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REPORT OF THE SESSION*

held in Geneva from 1st to 10 September 2003 and in Bonn from 13 to 17 October 2003

Addendum 2

Annex 1 (cont'd.)

Proposals of amendments to RID/ADR/ADN adopted by the Joint Meeting in 2003 (cont'd.)

Proposals of amendments to Part 2 of RID/ADR/ADN

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PART 2

Chapter 2.1

- 2.1.3.4 Fourth indent (Class 9 indent), add ", LIQUID" after "UN No. 2315 POLYCHLORINATED BIPHENYLS" and add "UN No. 3432 POLYCHLORINATED BIPHENYLS, SOLID" at the end.
- 2.1.3.8 Delete the last sentence ("Solutions and mixtures... (see also 2.3.5.6).").
- In NOTE 2, add ", LIQUID" after "UN No. 2315 POLYCHLORINATED BIPHENYLS" and add "UN No. 3432 POLYCHLORINATED BIPHENYLS, SOLID" at the end of the same paragraph.
- 2.1.3.9 Add a new paragraph to read as follows:
- "2.1.3.9 Wastes that do not meet the criteria for classification in classes 1 to 9 but are covered by the *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal* may be carried under UN Nos. 3077 or 3082".

Chapter 2.2

General note: *For all changes concerning sections 2.xy.3 (list of collective entries), the amended entries have to be rearranged (if necessary) and the new entries have to be inserted so as to keep the order "Generic entry", "Specific n.o.s. entry" and "General n.o.s. entry".*

Section 2.2.2

- 2.2.2.1.6 (c) Amend to read:

"Assignment to group F shall apply if the contents include 85% by mass or more flammable components and the chemical heat of combustion is 30 kJ/g or more;

It shall not apply if the contents contain 1% by mass or less flammable components and the heat of combustion is less than 20 kJ/g.

Otherwise the aerosol shall be tested for flammability in accordance with the tests described in the *Manual of Tests and Criteria*, Part III, section 31. Extremely flammable and flammable aerosols shall be assigned to group F.

NOTE: *Flammable components are flammable liquids, flammable solids or flammable gases and gas mixtures as defined in Notes 1 to 3 of sub-section 31.1.3 of Part III of the Manual of Tests and Criteria. This designation does not cover pyrophoric, self-heating or water-reactive substances. The chemical heat of combustion shall be determined by one of the following methods ASTM D 240, ISO/FDIS 13943: 1999 (E/F) 86.1 to 86.3 or NFPA 30B."*

- 2.2.2.3 In the "liquefied gases" table, Classification code 2F, amend the existing name for UN No. 1010 to read:
"BUTADIENES, STABILIZED or BUTADIENES AND HYDROCARBON MIXTURE, STABILIZED, having a vapour pressure at 70 °C not exceeding 1.1 MPa (11 bar) and a density at 50 °C not lower than 0.525 kg/l".

In the table for "Other articles containing gas under pressure", Classification code 6A, add the UN No 2857 as follows:

"2857 REFRIGERATING MACHINES containing non-flammable, non-toxic gases or ammonia solutions (UN 2672)".

Section 2.2.3

2.2.3.1.1 In the last sentence of the third paragraph, replace "and 3357" with ", 3357 and 3379". Delete NOTE 5 and NOTE 6.

2.2.3.1.3 Amend the definitions for Packing Group I, II and III to read as follows:

Packing Group	Flash Point (closed cup)	Initial Boiling Point
I	--	≤ 35°C
II ^a	< 23°C	> 35°C
III ^a	≥ 23°C ≤ 61°C	> 35°C

^a See also 2.2.3.1.4

For a liquid with (a) subsidiary risk(s), the packing group determined in accordance with the table above and the packing group based on the severity of the subsidiary risk(s) shall be considered; the classification and packing group shall then be determined in accordance with the table of precedence of hazards in 2.1.3.9."

2.2.3.3 Classification code D: add a new entry as follows "3379 DESENSITIZED EXPLOSIVE, LIQUID, N.O.S.". Delete the sentence between brackets.

Section 2.2.41

2.2.41.1.12 Amend the first sentence of this paragraph to read as follows:
"Self-reactive substances which have already been classified and are permitted for carriage in packagings are listed in 2.2.41.4, those already permitted for carriage in IBCs are listed in 4.1.4.2, packing instruction IBC520 and those already permitted for carriage in portable tanks are listed in 4.2.5.2, portable tank instruction T23. For each permitted substance listed, the appropriate generic entry of Table A of Chapter 3.2 (UN Nos. 3221 to 3240) is assigned, and appropriate subsidiary risks and remarks providing relevant transport information are given."

2.2.41.1.13 Amend the beginning of the first sentence to read:
"Classification of self-reactive substances not listed in 2.2.41.4, 4.1.4.2, packing instruction IBC520 or 4.2.5.2, portable tank instruction T23 and assignment to..."

2.2.41.1.18 Add UN No. 3380 to the list of UN numbers.

2.2.41.3 Classification code D: add a new entry to read as follows:
"3380 DESENSITIZED EXPLOSIVE, SOLID, N.O.S.". Delete the last sentence between brackets.

2.2.41.4 Amend the title to read "List of currently assigned self-reactive substances in packagings".

Add the following text before the existing **NOTE 1**:

"In the column "Packing Method" codes "OP1" to "OP8" refer to packing methods in 4.1.4.1, packing instruction P520 (see also 4.1.7.1). Self-reactive substances to be carried shall fulfil the classification and the control and emergency temperatures (derived from the SADT) as listed. For substances permitted in IBCs, see 4.1.4.2, packing instruction IBC520 and, for those permitted in tanks, see 4.2.5.2, portable tank instruction T23."

Delete **NOTE 2**. As a consequence, "**NOTE 1**" becomes "**NOTE**".

Section 2.2.42

2.2.42.1.5 Add a **NOTE 3** to read: "**NOTE 3**: Since organometallic substances can be classified in Classes 4.2 or 4.3 with additional subsidiary risks, depending on their properties, a specific classification flow chart for these substances is given in 2.3.6."

2.2.42.3 For the substances without subsidiary risk, create a new Classification code "S5 Organometallic" and assign it the following entries:
 "3391 ORGANOMETALLIC SUBSTANCE, SOLID, PYROPHORIC
 3392 ORGANOMETALLIC SUBSTANCE, LIQUID, PYROPHORIC
 3400 ORGANOMETALLIC SUBSTANCE, SOLID, SELF-HEATING".

Classification code SW, delete the entries for UN Nos. 2003, 3049, 3050 and 3203 (2 entries each) and the related notes. Insert new entries as follows:

"3433 LITHIUM ALKYLs, SOLID
 3393 ORGANOMETALLIC SUBSTANCE, SOLID, PYROPHORIC, WATER-REACTIVE
 3394 ORGANOMETALLIC SUBSTANCE, LIQUID, PYROPHORIC, WATER-REACTIVE".

For UN No. 2445, add ", LIQUID" at the end.

Section 2.2.43

2.2.43.1.5 Add a **NOTE** to read:
NOTE: Since organometallic substances can be classified in Classes 4.2 or 4.3 with additional subsidiary risks, depending on their properties, a specific classification flow chart for these substances is given in 2.3.6."

2.2.43.3 Insert ", LIQUID" at the end of UN Nos. 1389 and 1392 (Classification code W2) and move them to Classification code W1.

Classification code W1, insert new entries as follows:

"1420 POTASSIUM METAL ALLOYS, LIQUID
 1422 POTASSIUM SODIUM ALLOYS, LIQUID
 3398 ORGANOMETALLIC SUBSTANCE, LIQUID, WATER-REACTIVE".

Classification code W2, insert new entries as follows:

"3401 ALKALI METAL AMALGAM, SOLID
 3402 ALKALINE EARTH METAL AMALGAM, SOLID
 3403 POTASSIUM METAL ALLOYS, SOLID
 3404 POTASSIUM SODIUM ALLOYS, SOLID
 3395 ORGANOMETALLIC SUBSTANCE, SOLID, WATER-REACTIVE".

Classification code WF1, delete all the existing entries and insert a new entry as follows:
"3399 ORGANOMETALLIC SUBSTANCE, LIQUID, WATER-REACTIVE, FLAMMABLE".

Delete Note b.

Classification code WF2, delete the entry for UN No. 3372 and insert a new entry as follows:

"3396 ORGANOMETALLIC SUBSTANCE, SOLID, WATER-REACTIVE, FLAMMABLE".

Classification code WS, insert a new entry as follows:

"3397 ORGANOMETALLIC SUBSTANCE, SOLID, WATER-REACTIVE, SELF-HEATING".

Section 2.2.52

2.2.52.1.7 Amend the first sentence of this paragraph to read as follows:
"Organic peroxides which have already been classified and are permitted for carriage in packagings are listed in 2.2.52.4, those already permitted for carriage in IBCs are listed in 4.1.4.2, packing instruction IBC520 and those already permitted for carriage in tanks in accordance with Chapters 4.2 and 4.3 are listed in 4.2.5.2, portable tank instruction T23. For each permitted substance listed, the generic entry of Table A of Chapter 3.2 (UN Nos. 3101 to 3120) is assigned, appropriate subsidiary risks and remarks providing relevant transport information are given."

2.2.52.1.8 Insert ", 4.1.4.2 packing instruction IBC520 or 4.2.5.2, portable tank instruction T23," after "2.2.52.4" in the first sentence.

2.2.52.4 In the title add, at the end: "in packagings".

Replace the existing NOTE under the title with the following text:

"In the column "Packing Method", codes "OP1" to "OP8" refer to packing methods in 4.1.4.1 packing instruction P520 (see also 4.1.7.1). Organic peroxides to be carried shall fulfill the classification and the control and emergency temperatures (derived from the SADT) as listed. For substances permitted in IBCs, see 4.1.4.2, packing instruction IBC520 and, for those permitted in tanks, see 4.2.5.2, portable tank instruction T23."

In the table:

In the column "Subsidiary risks and remarks", delete "30)". (ADR only).

Amend the entries listed below as follows:

Organic peroxide	Column	Amendment
ACETYL BENZOYL PEROXIDE		Delete
tert-AMYL PEROXYACETATE	Packing method Number	Replace "OP8" with "OP7" Replace "3107" with "3105"

Organic peroxide		Column	Amendment
tert-BUTYL CUMYL PEROXIDE	(1 st row)	Packing method Number	Replace "OP7" with "OP8" Replace "3105" with "3107"
	(2 nd row)	Concentration Inert solid Packing method Number	Replace " ≤ 42 " with " ≤ 52 " Replace " ≥ 58 " with " ≥ 48 " Replace "OP7" with "OP8" Replace "3106" with "3108"
n-BUTYL-4,4-DI-(tert-BUTYLPEROXY)VALERATE	(2 nd row)	Delete	
	(3 rd row)	Concentration Inert solid	Replace " ≤ 42 " with " ≤ 52 " Replace " ≥ 58 " with " ≥ 48 "
tert-BUTYL HYDROPEROXIDE	(4 th row)	Packing method	Delete ",N,M"
tert-BUTYL MONOPEROXYPHthalate		Delete	
tert-BUTYL PEROXYACETATE	(3 rd row)	Diluent type A Diluent type B Packing method	Delete " ≥ 68 " Add " ≥ 68 " Delete ",N"
	(4 th and 5 th rows)	Delete	
tert-BUTYL PEROXYBENZOATE	(1 st row)	Diluent type A	Delete "< 22"
tert-BUTYL PEROXYDIETHYLACETATE + tert-BUTYL PEROXYBENZOATE		Delete	
tert-BUTYL PEROXY-2-ETHYLHEXANOATE	5 th and 6 th rows	Delete	
tert-BUTYL PEROXYISOBUTYRATE	(1 st row)	Diluent type B	Replace ">23" with " ≥ 23 "
	(2 nd row)	Diluent type B	Replace ">48" with " ≥ 48 "
tert-BUTYL PEROXYNEODECANOATE	(3 rd row)	Delete	
	(4 th row)	Number	Replace "3117" with "3119"
	(6 th row)	Packing method	Delete ",N"
tert-BUTYL PEROXYPIVALATE	(4 th and 5 th rows)	Delete	
3-tert-BUTYLPEROXY-3-PHENYLPHthalide		Delete	
tert-BUTYL PEROXY-3,5,5-TRIMETHYLHEXANOATE	(2 nd row)	Diluent type A	Delete " ≥ 68 "
		Diluent type B	Add " ≥ 68 "
		Packing method	Delete ", N"
(3 rd row)	Delete		
CUMYL HYDROPEROXIDE	(2 nd row)	Packing method	Delete ", M, N"
CUMYL PEROXYNEODECANOATE	(3 rd row)	Delete	
DIBENZOYL PEROXIDE	(8 th row)	Delete	
	(11 th row)	Packing method	Delete ",N"
DIBENZYL PEROXYDICARBONATE		Delete	
DI-(4-tert-BUTYLCYCLOHEXYL) PEROXYDICARBONATE	(2 nd row)	Packing method	Delete ",N"

Organic peroxide		Column	Amendment
DI-tert-BUTYL PEROXIDE	(1 st row)	Concentration	Replace ">32" with ">52"
	(2 nd row)	Packing method	Delete ",N"
	(3 rd row)	Delete	
1,1-DI-(tert-BUTYLPEROXY) CYCLOHEXANE	(5 th row)	Diluent type A	Replace "≥ 36" with "≥ 25"
	(6 th row)	Packing method	Delete ",N"
1,1-DI-(tert-BUTYLPEROXY)-3,3,5- TRIMETHYLCYCLOHEXANE	(3 rd row)	Packing method Number	Replace "OP7" with "OP5" Replace "3105" with "3103"
	(4 th row)	Packing method Number	Replace "OP7" with "OP8" Replace "3106" with "3110"
DICETYL PEROXYDICARBONATE	(2 nd row)	Packing method	Delete ",N"
DICUMYL PEROXIDE	(1 st row)	Concentration	Replace "42" with "52"
		Packing method	Delete ",M"
DICYCLOHEXYL PEROXYDICARBONATE	(1 st and 2 nd rows)	Control temperature	Replace "+5" with "+10"
		Emergency temperature	Replace "+10" with "+15"
DI-(2-ETHYLHEXYL) PEROXYDICARBONATE	(3 rd row)	Organic peroxide	This amendment does not apply to the English version
	(5 th row)	Delete	
	(6 th row)	Concentration Number	Replace "42" with "52" Replace "3118" with "3120"
DIETHYL PEROXYDICARBONATE		Delete	
DIISOTRIDECYL PEROXYDICARBONATE		Delete	
DILAUROYL PEROXIDE	(2 nd row)	Packing method	Delete ",N"
2,5-DIMETHYL-2,5-DI- (tert-BUTYLPEROXY)HEXANE	(2 nd row)	Delete	
DIMYRISTYL PEROXYDICARBONATE		(3 rd row) Delete	
DIPEROXY AZELAIC ACID		Delete	
DIPEROXY DODECANE DIACID		Delete	
DISTEARYL PEROXYDICARBONATE		Delete	
DI-(3,5,5-TRIMETHYLHEXANOYL) PEROXIDE	(2 nd row)	Packing method	Delete ", N"
	(4 th and 5 th rows)	Delete	
DI-(3,5,5-TRIMETHYL-1,2-DIOXOLANYL-3) PEROXIDE		Delete	
3,3,6,6,9,9-HEXAMETHYL-1,2,4,5- TETRAOXACYCLONONANE		Delete	
ISOPROPYLCUMYL HYDROPEROXIDE		Packing method	Delete ", M, N"
p-MENTHYL HYDROPEROXIDE	(2 nd row)	Packing method	Delete ", M, N"

Organic peroxide		Column	Amendment
METHYL ETHYL KETONE PEROXIDE(S)	(1 st row)	Concentration	Replace " ≤ 52 " with "see remark 8)"
	(2 nd row)	Concentration	Replace " ≤ 45 " with "see remark 9)"
	(3 rd row)	Concentration	Replace " ≤ 40 " with "see remark 10)"
	(4 th row)	Delete	
PEROXYACETIC ACID, TYPE F, stabilized	(1 st row)	Packing method	Delete ", N"
	(2 nd row)	Delete	
PINANYL HYDROPEROXIDE	(1 st row)	Concentration	Replace "56" with ">56"
	(2 nd row)	Concentration Diluent type A Packing method	Replace "<56" with " ≤ 56 " Replace ">44" with " ≥ 44 " Delete ", M"
TETRAHYDRONAPHTHYL HYDROPEROXIDE		Delete	
1,1,3,3-TETRAMETHYLBUTYL PEROXY-2 ETHYLHEXANOATE		Control temperature Emergency temperature	Replace "+20" with "+15" Replace "+25" with "+20"
1,1,3,3-TETRAMETHYLBUTYL PEROXYPHENOACETATE		Delete	

Insert the following new entries:

Organic peroxide	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
tert-AMYLPEROXY ISOPROPYL CARBONATE	≤ 77	≥ 23				OP5			3103	
tert-BUTYL PEROXYNEO-HEPTANOATE (new second row)	≤ 42 as a stable dispersion in water					OP8	0	+10	3117	
1,6-Di-(tert-BUTYLPEROXY-CARBONYLOXY) HEXANE	≤ 72	≥ 28				OP5			3103	
DICYCLOHEXYL PEROXYDICARBONATE (new third row)	≤ 42 as a stable dispersion in water					OP8	+15	+20	3119	
1-(2-ETHYLHEXANOYL-PEROXY)-1,3-DIMETHYLBUTYL PEROXYPIVALATE	≤ 52	≥ 45	≥ 10			OP7	-20	-10	3115	
PEROXYLAURIC ACID	≤ 100					OP8	+35	+40	3118	
POLYETHER POLY-tert-BUTYLPEROXY-CARBONATE	≤ 52		≥ 23			OP8			3107	
1,1,3,3-TETRAMETHYLBUTYL PEROXYPIVALATE	≤ 77	≥ 23				OP7	0	+10	3315	

2.2.52.4 Notes after the table:

Note 1): Add the following sentence at the end: "*The boiling point of diluent type B shall be at least 60°C higher than the SADT of the organic peroxide.*".

- Note 8): Amend to read as follows: "Available oxygen > 10% and ≤ 10.7%, with or without water."
- Note 9): Amend to read as follows: "Available oxygen ≤ 10%, with or without water."
- Note 10): Amend to read as follows: "Available oxygen ≤ 8,2%, with or without water."
- Note 21): Amend to read as follows: "With ≥ 25% diluent type A by mass, and in addition ethylbenzene."
- Note 22): Amend to read as follows: "With ≥ 19% diluent type A by mass, and in addition methyl isobutyl ketone."
- Note 30): Delete

Section 2.2.61

- 2.2.61.1.3 Replace the existing definition for "*LD₅₀ for acute oral toxicity*" with the following text:
"*LD₅₀ (median lethal dose) for acute oral toxicity* is the statistically derived single dose of a substance that can be expected to cause death within 14 days in 50 per cent of young adult albino rats when administered by the oral route. The *LD₅₀* value is expressed in terms of mass of test substance per mass of test animal (mg/kg)."

- 2.2.61.3 Classification code T1, amend the following entries to read:
"3276 NITRILES, TOXIC, LIQUID, N.O.S";
"3278 ORGANOPHOSPHORUS COMPOUND, TOXIC, LIQUID, N.O.S".

Insert new entries as follows:

"3381 TOXIC BY INHALATION LIQUID, N.O.S. with an inhalation toxicity lower than or equal to 200 ml/m³ and saturated vapour concentration greater than or equal to 500 LC₅₀"

"3382 TOXIC BY INHALATION LIQUID, N.O.S. with an inhalation toxicity lower than or equal to 1000 ml/m³ and saturated vapour concentration greater than or equal to 10 LC₅₀".

Classification code T2, replace "1693" with "3448", "3172" with "3462" and "3278" with "3464" and for this last UN No., replace "N.O.S. solid" with "SOLID, N.O.S."

Add the following entry: "3439 NITRILES, TOXIC, SOLID, N.O.S."

Classification code T3, amend liquid entries for UN Nos. 3280, 3281 and 3282 as follows:

"3280 ORGANOARSENIC COMPOUND, LIQUID, N.O.S.";

"3281 METAL CARBONYLS, LIQUID, N.O.S.";

"3282 ORGANOMETALLIC COMPOUND, TOXIC, LIQUID, N.O.S."

Delete the solid entries of UN Nos. 3280, 3281 and 3282.

Insert new entries as follows:

"3465 ORGANOARSENIC COMPOUND, SOLID, N.O.S.

3466 METAL CARBONYLS, SOLID, N.O.S.

3467 ORGANOMETALLIC COMPOUND, TOXIC, SOLID, N.O.S."

Classification code T4, insert new entries as follows:

"3440 SELENIUM COMPOUND, LIQUID, N.O.S.

3381 TOXIC BY INHALATION LIQUID, N.O.S. with an inhalation toxicity lower than or equal to 200 ml/m³ and saturated vapour concentration greater than or equal to 500 LC₅₀

3382 TOXIC BY INHALATION LIQUID, N.O.S. with an inhalation toxicity lower than or equal to 1000 ml/m³ and saturated vapour concentration greater than or equal to 10 LC₅₀".

Classification code T5, amend the entry for UN No. 3283 to read:

"3283 SELENIUM COMPOUND, SOLID, N.O.S."

Classification code T8, amend the entry for UN No. 3315 to read:

"3315 CHEMICAL SAMPLE, TOXIC".

Classification code TF1, insert new entries as follows:

"3383 TOXIC BY INHALATION LIQUID, FLAMMABLE, N.O.S. with an inhalation toxicity lower than or equal to 200 ml/m³ and saturated vapour concentration greater than or equal to 500 LC₅₀

3384 TOXIC BY INHALATION LIQUID, FLAMMABLE, N.O.S. with an inhalation toxicity lower than or equal to 1000 ml/m³ and saturated vapour concentration greater than or equal to 10 LC₅₀".

Classification code TW1, insert new entries as follows:

"3385 TOXIC BY INHALATION LIQUID, WATER-REACTIVE, N.O.S. with an inhalation toxicity lower than or equal to 200 ml/m³ and saturated vapour concentration greater than or equal to 500 LC₅₀

3386 TOXIC BY INHALATION LIQUID, WATER-REACTIVE, N.O.S. with an inhalation toxicity lower than or equal to 1000 ml/m³ and saturated vapour concentration greater than or equal to 10 LC₅₀".

Classification code TO1, insert new entries as follows:

"3387 TOXIC BY INHALATION LIQUID, OXIDIZING, N.O.S. with an inhalation toxicity lower than or equal to 200 ml/m³ and saturated vapour concentration greater than or equal to 500 LC₅₀

3388 TOXIC BY INHALATION LIQUID, OXIDIZING, N.O.S. with an inhalation toxicity lower than or equal to 1000 ml/m³ and saturated vapour concentration greater than or equal to 10 LC₅₀".

Classification code TC1, insert new entries as follows:

"3389 TOXIC BY INHALATION LIQUID, CORROSIVE, N.O.S. with an inhalation toxicity lower than or equal to 200 ml/m³ and saturated vapour concentration greater than or equal to 500 LC₅₀

3390 TOXIC BY INHALATION LIQUID, CORROSIVE, N.O.S. with an inhalation toxicity lower than or equal to 1000 ml/m³ and saturated vapour concentration greater than or equal to 10 LC₅₀".

Classification code TC3, insert new entries as follows:

"3389 TOXIC BY INHALATION LIQUID, CORROSIVE, N.O.S. with an inhalation toxicity lower than or equal to 200 ml/m³ and saturated vapour concentration greater than or equal to = 500 LC₅₀

3390 TOXIC BY INHALATION LIQUID, CORROSIVE, N.O.S. with an inhalation toxicity lower than or equal to 1000 ml/m³ and saturated vapour concentration greater than or equal to 10 LC₅₀".

Section 2.2.62

2.2.62 Replace the existing text with the following:

"2.2.62 Class 6.2 - Infectious substances

2.2.62.1 *Criteria*

2.2.62.1.1 The heading of Class 6.2 covers infectious substances. For the purposes of RID/ADR/ADN, infectious substances are substances which are known or are reasonably expected to contain pathogens. Pathogens are defined as micro-organisms (including bacteria, viruses, rickettsiae, parasites, fungi) and other agents such as prions, which can cause disease in humans or animals.

NOTE 1 (Existing *NOTE 3*)

NOTE 2 (Existing *NOTE 4* with the following change: replace "3172" with "3172 or 3462".)

2.2.62.1.2 (unchanged)

Definitions

2.2.62.1.3 For the purposes of RID/ADR/ADN,

"Biological products" are those products derived from living organisms which are manufactured and distributed in accordance with the requirements of appropriate national authorities, which may have special licensing requirements, and are used either for prevention, treatment, or diagnosis of disease in humans or animals, or for development, experimental or investigational purposes related thereto. They include, but are not limited to, finished or unfinished products such as vaccines;

"Cultures (laboratory stocks)" are the result of a process by which pathogens are amplified or propagated in order to generate high concentrations, thereby increasing the risk of infection when exposure to them occurs. This definition refers to cultures prepared for the intentional generation of pathogens and does not include cultures intended for diagnostic and clinical purposes;

"Genetically modified micro-organisms and organisms" are micro-organisms and organisms in which genetic material has been purposely altered through genetic engineering in a way that does not occur naturally;

"*Medical or clinical wastes*" are wastes derived from the medical treatment of animals or humans or from bio-research.

Classification

2.2.62.1.4 Infectious substances shall be classified in Class 6.2 and assigned to UN Nos 2814, 2900 or 3373, as appropriate.

Infectious substances are divided into the following categories:

2.2.62.1.4.1 Category A: An infectious substance which is carried in a form that, when exposure to it occurs, is capable of causing permanent disability, life-threatening or fatal disease to humans or animals. Indicative examples of substances that meet these criteria are given in the table in this paragraph.

NOTE : *An exposure occurs when an infectious substance is released outside of the protective packaging, resulting in physical contact with humans or animals.*

- (a) Infectious substances meeting these criteria which cause disease in humans or both in humans and animals shall be assigned to UN No. 2814. Infectious substances which cause disease only in animals shall be assigned to UN No. 2900;
- (b) Assignment to UN No. 2814 or UN No. 2900 shall be based on the known medical history and symptoms of the source human or animal, endemic local conditions, or professional judgement concerning individual circumstances of the source human or animal.

NOTE 1: *The proper shipping name for UN No. 2814 is INFECTIOUS SUBSTANCE, AFFECTING HUMANS. The proper shipping name for UN No. 2900 is INFECTIOUS SUBSTANCE, AFFECTING ANIMALS only.*

NOTE 2: *The following table is not exhaustive. Infectious substances, including new or emerging pathogens, which do not appear in the table but which meet the same criteria shall be assigned to Category A. In addition, if there is doubt as to whether or not a substance meets the criteria it shall be included in Category A.*

NOTE 3: *In the following table, the micro-organisms written in italics are bacteria, mycoplasmas, rickettsia or fungi.*

INDICATIVE EXAMPLES OF INFECTIOUS SUBSTANCES INCLUDED IN CATEGORY A IN ANY FORM UNLESS OTHERWISE INDICATED (2.2.62.1.4.1)	
UN Number and name	Micro-organism
UN No. 2814 Infectious substances affecting humans	<p><i>Bacillus anthracis (cultures only)</i></p> <p><i>Brucella abortus (cultures only)</i></p> <p><i>Brucella melitensis (cultures only)</i></p> <p><i>Brucella suis (cultures only)</i></p> <p><i>Burkholderia mallei - Pseudomonas mallei – Glanders (cultures only)</i></p> <p><i>Burkholderia pseudomallei – Pseudomonas pseudomallei (cultures only)</i></p> <p><i>Chlamydia psittaci - avian strains (cultures only)</i></p> <p><i>Clostridium botulinum (cultures only)</i></p> <p><i>Coccidioides immitis (cultures only)</i></p> <p><i>Coxiella burnetii (cultures only)</i></p> <p><i>Crimean-Congo hemorrhagic fever virus</i></p> <p>Dengue virus (cultures only)</p> <p>Eastern equine encephalitis virus (cultures only)</p> <p><i>Escherichia coli</i>, verotoxigenic (cultures only)</p> <p>Ebola virus</p> <p>Flexal virus</p> <p><i>Francisella tularensis (cultures only)</i></p> <p><i>Guanarito virus</i></p> <p>Hantaan virus</p> <p>Hantaviruses causing hantavirus pulmonary syndrome</p> <p>Hendra virus</p> <p>Hepatitis B virus (cultures only)</p> <p>Herpes B virus (cultures only)</p> <p>Human immunodeficiency virus (cultures only)</p> <p>Highly pathogenic avian influenza virus (cultures only)</p> <p>Japanese Encephalitis virus (cultures only)</p> <p>Junin virus</p> <p>Kyasanur Forest disease virus</p> <p>Lassa virus</p> <p>Machupo virus</p> <p>Marburg virus</p> <p><i>Monkeypox virus</i></p> <p><i>Mycobacterium tuberculosis (cultures only)</i></p> <p>Nipah virus</p> <p>Omsk hemorrhagic fever virus</p> <p>Poliovirus (cultures only)</p> <p>Rabies virus</p> <p><i>Rickettsia prowazekii (cultures only)</i></p> <p><i>Rickettsia rickettsii (cultures only)</i></p> <p>Rift Valley fever virus</p> <p>Russian spring-summer encephalitis virus (cultures only)</p> <p>Sabia virus</p> <p><i>Shigella dysenteriae type 1 (cultures only)</i></p> <p>Tick-borne encephalitis virus (cultures only)</p>

INDICATIVE EXAMPLES OF INFECTIOUS SUBSTANCES INCLUDED IN CATEGORY A IN ANY FORM UNLESS OTHERWISE INDICATED (2.2.62.1.4.1)	
UN Number and name	Micro-organism
UN No. 2814 Infectious substances affecting humans (cont'd)	Variola virus Venezuelan equine encephalitis virus West Nile virus (cultures only) Yellow fever virus (cultures only) <i>Yersinia pestis</i> (cultures only)
UN No. 2900 Infectious substances affecting animals only	African horse sickness virus African swine fever virus Avian paramyxovirus Type 1 - Newcastle disease virus Bluetongue virus Classical swine fever virus Foot and mouth disease virus Lumpy skin disease virus <i>Mycoplasma mycoides</i> - Contagious bovine pleuropneumonia Peste des petits ruminants virus Rinderpest virus Sheep-pox virus Goatpox virus Swine vesicular disease virus Vesicular stomatitis virus

2.2.62.1.4.2 Category B: An infectious substance which does not meet the criteria for inclusion in Category A. Infectious substances in Category B shall be assigned to UN No. 3373 except that cultures, as defined in 2.2.62.1.3, shall be assigned to UN No. 2814 or UN No. 2900 as appropriate.

NOTE: *The proper shipping name of UN No. 3373 is "DIAGNOSTIC SPECIMENS" or "CLINICAL SPECIMENS."*

2.2.62.1.5 Substances which do not contain infectious substances or substances which are unlikely to cause disease in humans or animals are not subject to the provisions of RID/ADR/ADN unless they meet the criteria for inclusion in another class.

2.2.62.1.6 Blood or blood components which have been collected for the purposes of transfusion or for the preparation of blood products to be used for transfusion or transplantation and any tissues or organs intended for use in transplantation are not subject to the provisions of RID/ADR/ADN.

2.2.62.1.7 Substances for which there is a low probability that infectious substances are present, or where the concentration is at a level naturally encountered, are not subject to the provisions of RID/ADR/ADN. Examples are: foodstuffs, water samples, living persons and substances which have been treated so that the pathogens have been neutralized or deactivated.

2.2.62.1.8 A live animal which has been intentionally infected and is known or suspected to contain an infectious substance shall only be carried under terms and conditions approved by the competent authority.

2.2.62.1.9 *Biological products*

For the purposes of RID/ADR/ADN, biological products are divided into the following groups:

- (a) those which are manufactured and packaged in accordance with the requirements of appropriate national authorities and carried for the purposes of final packaging or distribution, and use for personal health care by medical professionals or individuals. Substances in this group are not subject to the provisions of RID/ADR/ADN;
- (b) those which do not fall under paragraph (a) and are known or reasonably believed to contain infectious substances and which meet the criteria for inclusion in Category A or Category B. Substances in this group shall be assigned to UN No. 2814, UN No. 2900 or UN No. 3373, as appropriate.

NOTE: *Some licensed biological products may present a biohazard only in certain parts of the world. In that case, competent authorities may require these biological products to be in compliance with local requirements for infectious substances or may impose other restrictions.*

2.2.62.1.10 *Genetically modified micro-organisms and organisms*

Genetically modified micro-organisms not meeting the definition of infectious substance shall be classified according to section 2.2.9.

2.2.62.1.11 *Medical or clinical wastes*

2.2.62.1.11.1 Medical or clinical wastes containing Category A infectious substances or containing Category B infectious substances in cultures shall be assigned to UN No. 2814 or UN No. 2900 as appropriate. Medical or clinical wastes containing infectious substances in Category B, other than cultures, shall be assigned to UN No. 3291.

2.2.62.1.11.2 Medical or clinical wastes which are reasonably believed to have a low probability of containing infectious substances shall be assigned to UN No. 3291.

NOTE: *The proper shipping name for UN No. 3291 is "CLINICAL WASTE, UNSPECIFIED, N.O.S." or "(BIO) MEDICAL WASTE, N.O.S". or "REGULATED MEDICAL WASTE, N.O.S".*

2.2.62.1.11.3 Decontaminated medical or clinical wastes which previously contained infectious substances are not subject to the provisions of RID/ADR/ADN unless they meet the criteria for inclusion in another class.

2.2.62.1.11.4 Medical or clinical wastes assigned to UN No. 3291 are assigned to packing group II.

2.2.62.2 *Substances not accepted for carriage*

Live vertebrate or invertebrate animals shall not be used to carry an infectious agent unless the agent cannot be carried by other means or unless this carriage has been approved by the competent authority (see 2.2.62.1.8).

- 2.2.62.3** Classification code I4, amend the entry for UN 3373 to read as follows:
"3373 DIAGNOSTIC SPECIMENS or 3373 CLINICAL SPECIMENS".

Section 2.2.7

- 2.2.7.1.2 In (e), insert the following text after "naturally occurring radionuclides":
"which are either in their natural state, or have only been processed for purposes other than for extraction of the radionuclides, and"
- Add a new (f) as follows:
"(f) Non-radioactive solid objects with radioactive substances present on any surfaces in quantities not in excess of the limit defined in 2.2.7.2".
- 2.2.7.2 In the definition of "package", add "package" after "Type IP-1", "Type IP-2" and "Type IP-3" in b), c) and d).
- 2.2.7.6.1.1 Amend the title of the table to read: "Multiplication factor for tanks, containers and unpackaged LSA-I and SCO-I".
- 2.2.7.6.2.2 Amend to read: "The criticality safety index for each overpack or container shall be determined as the sum of the CSIs of all the packages contained. The same procedure shall be followed for determining the total sum of the CSIs in a consignment or aboard a vehicle/wagon/conveyance."
- 2.2.7.7.2.1 In the table, for "Cf-252", replace " 5×10^{-2} " with " 1×10^{-1} " under the heading A₁.
- 2.2.7.8.3 Insert the words "or overpack" after "package".
- 2.2.7.9.1 (a) Replace "5.4.1.2.5.1 (a)" with "5.4.1.1.1 (a)".
Replace "3.3.1 (special provisions 172 or 290)" with "3.3.1 (special provision 290, if relevant)".
- 2.2.7.9.3 (b) Amend to read as follows:
"(b) Each instrument or manufactured article bears the marking "RADIOACTIVE" except:
- (i) radioluminescent time-pieces or devices;
 - (ii) consumer products that either have received regulatory approval according to 2.2.7.1.2 (d) or do not individually exceed the activity limit for an exempt consignment in Table 2.2.7.7.2.1 (column (5)), provided such products are carried in a package that bears the marking "RADIOACTIVE" on an internal surface in such a manner that warning of the presence of radioactive material is visible on opening the package; and "
- 2.2.7.9.7 In the list of non applicable paragraphs, replace "5.4.1.3" with "5.4.3".
In the list of non applicable paragraphs, insert "5.4.1.1.1, except (a)."
After "5.4.1.2.5.1", delete "except for (a)".

Section 2.2.8

- 2.2.8.1.6 (c) Replace the two last sentences of the second indent with the following text:
"For the purposes of testing steel, type S235JR+CR (1.0037 resp. St 37-2), S275J2G3+CR (1.0144 resp. St 44-3), ISO 3574, Unified Numbering System (UNS) G10200 or SAE 1020, and for testing aluminium, non-clad, types 7075-T6 or AZ5GU-T6 shall be used. An acceptable test is prescribed in the Manual of Tests and Criteria, Part III, Section 37".
- 2.2.8.3 In footnote g, add ", SOLID" after "SODIUM FLUORIDE" and "POTASSIUM FLUORIDE", replace "and" with "," before "UN No. 2856" and insert the following text before "are substances of Class 6.1":
", UN No. 3415 SODIUM FLUORIDE SOLUTION and UN No. 3422 POTASSIUM FLUORIDE SOLUTION".
- 2.2.8.3 Delete footnotes b and c. Rename footnotes d to g accordingly.

Section 2.2.9

- 2.2.9.1.10 Replace the last sentence with the following text:
"Notwithstanding the provisions of 2.3.5, substances which cannot be assigned to other classes of RID/ADR/ADN or to other entries of Class 9, and which are not identified in Council Directive 67/548/EEC of 27 June 1967 on the approximation of laws, regulations and administrative provisions relating to the classification, packaging and labelling of dangerous substances, as amended¹¹, as substances to which letter N "Environmentally hazardous" has been allocated, are not subject to RID/ADR/ADN.
- Notwithstanding the provisions of 2.1.3.8, solutions and mixtures (such as preparations and wastes) of substances to which letter N has been allocated in Directive 67/548/EEC, as amended, need only be assigned to UN Nos. 3077 or 3082 if, according to Directive 1999/45/EC of the European Parliament and of the Council of 31 May 1999 concerning the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labelling of dangerous preparations, as amended¹², they are also allocated letter N "Environmentally hazardous" and they cannot be assigned to one of classes 1 to 8 or to any other entry of Class 9".
- 2.2.9.1.11 Amend to read:
"2.2.9.1.11 Genetically modified micro-organisms (GMMOs) and genetically modified organisms (GMOs) are micro-organisms and organisms in which genetic material has been purposely altered through genetic engineering in a way that does not occur naturally. They are assigned to Class 9 (UN No. 3245) if they do not meet the definition of infectious substances, but are capable of altering animals, plants or microbiological substances in a way not normally the result of natural reproduction.

NOTE 1: *GMMOs which are infectious are substances of Class 6.2, UN Nos. 2814 and 2900.*

¹¹ *Official Journal of the European Communities No.196, of 16 August 1967, pp. 1 – 5.*

¹² *Official Journal of the European Communities No. L 200, of 30 July 1999, pp. 1 – 68.*

NOTE 2: *GMMOs or GMOs are not subject to the provisions of RID/ADR/ADN when authorized for use by the competent authorities of the countries of origin, transit and destination.*¹³

NOTE 3: *Live animals shall not be used to carry genetically modified micro-organisms classified in Class 9 unless the substance can be carried no other way.*

- 2.2.9.3 In the list of collective entries, under Classification code M2, amend the entry for UN No. 2315 to read:
"2315 POLYCHLORINATED BIPHENYLS, LIQUID".
Insert the following new entry immediately after the liquid entry for the same substance
"3432 POLYCHLORINATED BIPHENYLS, SOLID".

Chapter 2.3

- 2.3.6 Add a new paragraph and a new figure 2.3.6 as follows:

"2.3.6 Classification of organometallic substances in Classes 4.2 and 4.3

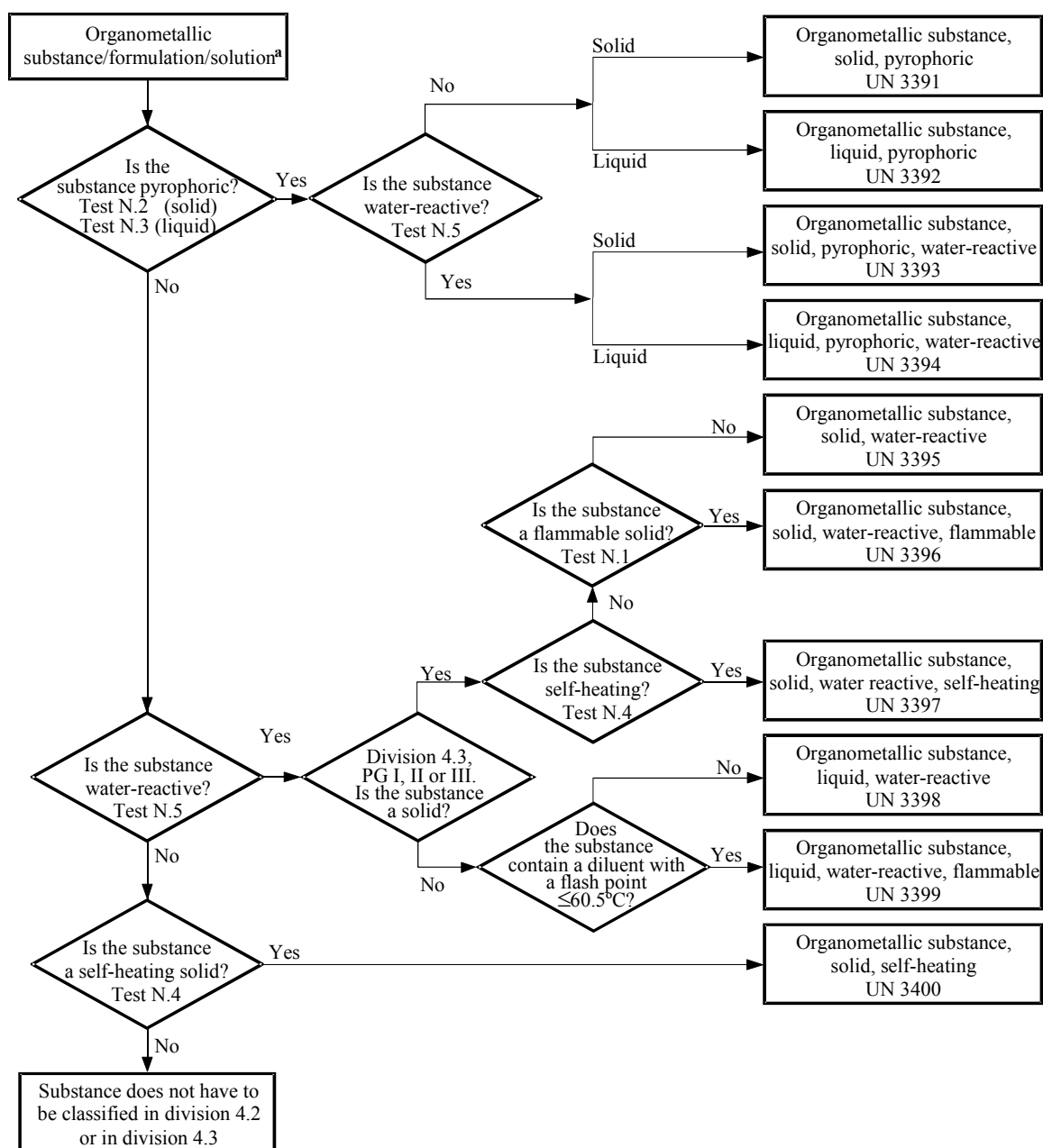
Depending on their properties as determined in accordance with tests N.1 to N.5 of the Manual of Tests and Criteria, Part III, section 33, organometallic substances may be classified in Classes 4.2 or 4.3, as appropriate, in accordance with the flowchart scheme given in Figure 2.3.6.

NOTE 1: *Depending on their other properties and on the precedence of hazard table (see 2.1.3.9), organometallic substances may have to be classified in other classes as appropriate.*

NOTE 2: *Flammable solutions with organometallic compounds in concentrations which are not liable to spontaneous combustion or, in contact with water, do not emit flammable gases, are substances of Class 3.*

¹³ See in particular Part C of Directive 2001/18/EC of the European Parliament and of the Council on the deliberate release into the environment of genetically modified organisms and repealing Council Directive 90/220/EEC (Official Journal of the European Communities, No. L 106, of 17 April 2001, pp. 8-14), which sets out the authorization procedures for the European Community.

Figure 2.3.6: Flowchart scheme for the classification of organometallic substances in Classes 4.2 and 4.3^b



^a If applicable and testing is relevant, taking into account reactivity properties, class 6.1 and 8 properties should be considered according to the precedence of hazard table of 2.1.3.9.

^b Test methods N.1 to N.5 can be found in the Manual of Tests and Criteria, Part III, Section 33.