", amend the address in brackets to read as follows: "(CGA, 14501 George Carter Way, Suite 103, Chantilly, VA 20151, United States of America)".

1.2.1 In the definition of "*GHS*", replace "fifth revised edition" by "sixth revised edition" and replace "ST/SG/AC.10/30/Rev.5" by "ST/SG/AC.10/30/Rev.6".

1.2.1 In the definition of "*Manual of Tests and Criteria*", replace "fifth revised edition" by "sixth revised edition" and replace "ST/SG/AC.10/11/Rev.5, Amend.1 and Amend.2" by "ST/SG/AC.10/11/Rev.6".

1.2.1 In the definition of "*Large salvage packaging*", replace "or leaking" by "leaking or non-conforming".

1.2.1 In the definition of "*Salvage pressure receptacle*" replace "1 000" by "3 000".

1.2.1 In the definition of "*Tube*", replace "a seamless transportable pressure receptacle of" by "a transportable pressure receptacle of seamless or composite construction having".

1.2.1 In the definition of "*UN Model Regulations*", replace "eighteenth" by "nineteenth" and "ST/SG/AC.10/1/Rev.18" by "ST/SG/AC.10/1/Rev.19".

1.2.1 Add the following new definitions in alphabetical order:

"Design life, for composite cylinders and tubes, means the maximum life (in number of years) for which the cylinder or tube is designed and approved in accordance with the applicable standard;"

"Service life, for composite cylinders and tubes, means the number of years the cylinder or tube is permitted to be in service;"

"SAPT" see "*Self-accelerating polymerization temperature*";

"Self-accelerating polymerization temperature (SAPT)" means the lowest temperature at which polymerization may occur with a substance in the packaging, IBC or tank as offered for carriage. The SAPT shall be determined in accordance with the test procedures established for the self-accelerating decomposition temperature for self-reactive substances in accordance with Part II, section 28 of the Manual of Tests and Criteria;"

Chapter 1.6

1.6.1.25 Amend to read as follows:

1.6.1.25 Cylinders of 60 litres water capacity or less marked with a UN number in accordance with the provisions of ADN applicable up to 31 December 2012 and which do not conform to the requirements of 5.2.1.1 regarding the size of the UN number and of the letters "UN" applicable as from 1 January 2013 may continue to be used until the next periodic inspection but no later than 30 June 2018."

Add the following new transitional measures:

"1.6.1.38 Notwithstanding the requirements of special provision 188 of Chapter 3.3 applicable as from 1 January 2017, packages containing lithium cells or batteries may continue to be marked until 31 December 2018 in accordance with the requirements of special provision 188 of Chapter 3.3 in force up to 31 December 2016."

"1.6.1.39 Notwithstanding the requirements of ADN applicable as from 1 January 2017, articles of UN Nos. 0015, 0016 and 0303 containing smoke-producing substance(s) toxic by inhalation according to the criteria for Class 6.1 manufactured before 31 December 2016 may be carried until 31 December 2018 without a "TOXIC" subsidiary risk label (model No. 6.1, see 5.2.2.2.2)."

"1.6.1.40 Notwithstanding the requirements of ADN applicable as from 1 January 2017, large packagings conforming to the packing group III performance level in accordance with special packing provision L2 of packing instruction LP02 of 4.1.4.3 of ADR applicable until 31 December 2016 may continue to be used until 31 December 2022 for UN No. 1950."

"1.6.1.41 Notwithstanding the requirements of column (5) of Table A of Chapter 3.2 applicable as from 1 January 2017 to UN Nos. 3090, 3091, 3480 and 3481, the Class 9 label (model No 9, see 5.2.2.2) may continue to be used for these UN numbers until 31 December 2018."

Chapter 2.1

2.1.1.1 For Class 4.1, after "self-reactive substances" insert ", polymerizing substances".

2.1.2.2 At the end, insert a new sentence to read as follows:

"The substances listed by name in column (2) of Table A of Chapter 3.2 shall be carried according to their classification in Table A or under the conditions specified in 2.1.2.8.".

Add a new 2.1.2.8 to read as follows:

"2.1.2.8 A consignor who has identified, on the basis of test data, that a substance listed by name in column 2 of Table A of Chapter 3.2 meets classification criteria for a class that is not identified in column 3a or 5 of Table A of Chapter 3.2, may, with the approval of the competent authority, consign the substance:

- Under the most appropriate collective entry listed in sub-sections 2.2.x.3 reflecting all hazards; or
- Under the same UN number and name but with additional hazard communication information as appropriate to reflect the additional subsidiary risk(s) (documentation, label, placard) provided that the class remains unchanged and that any other carriage conditions (e.g. limited quantity, packaging and tank provisions) that would normally apply to substances possessing such a combination of hazards are the same as those applicable to the substance listed.

NOTE 1: *The competent authority granting the approval may be the competent authority of any ADN Contracting Party who may also recognize an approval granted by the competent authority of a country which is not an ADN Contracting Party provided that this approval has been granted in accordance with the procedures applicable according to RID, ADR, ADN, the IMDG Code or the ICAO Technical Instructions.*

NOTE 2: *When a competent authority grants such approvals, it should inform the United Nations Sub-Committee of Experts on the Transport of Dangerous Goods accordingly and submit a relevant proposal of amendment to the Dangerous Goods List of*

the UN Model Regulations. Should the proposed amendment be rejected, the competent authority should withdraw its approval.".

NOTE 3: *For carriage in accordance with 2.1.2.8, see also 5.4.1.1.20.".*

Chapter 2.2

2.2.1.1.5 In the definition of Division 1.6, in the second sentence, replace "contain only extremely insensitive substance" by "predominantly contain extremely insensitive substances".

2.2.1.1.6 Amend the definition of Compatibility Group N to read as follows: "Articles predominantly containing extremely insensitive substances".

2.2.1.1.7.1 In the second sentence, insert a paragraph break after "However," and replace "," by ":". Remainder of the sentence becomes new subparagraph (b). In (b), replace "such articles" by "fireworks".

Insert a new subparagraph (a) to read as follows:

"(a) waterfalls giving a positive result when tested in the HSL Flash composition test in Appendix 7 of the Manual of Tests and Criteria shall be classified as 1.1G regardless of the results of Test Series 6;".

2.2.1.1.7.5 In the table, for the entry "Fountain" in the column "Includes: / Synonym", delete "showers". In the third column, at the end, add the following Note:

"NOTE: Fountains intended to produce a vertical cascade or curtain of sparks are considered to be waterfalls (see row below)."

After the row for "Fountain", insert a new row to read as follows:

Type	Includes: / Synonym:	Definition	Specification	Classification
Waterfall	Cascades, showers	Pyrotechnic fountain intended to produce a vertical cascade or curtain of sparks	Containing a pyrotechnic substance which gives a positive result when tested in the HSL Flash composition test in Appendix 7 of the Manual of Tests and Criteria regardless of the results of Test Series 6 (see 2.2.1.1.7.1 (a))	1.1G
			Containing a pyrotechnic substance which gives a negative result when tested in the HSL Flash composition test in Appendix 7 of the Manual of Tests and Criteria	1.3G

2.2.1.1 Add a new paragraph 2.2.1.1.9 to read as follows:

"2.2.1.1.9 Classification documentation

2.2.1.1.9.1 A competent authority assigning an article or substance into Class 1 shall confirm with the applicant that classification in writing.

2.2.1.1.9.2 A competent authority classification document may be in any form and may consist of more than one page, provided pages are numbered consecutively. The document shall have a unique reference.

2.2.1.1.9.3 The information provided shall be easy to identify, legible and durable.

2.2.1.9.4 Examples of the information that may be provided in the classification documents are as follows:

- (a) The name of the competent authority and the provisions in national legislation under which it is granted its authority;
- (b) The modal or national regulations for which the classification document is applicable;
- (c) Confirmation that the classification has been approved, made or agreed in accordance with the UN Model Regulations or the relevant modal regulations;
- (d) The name and address of the person in law to which the classification has been assigned and any company registration which uniquely identifies a company or other body corporate under national legislation;
- (e) The name under which the explosives will be placed onto the market or otherwise supplied for carriage;
- (f) The proper shipping name, UN number, class, division and corresponding compatibility group of the explosives;
- (g) Where appropriate, the maximum net explosive mass of the package or article;
- (h) The name, signature, stamp, seal or other identification of the person authorised by the competent authority to issue the classification document is clearly visible;
- (i) Where safety in carriage or the division is assessed as being dependent upon the packaging, the packaging mark or a description of the permitted:
 - Inner packagings
 - Intermediate packagings
 - Outer packagings
- (j) The classification document states the part number, stock number or other identifying reference under which the explosives will be placed onto the market or otherwise supplied for carriage;
- (k) The name and address of the person in law who manufactured the explosives and any company registration which uniquely identifies a company or other body corporate under national legislation;
- (l) Any additional information regarding the applicable packing instruction and special packing provisions where appropriate;
- (m) The basis for assigning the classification, i.e. whether on the basis of test results, default for fireworks, analogy with classified explosive, by definition from Table A of Chapter 3.2 etc.;
- (n) Any special conditions or limitations that the competent authority has identified as relevant to the safety for carriage of the explosives, the communication of the hazard and international carriage;
- (o) The expiry date of the classification document is given where the competent authority considers one to be appropriate."

2.2.1.4 In the definition of "ROCKET MOTORS", after "0281", insert ", 0510".

2.2.2.2.1 Amend to read as follows:

"2.2.2.2.1 Chemically unstable gases of Class 2 shall not be accepted for carriage unless the necessary precautions have been taken to prevent the possibility of a dangerous decomposition or polymerization under normal conditions of carriage or unless carried in accordance with special packing provision (r) of packing instruction P200 (10) of 4.1.4.1 of ADR, as applicable. For the precautions necessary to prevent polymerization, see special provision 386 of Chapter 3.3. To this end particular care shall be taken to ensure that receptacles and tanks do not contain any substances liable to promote these reactions."

2.2.3.1.5 Existing text becomes 2.2.3.1.5.1. At the beginning, replace "viscous liquids" by "Except as provided for in 2.2.3.1.5.2, viscous liquids".

Before this paragraph, add a new heading 2.2.3.1.5 to read as follows:

"2.2.3.1.5 *Viscous liquids*".

Insert a new 2.2.3.1.5.2 to read as follows:

"2.2.3.1.5.2 Viscous liquids which are also environmentally hazardous, but meet all other criteria in 2.2.3.1.5.1, are not subject to any other provisions of ADN when they are carried in single or combination packagings containing a net quantity per single or inner packaging of 5 litres or less, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8 of ADR."

2.2.3.2.2 Amend to read as follows:

"2.2.3.2.2 Chemically unstable substances of Class 3 shall not be accepted for carriage unless the necessary precautions have been taken to prevent the possibility of a dangerous decomposition or polymerization under normal conditions of carriage. For the precautions necessary to prevent polymerization, see special provision 386 of Chapter 3.3. To this end particular care shall be taken to ensure that receptacles and tanks do not contain any substances liable to promote these reactions."

2.2.3.3 For "F3 articles", at the end of the proper shipping name for UN 3269, add ", liquid base material".

2.2.41 In the heading of Class 4.1, after "self-reactive substances", insert ", polymerizing substances".

2.2.41.1.1 In the first paragraph, replace "and self-reactive liquids or solids "by", self-reactive liquids or solids and polymerizing substances". In the second paragraph, insert a new indent at the end to read

" - polymerizing substances (2.2.41.1.20 and 2.2.41.1.21)."

2.2.41.1.2 At the end, add the following new subdivisions:

"PM Polymerizing substances

PM1 Not requiring temperature control;

PM2 Requiring temperature control."

2.2.41.1.2 After "F3 Inorganic;", insert "F4 Articles;"

2.2.41 Insert the following new sub-sections 2.2.41.1.20 and 2.2.41.1.21:

"Polymerizing substances

Definitions and properties

2.2.41.1.20 *Polymerizing substances* are substances which, without stabilization, are liable to undergo a strongly exothermic reaction resulting in the formation of larger

molecules or resulting in the formation of polymers under conditions normally encountered in carriage. Such substances are considered to be polymerizing substances of Class 4.1 when:

- (a) Their self-accelerating polymerization temperature (SAPT) is 75 °C or less under the conditions (with or without chemical stabilization as offered for carriage) and in the packaging, IBC or tank in which the substance or mixture is to be carried;
- (b) They exhibit a heat of reaction of more than 300 J/g; and
- (c) They do not meet any other criteria for inclusion in classes 1 to 8.

A mixture meeting the criteria of a polymerizing substance shall be classified as a polymerizing substance of Class 4.1.

Temperature control requirements

2.2.41.1.21 Polymerizing substances are subject to temperature control in carriage if their self-accelerating polymerization temperature (SAPT) is:

- (a) When offered for carriage in a packaging or IBC, 50 °C or less in the packaging or IBC in which the substance is to be carried; or
- (b) When offered for carriage in a tank, 45 °C or less in the tank in which the substance is to be carried."

2.2.41.3 Under "flammable solids - without subsidiary risk", insert the following new arm:

articles	F4	3527 POLYESTER RESIN KIT, solid base material
----------	----	---

At the end, add the following arm:

Polymerizing substances PM	not requiring temperature control	PM1	3531 POLYMERIZING SUBSTANCE, SOLID, STABILIZED, N.O.S. 3532 POLYMERIZING SUBSTANCE, LIQUID, STABILIZED, N.O.S.
	requiring temperature control	PM2	3533 POLYMERIZING SUBSTANCE, SOLID, TEMPERATURE CONTROLLED, N.O.S. (RID only:) (not accepted for carriage by rail, see 2.2.41.2.3) 3534 POLYMERIZING SUBSTANCE, LIQUID, TEMPERATURE CONTROLLED, N.O.S. (RID only:) (not accepted for carriage by rail, see 2.2.41.2.3)

2.2.52.4 In the table, amend the entries listed below as indicated:

<i>Organic peroxide</i>	<i>Column</i>	<i>Amendment</i>	
DIBENZOYL PEROXIDE	(first row)	Concentration (%)	Replace ">51 - 100" by ">52 - 100"
tert-BUTYL CUMYL PEROXIDE	(first row)	Number (Generic entry)	Replace "3107" by "3109"
(ADR and ADN:) DICETYL PEROXYDICARBONATE	(first row)	Packing Method	Replace "OP7" by "OP8"

<i>Organic peroxide</i>	<i>Column</i>	<i>Amendment</i>
DICETYLPEROXYDICARBONATE	(first row) Number (Generic entry)	Replace "3116" by "3120"
tert-BUTYL PEROXY-3,5,5-TRIMETHYLHEXANOATE	(first row) Concentration (%)	Replace ">32-100" by ">37-100"
tert-BUTYL PEROXY-3,5,5-TRIMETHYLHEXANOATE	(third row) Concentration (%)	Replace " \leq 32" by " \leq 37"
tert-BUTYL PEROXY-3,5,5-TRIMETHYLHEXANOATE	(third row) Diluent type B (%)	Replace " \geq 68" by " \geq 63"

2.2.61.2.1 Amend to read as follows:

"2.2.61.2.1 Chemically unstable substances of Class 6.1 shall not be accepted for carriage unless the necessary precautions have been taken to prevent the possibility of a dangerous decomposition or polymerization under normal conditions of carriage. For the precautions necessary to prevent polymerization, see special provision 386 of Chapter 3.3. To this end particular care shall be taken to ensure that receptacles and tanks do not contain any substances liable to promote these reactions."

2.2.7.2.4.1.3 Replace "marking "RADIOACTIVE"" by "mark "RADIOACTIVE"" wherever it appears.

2.2.7.2.4.1.4 (b) Replace "marking "RADIOACTIVE"" by "mark "RADIOACTIVE"".

2.2.8.2.1 Amend to read as follows:

"2.2.8.2.1 Chemically unstable substances of Class 8 shall not be accepted for carriage unless the necessary precautions have been taken to prevent the possibility of a dangerous decomposition or polymerization under normal conditions of carriage. For the precautions necessary to prevent polymerization, see special provision 386 of Chapter 3.3. To this end particular care shall be taken to ensure that receptacles and tanks do not contain any substances liable to promote these reactions."

2.2.9.1.7 Insert the following new first paragraph:

"Lithium batteries shall meet the following requirements, except when otherwise provided for in ADN (e.g. for prototype batteries and small production runs under special provision 310 or damaged batteries under special provision 376)."

2.2.9.1.7 Delete the last Note.

2.2.9.1.10.2.5 In the second paragraph, in the first sentence, amend the end to read as follows:

"OECD Test Guidelines 107, 117 or 123."

2.2.9.1.14 In the list before the Note, after "Electric double layer capacitors (with an energy storage capacity greater than 0.3 Wh)" add a new line to read:

"Engines and machinery, internal combustion."

2.2.9.1.14 In the Note, delete the entries for UN Nos. 3166 and 3171.

2.2.9.3, for M2 *Substances and articles which, in the event of fire, may form dioxins*

After "3151 POLYHALOGENATED BIPHENYLS, LIQUID or", add a new entry to read as follows:

"3151 HALOGENATED MONOMETHYLDIPHENYLMETHANES, LIQUID or".

After "3152 POLYHALOGENATED BIPHENYLS, SOLID or", add a new entry to read as follows:

"3152 HALOGENATED MONOMETHYLDIPHENYLMETHANES, SOLID or".

Consequential amendments:

2.2.9.3 In the title of M2, replace "apparatus" by "articles".

2.1.3.4.2 After "UN No. 3151 POLYHALOGENATED BIPHENYLS, LIQUID;", add a new entry to read as follows:

"UN No. 3151 HALOGENATED MONOMETHYLDIPHENYLMETHANES, LIQUID;".

After "UN No. 3152 POLYHALOGENATED BIPHENYLS, SOLID;", add a new entry to read as follows: "

"UN No. 3152 HALOGENATED MONOMETHYLDIPHENYLMETHANES, SOLID;".

Chapter 3.3, special provision 663, under "Scope", in the last indent:

After "polyhalogenated biphenyls" insert ", halogenated monomethyldiphenylmethanes".

Chapter 3.1

3.1.2.2 At the end of the first sentence, replace "package marking" by "package marks".

3.1.2.3 At the end of the second sentence, replace "package marking" by "package marks".

3.1.2.6 In the introductory sentence, before subparagraphs (a) and (b), at the end, before "then:" insert "or the evolution of excessive heat, or when chemical stabilization is used in combination with temperature control,"

3.1.2.6 (a) Amend to read as follows:

"(a) For liquids and solids where the SAPT¹ (measured without or with inhibitor, when chemical stabilization is applied) is less than or equal to that prescribed in 2.2.41.1.21, the provisions of 2.2.41.1.17, special provision 386 of Chapter 3.3, special provision V8 of Chapter 7.2, special provision S4 of Chapter 8.5 and the requirements of Chapter 9.6 apply except that the term "SADT" as used in these paragraphs is understood to include also "SAPT" when the substance concerned reacts by polymerization;"

Footnote ¹ reads as follows: "¹ For the definition of self-accelerating polymerization temperature (SAPT), see 1.2.1."

Consequential amendments:

5.4.1.2.3 In the heading, after "self-reactive substances" insert "and polymerizing substances".

5.4.1.2.3.1 After "self-reactive substances" insert "or polymerizing substances". In the text in parenthesis, after "see 2.2.41.1.17;" insert "for polymerizing substance see 2.2.41.1.21".

Chapter 3.2, Table A

For UN No. 0015, insert a new row with the same information as for the other entries for UN No. 0015 except that the designation in column (2) reads "AMMUNITION, SMOKE with or without burster, expelling charge or propelling charge, containing toxic by inhalation substances" and the codes for labels in column (5) read "1 +6.1".

For UN No. 0016, insert a new row with the same information as for the other entries for UN No. 0016 except that the designation in column (2) reads "AMMUNITION, SMOKE with or without burster, expelling charge or propelling charge, containing toxic by inhalation substances" and the codes for labels in column (5) read "1 +6.1".

For UN No. 0303, insert a new row with the same information as for the other entries for UN No. 0303 except that the designation in column (2) reads "AMMUNITION, SMOKE with or without burster, expelling charge or propelling charge, containing toxic by inhalation substances" and the codes for labels in column (5) read "1.4 +6.1".

For UN Nos. 1005 and 3516, add "379" in column (6).

For UN Nos. 1006, 1013, 1046, 1056, 1065, 1066, 1956, 2036, add "378" in column (6).

For UN Nos. 1010, 1051, 1060, 1081, 1082, 1085, 1086, 1087, 1092, 1093, 1143, 1167, 1185, 1218, 1246, 1247, 1251, 1301, 1302, 1303, 1304, 1545, 1589, 1614, 1724, 1829, 1860, 1917, 1919, 1921, 1991, 2055, 2200, 2218, 2227, 2251, 2277, 2283, 2348, 2352, 2383, 2396, 2452, 2521, 2527, 2531, 2607, 2618, 2838, 3022, 3073 and 3079, in column (6) insert "386".

For UN Nos. 1202, 1203, 1223, 1268, 1863 and 3475, in column (6) delete "363".

For UN No. 2000, insert "383" in column (6).

For UN No. 2211, replace "207" by "382" in column (6).

For UN No. 2815, in column (5) insert "+ 6.1" and in column (3b) replace "C7" by "CT1".
For UN Nos. 2977 and 2978, in column (5) insert "+ 6.1" before "+ 8" ..

Consequential amendment:

In 5.3.2.3.2, after "70 radioactive material" insert a new line to read "768 radioactive material, toxic, corrosive".

For UN Nos. 3090, 3091, 3480 and 3481, in column (5), replace "9" by "9A".

For UN Nos. 3091 and 3481, insert "310" in column (6).

For UN No. 3151, amend column (2) to read as follows:

"POLYHALOGENATED BIPHENYLS, LIQUID or HALOGENATED MONOMETHYLDIPHENYLMETHANES, LIQUID or POLYHALOGENATED TERPHENYLS, LIQUID".

For UN No. 3152, amend column (2) to read as follows:

"POLYHALOGENATED BIPHENYLS, SOLID or HALOGENATED MONOMETHYLDIPHENYLMETHANES, SOLID or POLYHALOGENATED TERPHENYLS, SOLID".

For UN No. 3269, packing groups II and III, in column (2) add the following text at the end of the description: ", liquid base material".

For UN No. 3507, in column (3), replace "8" by "6.1" and in column (5), replace "8" by "6.1 +8".

Consequential amendment:

In 5.3.2.3.2, after "68 Toxic substance, corrosive" insert a new line to read "687 Toxic substance, corrosive, radioactive".

Add the following entries:

(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7a)	(7b)	(8)	(9a)	(9b)	(10)	(11)	(12)	(13)
0510	ROCKET MOTORS	1	1.4C		1.4		0		E0						
3527	POLYESTER RESIN KIT, solid base material	4.1	F4	II	4.1	236 340	5kg		E0						
3527	POLYESTER RESIN KIT, solid base material	4.1	F4	III	4.1	236 340	5kg		E0						
3528	ENGINE, INTERNAL COMBUSTION, FLAMMABLE LIQUID POWERED or ENGINE, FUEL CELL, FLAMMABLE LIQUID POWERED or MACHINERY, INTERNAL COMBUSTION, FLAMMABLE LIQUID POWERED or MACHINERY, FUEL CELL, FLAMMABLE LIQUID POWERED	3			3	363 667	0		E0						
3529	ENGINE, INTERNAL COMBUSTION, FLAMMABLE GAS POWERED or ENGINE, FUEL CELL, FLAMMABLE GAS POWERED or MACHINERY, INTERNAL COMBUSTION, FLAMMABLE GAS POWERED or MACHINERY, FUEL CELL, FLAMMABLE GAS POWERED	2			2.1	363 667	0		E0						
3530	ENGINE, INTERNAL COMBUSTION or MACHINERY, INTERNAL COMBUSTION	9			9	363 667	0		E0						
3531	POLYMERIZING SUBSTANCE, SOLID, STABILIZED, N.O.S.	4.1	PM1	III	4.1	274 386	0		E0						
3532	POLYMERIZING SUBSTANCE, LIQUID, STABILIZED, N.O.S.	4.1	PM1	III	4.1	274 386	0		E0						
3533	POLYMERIZING SUBSTANCE, SOLID, TEMPERATURE CONTROLLED, N.O.S.	4.1	PM2	III	4.1	274 386	0		E0						
3534	POLYMERIZING SUBSTANCE, LIQUID, TEMPERATURE CONTROLLED, N.O.S.	4.1	PM2	III	4.1	274 386	0		E0						

Consequential amendments:

5.3.2.3.2 For hazard identification number 40, at the end insert ", or polymerizing substance".

Chapter 3.2, Table B

Amend the entry for "POLYESTER RESIN KIT" to read as follows:

POLYESTER RESIN KIT, liquid base material	3269	3
POLYESTER RESIN KIT, solid base material	3527	4.1

Amend the entries for Engine, fuel cell, flammable gas powered, Engine, fuel cell, flammable liquid powered and Engine, internal combustion to read:

ENGINE, FUEL CELL, FLAMMABLE GAS POWERED	3529	2.1
ENGINE, FUEL CELL, FLAMMABLE LIQUID POWERED	3528	3
ENGINE, INTERNAL COMBUSTION	3530	9

In the entry for ROCKET MOTORS, insert a new row with "0510" in the second column and "1" in the third column.

Add the following new entries in alphabetical order:

ENGINE, INTERNAL COMBUSTION, FLAMMABLE LIQUID POWERED	3528	3
MACHINERY, INTERNAL COMBUSTION, FLAMMABLE LIQUID POWERED	3528	3
MACHINERY, FUEL CELL, FLAMMABLE LIQUID POWERED	3528	3
ENGINE, INTERNAL COMBUSTION, FLAMMABLE GAS POWERED	3529	2.1
MACHINERY, INTERNAL COMBUSTION, FLAMMABLE GAS POWERED	3529	2.1
MACHINERY, FUEL CELL, FLAMMABLE GAS POWERED	3529	2.1
MACHINERY, INTERNAL COMBUSTION	3530	9
HALOGENATED MONOMETHYLDIPHENYLMETHANES, LIQUID	3151	9
HALOGENATED MONOMETHYLDIPHENYLMETHANES, SOLID	3152	9
Table Tennis Balls, see	2000	4.1
POLYMERIZING SUBSTANCE, SOLID, STABILIZED, N.O.S.	3531	4.1
POLYMERIZING SUBSTANCE, LIQUID, STABILIZED, N.O.S.	3532	4.1
POLYMERIZING SUBSTANCE, SOLID, TEMPERATURE CONTROLLED, N.O.S.	3533	4.1
POLYMERIZING SUBSTANCE, LIQUID, TEMPERATURE CONTROLLED, N.O.S.	3534	4.1

Chapter 3.3

3.3.1 Add the following second sentence: "Where a special provision includes a requirement for package marking, the provisions of 5.2.1.2 (a) and (b) shall be met. If the required mark is in the form of specific wording indicated in quotation marks, such as "Damaged Lithium Batteries", the size of the mark shall be at least 12 mm, unless otherwise indicated in the special provision or elsewhere in ADN."

SP188 (f) Amend to read as follows:

"(f) Each package shall be marked with the appropriate lithium battery mark, as illustrated in 5.2.1.9;

This requirement does not apply to:

- (i) packages containing only button cell batteries installed in equipment (including circuit boards); and
- (ii) packages containing no more than four cells or two batteries installed in equipment, where there are not more than two packages in the consignment".

SP188 (g) Delete.

SP188 (h) and (i) Rerunber as (g) and (h) respectively.

SP188 Add the following paragraph at the end:

"A single cell battery as defined in Part III, sub-section 38.3.2.3 of the *Manual of Tests and Criteria* is considered a "cell" and shall be carried according to the requirements for "cells" for the purpose of this special provision."

SP207 Delete "Polymeric beads and".

SP225 In the last Note, replace "applicable to the relevant gas" by "applicable to the relevant dangerous goods".

SP236 Amend to read as follows:

"236 Polyester resin kits consist of two components: a base material (either Class 3 or Class 4.1, packing group II or III) and an activator (organic peroxide). The organic peroxide shall be type D, E, or F, not requiring temperature control. The packing group shall be II or III, according to the criteria of either Class 3 or Class 4.1, as appropriate, applied to the base material. The quantity limit shown in column (7a) of Table A of Chapter 3.2 applies to the base material."

SP310 Amend to read as follows:

"310 The testing requirements in the Manual of Tests and Criteria, part III sub-section 38.3 do not apply to production runs, consisting of not more than 100 cells and batteries, or to pre-production prototypes of cells and batteries when these prototypes are carried for testing when packaged in accordance with packing instruction P910 of 4.1.4.1 of ADR.

The transport document shall include the following statement: "Carriage in accordance with special provision 310".

Damaged or defective cells, batteries, or cells and batteries contained in equipment shall be carried in accordance with special provision 376 and packaged in accordance with packing instructions P908 of 4.1.4.1 or LP904 of 4.1.4.3 of ADR, as applicable.

Cells, batteries or cells and batteries contained in equipment carried for disposal or recycling may be packaged in accordance with special provision 377 and packing instruction P909 of 4.1.4.1 of ADR."

SP317 Amend to read as follows:

"317 "Fissile-excepted" applies only to those fissile material and packages containing fissile material which are excepted in accordance with 2.2.7.2.3.5."

SP327 In the second sentence, insert "movement and" after "protected against".

SP327 In the third sentence, replace "LP02" by "LP200".

SP363 Amend to read as follows:

"363 (a) This entry applies to engines or machinery, powered by fuels classified as dangerous goods via internal combustion systems or fuel cells (e.g. combustion engines, generators, compressors, turbines, heating units, etc.), in quantities above those specified in column (7a) of Table A of Chapter 3.2, except vehicle equipment assigned to UN No. 3166 referred to in special provision 666.

NOTE: This entry does not apply to equipment referred to in 1.1.3.3.

(b) Engines or machinery which are empty of liquid or gaseous fuels and which do not contain other dangerous goods, are not subject to ADN.

NOTE 1: An engine or machinery is considered to be empty of liquid fuel when the liquid fuel tank has been drained and the engine or machinery cannot be operated due to a lack of fuel. Engine or machinery components such as fuel lines, fuel filters and injectors do not need to be cleaned, drained or purged to be considered empty of liquid fuels. In addition, the liquid fuel tank does not need to be cleaned or purged.

NOTE 2: An engine or machinery is considered to be empty of gaseous fuels when the gaseous fuel tanks are empty of liquid (for liquefied gases), the pressure in the tanks does not exceed 2 bar and the fuel shut-off or isolation valve is closed and secured.

(c) Engines and machinery containing fuels meeting the classification criteria of Class 3, shall be assigned to the entries UN No. 3528 ENGINE, INTERNAL COMBUSTION, FLAMMABLE LIQUID POWERED or UN No. 3528 ENGINE, FUEL CELL, FLAMMABLE LIQUID POWERED or UN No. 3528 MACHINERY, INTERNAL COMBUSTION, FLAMMABLE LIQUID POWERED or UN No. 3528 MACHINERY, FUEL CELL, FLAMMABLE LIQUID POWERED, as appropriate.

(d) Engines and machinery containing fuels meeting the classification criteria of flammable gases of Class 2, shall be assigned to the entries UN No. 3529 ENGINE, INTERNAL COMBUSTION, FLAMMABLE GAS POWERED or UN No. 3529 ENGINE, FUEL CELL, FLAMMABLE GAS POWERED or UN No. 3529 MACHINERY, INTERNAL COMBUSTION, FLAMMABLE GAS POWERED or UN No. 3529 MACHINERY, FUEL CELL, FLAMMABLE GAS POWERED, as appropriate.

Engines and machinery powered by both a flammable gas and a flammable liquid shall be assigned to the appropriate UN No. 3529 entry.

(e) Engines and machinery containing liquid fuels meeting the classification criteria of 2.2.9.1.10 for environmentally hazardous substances and not meeting the classification criteria of any other class shall be assigned to the entries UN No. 3530 ENGINE, INTERNAL COMBUSTION or UN No. 3530 MACHINERY, INTERNAL COMBUSTION, as appropriate.

- (f) Engines or machinery may contain other dangerous goods than fuels (e.g. batteries, fire extinguishers, compressed gas accumulators or safety devices) required for their functioning or safe operation without being subject to any additional requirements for these other dangerous goods, unless otherwise specified in ADN. However, lithium batteries shall meet the requirements of 2.2.9.1.7, except as provided for in special provision 667.
- (g) The engines or machinery are not subject to any other requirements of ADN if the following requirements are met:
- (i) The engine or machinery, including the means of containment containing dangerous goods, shall be in compliance with the construction requirements specified by the competent authority of the country of manufacture²;
 - (ii) Any valves or openings (e.g. venting devices) shall be closed during carriage;
 - (iii) The engines or machinery shall be oriented to prevent inadvertent leakage of dangerous goods and secured by means capable of restraining the engines or machinery to prevent any movement during carriage which would change the orientation or cause them to be damaged;
 - (iv) for UN No. 3528 and UN No. 3530:
Where the engine or machinery contains more than 60 l of liquid fuel and has a capacity of more than 450 l but not more than 3 000 l, it shall be labelled on two opposite sides in accordance with 5.2.2.
Where the engine or machinery contains more than 60 l of liquid fuel and has a capacity of more than 3 000 l, it shall be placarded on two opposite sides. Placards shall correspond to the labels required in Column (5) of Table A of Chapter 3.2 and shall conform to the specifications given in 5.3.1.7. Placards shall be displayed on a background of contrasting colour, or shall have either a dotted or solid outer boundary line.
 - (v) for UN No. 3529:
Where the fuel tank of the engine or machinery has a water capacity of more than 450 l but not more than 1 000 l, it shall be labelled on two opposite sides in accordance with 5.2.2.
Where the fuel tank of the engine or machinery has a water capacity of more than 1 000 l, it shall be placarded on two opposite sides. Placards shall correspond to the labels required in Column (5) of Table A of Chapter 3.2 and shall conform to the specifications given in 5.3.1.7. Placards shall be displayed on a background of contrasting colour, or shall have either a dotted or solid outer boundary line.
 - (vi) A transport document in accordance with 5.4.1 is required only when the engine or machinery contains more than 1 000 l of liquid fuels, for

² For example, compliance with the relevant provisions of Directive 2006/42/EC of the European Parliament and of the Council of 17 May 2006 on machinery, and amending Directive 95/16/EC (Official Journal of the European Union No. L 157 of 9 June 2006, pp. 0024-0086).

UN 3528 and UN 3530, or the fuel tank has a water capacity of more than 1 000 l, for UN 3529.

This transport document shall contain the following additional statement "Transport in accordance with special provision 363".

SP369 Amend the first paragraph to read as follows:

"In accordance with 2.1.3.5.3 (a), this radioactive material in an excepted package possessing toxic and corrosive properties is classified in Class 6.1 with [radioactive material] and corrosivity subsidiary risks."

SP369 Amend the third paragraph to read as follows:

"In addition to the provisions applicable to the carriage of Class 6.1 substances with a corrosivity subsidiary risk, the provisions of 5.1.3.2, 5.1.5.2.2, 5.1.5.4.1 (b), 7.5.11 CW33/CV33 (3.1), (5.1) to (5.4) and (6) of ADR shall apply."

SP370 In the second indent, replace "that is not too sensitive for acceptance into Class 1" with "that gives a positive result".

SP373 (b) (i) and (c) (ii) Insert "or adsorbent" after "absorbent". Insert "or adsorb" after "absorb".

SP373 In the penultimate paragraph, replace "carriage in accordance" by "transport in accordance".

Add the following new special provisions:

"378 Radiation detectors containing this gas in non-refillable pressure receptacles not meeting the requirements of Chapter 6.2 and packing instruction P200 of 4.1.4.1 of ADR may be carried under this entry provided:

- (a) The working pressure in each receptacle does not exceed 50 bar;
- (b) The receptacle capacity does not exceed 12 litres;
- (c) Each receptacle has a minimum burst pressure of at least 3 times the working pressure when a relief device is fitted and at least 4 times the working pressure when no relief device is fitted;
- (d) Each receptacle is manufactured from material which will not fragment upon rupture;
- (e) Each detector is manufactured under a registered quality assurance programme;

NOTE: ISO 9001:2008 may be used for this purpose.

- (f) Detectors are carried in strong outer packagings. The complete package shall be capable of withstanding a 1.2 metre drop test without breakage of the detector or rupture of the outer packaging. Equipment that includes a detector shall be packed in a strong outer packaging unless the detector is afforded equivalent protection by the equipment in which it is contained; and
- (g) The transport document includes the following statement "Transport in accordance with special provision 378".

Radiation detectors, including detectors in radiation detection systems, are not subject to any other requirements of ADN if the detectors meet the requirements in (a) to (f) above and the capacity of detector receptacles does not exceed 50 ml.".

"379 Anhydrous ammonia adsorbed or absorbed on a solid contained in ammonia dispensing systems or receptacles intended to form part of such systems are not subject to the other provisions of ADN if the following conditions are observed:

- (a) The adsorption or absorption presents the following properties:
 - (i) The pressure at a temperature of 20 °C in the receptacle is less than 0.6 bar;
 - (ii) The pressure at a temperature of 35 °C in the receptacle is less than 1 bar;
 - (iii) The pressure at a temperature of 85 °C in the receptacle is less than 12 bar.
- (b) The adsorbent or absorbent material shall not have dangerous properties listed in classes 1 to 8;
- (c) The maximum contents of a receptacle shall be 10 kg; and
- (d) Receptacles containing adsorbed or absorbed ammonia shall meet the following conditions:
 - (i) Receptacles shall be made of a material compatible with ammonia as specified in ISO 11114-1:2012;
 - (ii) Receptacles and their means of closure shall be hermetically sealed and able to contain the generated ammonia;
 - (iii) Each receptacle shall be able to withstand the pressure generated at 85 °C with a volumetric expansion no greater than 0.1%;
 - (iv) Each receptacle shall be fitted with a device that allows for gas evacuation once pressure exceeds 15 bar without violent rupture, explosion or projection; and
 - (v) Each receptacle shall be able to withstand a pressure of 20 bar without leakage when the pressure relief device is deactivated.

When carried in an ammonia dispenser, the receptacles shall be connected to the dispenser in such a way that the assembly is guaranteed to have the same strength as a single receptacle.

The properties of mechanical strength mentioned in this special provision shall be tested using a prototype of a receptacle and/or dispenser filled to nominal capacity, by increasing the temperature until the specified pressures are reached.

The test results shall be documented, shall be traceable and shall be communicated to the relevant authorities upon request."

"380 *(Reserved)*".

"381 *(Reserved)*".

"382 Polymeric beads may be made from polystyrene, poly (methyl methacrylate) or other polymeric material. When it can be demonstrated that no flammable vapour, resulting in a flammable atmosphere, is evolved according to test U1 (Test method for substances liable to evolve flammable vapours) of Part III, sub-section 38.4.4 of the Manual of Tests and Criteria, polymeric beads, expandable need not be classified under this UN number. This test should only be performed when de-classification of a substance is considered."

"383 Table tennis balls manufactured from celluloid are not subject to ADN where the net mass of each table tennis ball does not exceed 3.0 g and the total net mass of table tennis balls does not exceed 500 g per package."

"384 *(Reserved)*".

"385 *(Reserved)*".

"386 When substances are stabilized by temperature control, the provisions of 2.2.41.1.17, special provision V8 of Chapter 7.2 of ADR, special provision S4 of Chapter 8.5 of ADR and the requirements of Chapter 9.6 of ADR apply. When chemical stabilization is employed, the person offering the packaging, IBC or tank for carriage shall ensure that the level of stabilization is sufficient to prevent the substance in the packaging, IBC or tank from dangerous polymerization at a bulk mean loading temperature of 50 °C, or, in the case of a portable tank, 45 °C. Where chemical stabilization becomes ineffective at lower temperatures within the anticipated duration of carriage, temperature control is required. In making this determination factors to be taken into consideration include, but are not limited to, the capacity and geometry of the packaging, IBC or tank and the effect of any insulation present, the temperature of the substance when offered for carriage, the duration of the journey and the ambient temperature conditions typically encountered in the journey (considering also the season of year), the effectiveness and other properties of the stabilizer employed, applicable operational controls imposed by regulation (e.g. requirements to protect from sources of heat, including other cargo carried at a temperature above ambient) and any other relevant factors."

Chapter 3.4

- 3.4.7.1 Replace "marking" by "mark" wherever it appears (4 times).
- 3.4.7.2 At the end of the first sentence, replace "marking" by "mark".
- 3.4.8.1 Replace "marking" by "mark" wherever it appears (4 times).
- 3.4.8.2 At the end of the first sentence, replace "marking" by "mark".
- 3.4.9 Replace "marking" by "mark" (twice) and "markings" by "marks".
- 3.4.10 Replace "marking" by "mark".
- 3.4.11 Amend to read as follows:

"3.4.11 Use of overpacks

For an overpack containing dangerous goods packed in limited quantities, the following applies:

Unless the marks representative of all dangerous goods in an overpack are visible, the overpack shall be:

- marked with the word "OVERPACK". The lettering of the "OVERPACK" mark shall be at least 12 mm high. The mark shall be in an official language of the country of origin and also, if that language is not English, French or German, in English, French or German, unless agreements, if any, concluded between the countries concerned in the transport operation provide otherwise; and
- marked with the marks required by this chapter.

Except for air transport, the other provisions of 5.1.2.1 apply only if other dangerous goods which are not packed in limited quantities are contained in the overpack and only in relation to these other dangerous goods."

Chapter 3.5

- 3.5.2 (b) After the first sentence, amend the remainder of sub-paragraph (b) to read as follows:

"For liquid dangerous goods, the intermediate or outer packaging shall contain sufficient absorbent material to absorb the entire contents of the inner packagings. When placed in the intermediate packaging, the absorbent material may be the cushioning material. Dangerous goods shall not react dangerously with cushioning, absorbent material and packaging material or reduce the integrity or function of the materials. Regardless of its orientation, the package shall completely contain the contents in case of breakage or leakage;"

3.5.2 (e) Replace "markings" by "marks".

3.5.4.2 In the paragraph after the figure, replace "marking" by "mark".

3.5.4.3 Amend to read as follows:

"3.5.4.3 Use of overpacks

For an overpack containing dangerous goods packed in excepted quantities, the following applies:

Unless the marks representative of all dangerous goods in an overpack are visible, the overpack shall be:

- marked with the word "OVERPACK". The lettering of the "OVERPACK" mark shall be at least 12 mm high. The mark shall be in an official language of the country of origin and also, if that language is not English, French or German, in English, French or German, unless agreements, if any, concluded between the countries concerned in the transport operation provide otherwise; and
- marked with the marks required by this chapter.

The other provisions of 5.1.2.1 apply only if other dangerous goods which are not packed in excepted quantities are contained in the overpack and only in relation to these other dangerous goods."

Chapter 5.1

5.1.2.1 (a) Amend to read as follows:

"(a) Unless marks and labels required in Chapter 5.2, except 5.2.1.3 to 5.2.1.6, 5.2.1.7.2 to 5.2.1.7.8 and 5.2.1.10, representative of all dangerous goods in the overpack are visible, the overpack shall be:

(i) marked with the word "OVERPACK". The lettering of the "OVERPACK" mark shall be at least 12 mm high. The mark shall be in an official language of the country of origin and also, if that language is not English, French or German, in English, French or German, unless agreements, if any, concluded between the countries concerned in the transport operation provide otherwise; and

(ii) labelled and marked with the UN number and other marks, as required for packages in Chapter 5.2 except 5.2.1.3 to 5.2.1.6, 5.2.1.7.2 to 5.2.1.7.8 and 5.2.1.10, for each item of dangerous goods contained in the overpack. Each applicable mark or label only needs to be applied once.

Labelling of overpacks containing radioactive material shall be in accordance with 5.2.2.1.11."

5.1.2.1 b) Replace "marking" by "marks".

5.1.2.3 Replace "markings" by "marks" (twice).

Chapter 5.2

5.2.1 In the Note, replace "markings" by "marks".

5.2.1.1 Replace "marking" by "mark".

5.2.1.2 Replace "markings" by "marks".

5.2.1.3 In the second sentence, replace "marking" by "mark".

5.2.1.5 In the second sentence replace "marking" by "mark".

5.2.1.7.1 In the second sentence replace "markings" by "marks".

5.2.1.7.7 Replace "marking" by "mark".

5.2.1.8.2 Replace "markings" by "marks".

5.2.1.8.3 In the paragraph after the figure, replace "marking" by "mark" (twice).

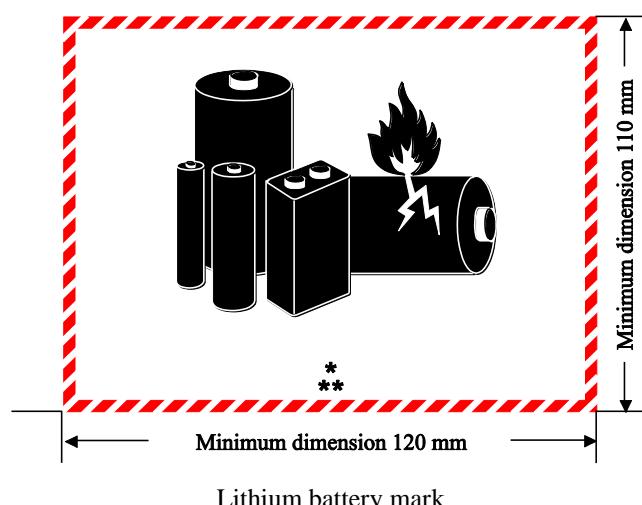
5.2.1 Add a new 5.2.1.9 to read as follows:

"5.2.1.9 *Lithium battery mark*

5.2.1.9.1 Packages containing lithium cells or batteries prepared in accordance with special provision 188 shall be marked as shown in Figure 5.2.1.9.2.

5.2.1.9.2 The mark shall indicate the UN number preceded by the letters "UN", i.e. 'UN 3090' for lithium metal cells or batteries or 'UN 3480' for lithium ion cells or batteries. Where the lithium cells or batteries are contained in, or packed with, equipment, the UN number preceded by the letters "UN", i.e. 'UN 3091' or 'UN 3481' as appropriate shall be indicated. Where a package contains lithium cells or batteries assigned to different UN numbers, all applicable UN numbers shall be indicated on one or more marks.

Figure 5.2.1.9.2



* Place for UN number(s)

** Place for telephone number for additional information

The mark shall be in the form of a rectangle with hatched edging. The dimensions shall be a minimum of 120 mm wide x 110 mm high and the minimum width of the hatching shall be 5 mm. The symbol (group of batteries, one damaged and emitting flame, above the UN number for lithium ion or lithium metal batteries or cells) shall be black on white. The hatching shall be red. If the size of the package so requires, the dimensions/line thickness

may be reduced to not less than 105 mm wide x 74 mm high. Where dimensions are not specified, all features shall be in approximate proportion to those shown.".

Renumber 5.2.1.9 as 5.2.1.10 and renumber as appropriate subsequent paragraphs, references and figures in this sub-section.

Consequential amendments:

In 1.7.1.5.1 (a), 3.4.1 (e), 5.1.2.3, replace "5.2.1.9" by "5.2.1.10".

In 5.1.2.1 (b), replace "5.2.1.9" by "5.2.1.10" and "5.2.1.9.1" by "5.2.1.10.1".

5.2.2.1.2 Replace "marking" by "mark".

5.2.2.1.6 (b) Replace "marking" by "mark".

5.2.2.1.11.1 In the penultimate sentence, replace "markings" by "marks".

5.2.2.2.1.1 Figure 5.2.2.2.1.1, in the text for figure note **, insert "/symbol" after "text/number".

5.2.2.2.1.2 After the first paragraph, add a new Note to read as follows:

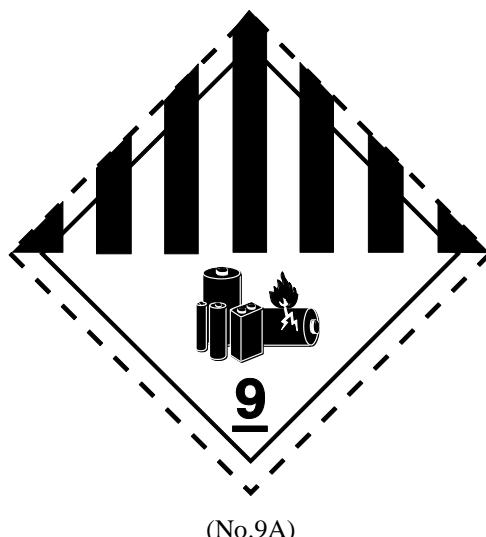
"NOTE: When the diameter of the cylinder is too small to permit the display of the reduced size labels on the non-cylindrical upper part of the cylinder, the reduced sized labels may be displayed on the cylindrical part."

5.2.2.2.1.3 After sub-paragraph (c), add the following new paragraph:

"However for label model No. 9A, the upper half of the label shall only contain the seven vertical stripes of the symbol and the lower half shall contain the group of batteries of the symbol and the class number."

At the beginning of the last paragraph, insert "Except for label model No. 9A,"

5.2.2.2.2 Under "**CLASS 9 HAZARD Miscellaneous dangerous substances and articles**", after the generic No. 9 label, add the following:"



(No.9A)

Symbol (seven vertical black stripes in upper half; battery group, one broken and emitting flame in lower half): black;

Background: white;

Figure "9" underlined in bottom corner"

Chapter 5.3

5.3.1.2 At the end, add the following new sentence:

"If all compartments have to bear the same placards, these placards need to be displayed only once along each side and at both ends of the tank container or portable tank.".

5.3.1.4.1 In the last sentence of the second paragraph, at the beginning, delete "However, in such case,"

5.3.3 In the second paragraph, replace "marking" by "mark" and insert a new fourth sentence to read as follows:

"For tank-containers or portable tanks with a capacity of not more than 3 000 litres and with an available surface area insufficient to affix the prescribed marks, the minimum dimensions of the sides may be reduced to 100 mm."

5.3.6.2 Add a new penultimate sentence to read as follows:

"For tank-containers or portable tanks with a capacity of not more than 3 000 litres and with an available surface area insufficient to affix the prescribed marks, the minimum dimensions may be reduced to 100 mm x 100 mm."

Chapter 5.4

Insert a new 5.4.1.1.20 and 5.4.1.1.21 to read as follows:

"5.4.1.1.20 Special provisions for the carriage of substances classified in accordance with 2.1.2.8

For carriage in accordance with 2.1.2.8, a statement shall be included in the transport document, as follows "Classified in accordance with 2.1.2.8"."

"5.4.1.1.21 Special provisions for the carriage of UN Nos. 3528, 3529 and 3530

For carriage of UN Nos. 3528, 3529 and 3530, the transport document, when required according to special provision 363 of Chapter 3.3, shall contain the following additional statement "Transport in accordance with special provision 363". Renumber existing 5.4.1.1.20 as 5.4.1.1.22.

Chapter 5.5

5.5.2.3.2 In the paragraph after figure 5.5.2.3.2, replace "marking" by "mark" (twice).

5.5.3.4.2 Replace "markings" by "marks".

5.5.3.6.2 In the paragraph following the caption of figure 5.5.3.6.2, replace "marking" by "mark".