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## 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)**

#### Twentieth session

Geneva, 23–27 January 2012

Item 4 (b) of the provisional agenda

**Proposals for amendments to the Regulations annexed to ADN: Other proposals**

### **Report on the fourth meeting of the informal working group on substances<sup>1, 2</sup>**

**Transmitted by the German Government**

#### **Introduction**

1. The fourth meeting of the informal working group on substances took place on 13 October 2011 at the German Federal Institute of Physics and Technology (PTB) in Braunschweig. The following persons attended the meeting: Dr. Brandes (Germany); Mr. Hoving (Netherlands); Mr. Huurdeman (Netherlands); Dr. Kraeh (CEFIC) and Mr. Krischok (Germany, Chairman).

#### **Results**

2. In accordance with the mandate given by the Safety Committee (ECE/TRANS/WP.15/AC.2/40, paragraphs 22 to 24 and 27), the group dealt with the following issues:

#### **A. Proposals for amendments in Table A and in Table C**

3. The members of the informal working group checked the need for amendments and additions, specifically for inland navigation, for Table A and

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<sup>1</sup> Distributed in German by the Central Commission for the Navigation of the Rhine under the symbol CCNR/ZKR/ADN/WP.15/AC.2/2012/5.

<sup>2</sup> In accordance with the programme of work of the Inland Transport Committee for 2010–2014 (ECE/TRANS/208, para. 106, ECE/TRANS/2010/8, programme activity 02.7 (b)).

Table C of the Regulations annexed to the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN). This was done on the basis of a report of the Ad hoc Working Group on the Harmonization of RID/ADR/ADN with the UN Recommendations on the Transport of Dangerous Goods (ECE/TRANS/WP.15/AC.1/2011/30/Add.1).

4. The amendments required for Table A are listed in the annex under proposal 1. The Safety Committee is requested to check these amendment proposals.

5. There is no need for amendments in Table C in the opinion of the informal working group.

6. However, the informal working group would like to point out to the Safety Committee that, in their opinion, it should be investigated whether it is necessary to include ventilation regulations in 7.1.6.12 for the transport of cargo transport units which are fumigated or cooled with coolants such as dry ice, nitrogen or argon.

7. Furthermore, the informal working group would like to point out that reference should be made to Table A of the ADR if special provision 659 is included.

## **B. Proposal for amendments to the flowchart to enable the transport of heavy heating oils in type N double-hulled ships as from 1 January 2013**

8. To enable the transport of heavy heating oils in type N double-hulled tankers, the criteria for ascertaining the acute or chronic toxicity 1 (N1: criteria according to 2.2.9.1.10.2) in the second box of the flowchart should be supplemented with a query as to the vapour pressure at 50 °C. After analysing the vapour pressure data of substances which have to be transported in a type C vessel due to their environmental hazard, the informal group recommends a limit of 1 kPa. This means that group N1 substances with a vapour pressure of  $\geq 1$  kPa at 50 °C should continue to be transported in a type C vessel and group N1 substances with a vapour pressure of  $< 1$  kPa at 50 °C require a type N double-hulled, closed tanker. As a consequential amendment, the following 4 substances would be affected:

UN 1764 DICHLOROACETIC ACID;

UN 2430 ALKYLPHENOLES, SOLID, N.O.S. (NONYLPHENOL-ISOMERIC MIXTURE, MOLTEN) (twice);

UN 2709 BUTYLBENZENES;

UN 2850 PROPYLENE TETRAMER or TETRAPROPYLE.

9. The informal working group sees a danger of flame arresters, pressure relief and vacuum valves and gas collection lines becoming clogged during the carriage of heavy heating oils. For this reason, it recommends that heavy heating oils are entered separately in Table C. A new remark should be added to this entry in column 20, which specifies that flame arresters, pressure relief and vacuum valves and gas collection lines must be heatable.

10. The necessary amendments, including the consequential amendments, are listed in the annex in proposal 2. The Safety Committee is requested to check these amendment proposals.

**C. Principles applying to the allocation to UN and substance Numbers**

11. The representative of the Netherlands is of the opinion that an allocation to the inland navigation-specific Substance Numbers 9001 to 9006 can only be made if an allocation cannot be made to UN Numbers or Substance Number 9000. The informal working group supports this viewpoint.

## Annex

### Amendment proposal 1

#### Part 3

##### Chapter 3.2

3.2.1, Table A

Amend Table A as follows:

<i>UN Number</i>	<i>Column</i>	<i>Amendment</i>
2381	3b	Replace "F1" by "FT1".
	5	Insert "+ 6.1" after "3".
	9	Replace "PP, EX, A" by "PP, EP, EX, TOX, A".
	10	Insert "VE02" after "VE01".
	12	Replace "1" by "2".
2809	3b	Replace "C9" by "CT1".
	5	Insert "+ 6.1" after "8".
	6	Replace "599" by "365".
	9	Insert "TOX, A" after "PP, EP".
	10	Insert "VE02".

Insert the following new entries in Table A:

(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7a)	(7b)	(8)	(9)	(10)	(11)	(12)	(13)
3497	KRILL MEAL	4.2	S2	II	4.2	300	0	E2		PP			0	
3497	KRILL MEAL	4.2	S2	III	4.2	300	0	E1		PP			0	
3498	IODINE MONOCHLORIDE, LIQUID (same data as for UN 1792 in RID/ADR 2011)	8	C1	II	8		1 L	E2		PP, EP			0	
3499	CAPACITOR, electric double layer (with an energy storage capacity greater than 0.3 Wh)	9	M11		9	361	0	E0		PP			0	
3500	CHEMICAL UNDER PRESSURE, N.O.S.	2	8A		2.2	274 659	0	E0		PP			0	
3501	CHEMICAL UNDER PRESSURE, FLAMMABLE, N.O.S.	2	8F		2.1	274 659	0	E0		PP, EX, A	VE01		1	
3502	CHEMICAL UNDER PRESSURE, TOXIC, N.O.S.	2	8T		2.2 +6.1	274 659	0	E0		PP, EP, TOX, A	VE02		2	
3503	CHEMICAL UNDER PRESSURE, CORROSIVE, N.O.S.	2	8C		2.2 +8	274 659	0	E0		PP, EP			0	
3504	CHEMICAL UNDER PRESSURE, FLAMMABLE, TOXIC, N.O.S.	2	8TF		2.1 +6.1	274 659	0	E0		PP, EP, EX, TOX, A	VE01, VE02		2	
3505	CHEMICAL UNDER PRESSURE, FLAMMABLE, CORROSIVE, N.O.S.	2	8FC		2.1 +8	274 659	0	E0		PP, EP, EX, A	VE01		1	
3506	MERCURY CONTAINED IN MANUFACTURED ARTICLES	8	CT3	III	8 +6.1	366	5 kg	E0		PP, EP, TOX, A	VE02		0	

## Amendment proposal 2

### Part 3

#### Chapter 3.2

##### 3.2.3, Flowchart, 2nd box

After "acute or chronic toxicity 1 (N1: criteria according to 2.2.9.1.10.2)" add "and vapour pressure at 50 °C  $\geq$  1 kPa".

Flowchart, 3rd box

Replace:

- "• Corrosive substances that react dangerously with water, or
- Substances with long-term effects on health – CMR (criteria: Categories 1A or 1B of chapters 3.5, 3.6 and 3.7 of GHS)".

By:

- "• Corrosive substances that react dangerously with water,
- Acute or chronic toxicity 1 (N1: criteria according to 2.2.9.1.10.2) and vapour pressure at 50 °C  $<$  1 kPa, or
- Substances with long-term effects on health – CMR (criteria: Categories 1A or 1B of chapters 3.5, 3.6 and 3.7 of GHS)".

3.2.3, Table C

Insert following new entry in Table C:

(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
<i>UN number or substance number</i>	<i>Name and description</i>	<i>Class</i>	<i>Classification code</i>	<i>Packing group</i>	<i>Dangers</i>	<i>Type of tank vessel</i>	<i>Cargo tank condition</i>	<i>Cargo tank type</i>	<i>Cargo tank equipment</i>	<i>Opening pressure of the high-velocity vent valve in kPa</i>	<i>Maximum degree of filling in %</i>	<i>Relative density at 20 °C</i>	<i>Type of sampling device</i>	<i>Pump room below deck permitted</i>	<i>Temperature class</i>	<i>Explosion group</i>	<i>Anti-explosion protection required</i>	<i>Equipment required</i>	<i>Number of cores/lights</i>	<i>Additional requirements/remarks</i>
3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCES; LIQUID, N.O.S. (heavy heating oils)	9	M 6	III	9+N1 (+ CMR, F or S)	N	2	3		10	97		3	yes			no	PP	0	39

## 3.2.3, Table C

Explanatory remarks for column (20)

Insert the following new remark at the end:

- "39. The closed tanker required for this substance must, if this tanker:
- Is designed according to paragraph 9.3.2.22.5 a) i) or d) or paragraph 9.3.3.22.5 a) i) or d), be furnished with heatable pressure relief and vacuum valves and, or
  - Is designed according to paragraph 9.3.2.22.5 a) ii), v), b) or c) or paragraph 9.3.3.22.5 a) ii), v), b) or c), be furnished with heatable gas collection lines as well as heatable pressure relief and vacuum valves, or
  - Is designed according to paragraph 9.3.2.22.5 a) iii) or iv) or paragraph 9.3.3.22.5 a) iii) or iv), be furnished with heatable gas collection lines as well as heatable pressure relief and vacuum valves and heatable flame arresters."

## 3.2.3, Flowchart

Column (20) Determination of the additional requirements or remarks

Add at the end:

"Remark 39: Reference shall be made in column (20) to remark 39 for UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S (heavy heating oil)."

## Consequential amendments

### Part 3

#### Chapter 3.2

##### 3.2.3, Table C

Amend Table C as follows:

<i>UN Number</i>	<i>Column</i>	<i>Amendment</i>
1764	6	Replace "C" by "N".
	8	Replace "2" by "3".
	11	Replace "95" by "97".
2430 (Entry with explosion protection)	6	Replace "C" by "N".
	8	Replace "1" by "3".
	11	Replace "95" by "97".



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<i>UN Number</i>	<i>Column</i>	<i>Amendment</i>
2430 (Entry without explosion protection)	6	Replace "C" by "N".
	8	Replace "2" by "3".
	11	Replace "95" by "97".
2709	6	Replace "C" by "N".
	8	Replace "2" by "3".
	11	Replace "95" by "97".
2850	6	Replace "C" by "N".
	8	Replace "2" by "3".
	11	Replace "95" by "97".

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