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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)

Nineteenth session Geneva, 22–25 August 2011

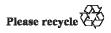
> Report of the Joint Meeting of Experts on the Regulations annexed to the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN Safety Committee) on its nineteenth session*

Addendum

Annex

Proposed amendments to the Regulations annexed to ADN for entry into force on 1 January 2013

^{*} Distributed in German by the Central Commission for the Navigation of the Rhine under the symbol CCNR/ZKR/ADN/WP.15/AC.2/40/Add.1.



Part 1

Chapter 1.2

1.2.1 Add the following new definition:

"*Liquefied Petroleum Gas (LPG)* means a low pressure liquefied gas composed of one or more light hydrocarbons which are assigned to UN 1011, UN 1075, UN 1965, UN 1969 or UN 1978 only and which consists mainly of propane, propene, butane, butane isomers, butene with traces of other hydrocarbon gases.

NOTE 1: Flammable gases assigned to other UN numbers shall not be regarded as LPG.

NOTE 2: For UN 1075 see NOTE 2 in 2.2.2.3 under 2F/UN 1965.".

(Reference document: ECE/TRANS/WP.15/AC.1/120)

Chapter 1.15

1.15.4 Replace by the following text:

"1.15.4 Obligations of recommended classification societies

1.15.4.1 Recommended classification societies shall undertake to cooperate with each other so as to guarantee the equivalence from the point of view of the safety level of their technical standards, the implementation of those standards and their coordinated development.

1.15.4.2 They shall exchange experiences in joint meetings at least once a year with a view to updating and implementing their technical standards which are relevant to the implementation of the provisions of the present Agreement. They shall report annually to the Safety Committee. The Contracting Parties shall be informed of meetings and be given the opportunity to participate in them.

1.15.4.3 Recommended classification societies shall undertake to bring their requirements into line with the provisions of the Agreement whenever the annexed Regulations are amended and in due time taking account of the date of application of the amended or new provisions. In response to requests from the competent authority, recommended classification societies shall provide all relevant information regarding their technical requirements.".

(*Reference documents: ECE/TRANS/WP.15/AC.2/2011/30 as amended*).

Part 2

Chapter 2.1

2.1.3.5.3 Amend the beginning (before the parenthesis) of sub-paragraph (h) to read as follows:

"(h) Substances of Class 6.1 meeting the inhalation toxicity criteria of packing group I".

(Reference document: ECE/TRANS/WP.15/AC.1/120)

2.1.3.5.4 Add the following paragraph:

"If the hazard characteristics of the substance are such that the substance can be assigned to a UN number or an identification number, then the UN number shall take precedence.".

(*Reference documents:* ECE/TRANS/WP.15/AC.2/2011/20 as amended)

Chapter 2.2

2.2.3.1.1 In NOTE 2, add "including synthetically manufactured products" after "heating oil (light)".

(*Reference document:* ECE/TRANS/WP.15/AC.1/120)

2.2.9.1.14 Amend the fourth indent to read as follows:

"- Identification No. 9003 SUBSTANCES HAVING A FLASH-POINT ABOVE 60 °C AND NOT MORE THAN 100 °C which cannot be assigned to another class or another entry of Class 9. If these substances can also be assigned to Identification No. 9005 or Identification No. 9006, then Identification No. 9003 shall take precedence.".

(Reference documents: ECE/TRANS/WP.15/AC.2/2011/20 as amended)

Part 3

Chapter 3.2

3.2.1 Table A

For UN No. 0509, column (11) left, insert "LO01". (*Reference document: ECE/TRANS/WP.15/AC.2/2011/35*)

For UN Nos. 1011, 1969 and 1978, insert "657" in column (6). (*Reference document: ECE/TRANS/WP.15/AC.1/120*)

For UN No. 1057, insert "658" in column (6). (*Reference document: ECE/TRANS/WP.15/AC.1/122*)

For UN Nos. 1810, 1834 and 1838, column (9), after "PP, EP" insert "TOX, A", column (10), insert "VE02", column (12), replace "0" by "2".

For UN No. 2481, column (12), replace "0" by "2". (*Reference document: ECE/TRANS/WP.15/AC.2/2011/35*)

For UN Nos. 3175 and 3243, insert "601" in column (6). (*Reference document: ECE/TRANS/WP.15/AC.1/122*)

For UN No. 3495, column (9), replace "PP, EX, TOX, A" by "PP, EP, TOX, A". (*Reference document: ECE/TRANS/WP.15/AC.2/2011/35*)

3.2.3 Table C

Insert "3.2.3.1" before "Explanations concerning Table C".

Insert "3.2.3.2 Table C" before Table C.

Before the flowchart for classification of liquids of Classes 3, 6.1, 8 and 9 for carriage in tanks in inland navigation, insert the following title:

"3.2.3.3 Flowchart, schemes and criteria for determining applicable special requirements (columns (6) to (20) of Table C)".

Make the following changes to Table C:

For entries with a reference to the flowchart, 1202, 1224, 1267, 1268, 1719, 1760, 1863, 1986, 1987, 1989, 1992, 1993, 2735, 2810, 2922, 2924, 2927, 2929, 3082, 3256, 3257, 3264, 3265, 3266, 3267, 3271, 3272, 3286, 3287, 3289, 3295, 9001, 9002, 9003, 9005 and 9006, replace "see flowchart" with "*see 3.2.3.3" in column (20).

(Reference document: ECE/TRANS/WP.15/AC.2/2011/34)

3.2.3 Table C

Amend as follows:

UN No.	(with description/comments if necessary)	Column	Amendment
1010	1,3-BUTADIENE, STABILIZED	(18)	Replace "PP, EX, A" with "PP, EP, EX, TOX, A".
1010	BUTADIENES STABILIZED or BUTADIENES AND HYDROCARBON MIXTURE,	(2)	Insert at the end "(contains less than 0.1% 1.3-butadiene)".
	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	(16)	Replace "II B" with "II B ⁴)".
1011		(2)	Insert at the end "(contains less than 0.1% 1.3-butadiene)".
		(5)	Delete "+CMR".
		(20)	Delete "; 99".
1040		(14)	Replace "yes" with "no".
1127	CHLOROBUTANES (2-CHLOROBUTANE)	(15)	Replace " $T4^{3}$ " with " $T3$ ".
1127	CHLOROBUTANES (1-CHLORO-2- METHYLPROPANE)	(15)	Replace " $T4^{3}$ " with " $T3$ ".
1135		(5)	Replace "6.1+3" with "6.1+3+N3".
1153		(15)	Replace "T4 ³)" with "T 4".
		(16)	Replace "II B ⁴)" with "II A ⁷)".
1157		(15)	Replace "T4 ³)" with "T2".
1160		(5)	Replace "3+8" with "3+8+N3".
		(16)	Replace "II B ⁴)" with "II A".
1163		(16)	Replace "II B ⁴)" with "II C".
1167		(16)	Replace "II B ⁷)" with "II B".
1171		(18)	Replace "PP, EX, A" with "PP, EP, EX, TOX, A".
1172		(18)	Replace "PP, EX, A" with "PP, EP, EX, TOX, A".
1175		(16)	Replace "II B" with "II A".
1177		(16)	Replace "II A" with "II A ⁷)".
1179		(16)	Replace "II B" with "II B ⁴)".
1188		(18)	Replace "PP, EX, A" with "PP, EP, EX, TOX, A".
1191		(5)	Replace "3+F" with "3+N3+F".
		(16)	Replace "II A" with "II A ⁷)".
1202	GAS OIL or DIESEL FUEL or HEATING OIL (LIGHT) (flashpoint not more than 60° C)	(18)	Replace "PP" with "*".
1202	GAS OIL or DIESEL FUEL or HEATING OIL (LIGHT) (flashpoint more than 60° C but not more than 100° C)	(18)	Replace "PP" with "*".

UN No.	(with description/comments if necessary)	Column	Amendment
1203	MOTOR SPIRIT or GASOLINE or PETROL	(18)	Replace "PP, EX, A" with "PP, EP, EX, TOX, A".
1203	MOTOR SPIRIT or GASOLINE or PETROL, WITH MORE THAN 10% BENZENE 60° C <	(5)	Replace "3+CMR+F" with "3+N2+CMR+F".
	BOILING POINT $\leq 60^{\circ}$ C	(18)	Replace "PP, EX, A" with "PP, EP, EX, TOX, A".
1203	MOTOR SPIRIT or GASOLINE or PETROL, WITH MORE THAN 10% BENZENE 60° C <	(5)	Replace "3+CMR+F" with "3+N2+CMR+F".
	BOILING POINT $\leq 85^{\circ}$ C	(18)	Replace "PP, EX, A" with "PP, EP, EX, TOX, A".
1203	MOTOR SPIRIT or GASOLINE or PETROL WITH MORE THAN 10% BENZENE 85° C <	(5)	Replace "3+CMR+F" with "3+N2+CMR+F".
	BOILING POINT $\leq 115^{\circ}$ C	(18)	Replace "PP, EX, A" with "PP, EP, EX, TOX, A".
1203	MOTOR SPIRIT or GASOLINE or PETROL, WITH MORE THAN 10% BENZENE BOILING	(5)	Replace "3+CMR+F" with "3+N2+CMR+F".
	$POINT > 115^{\circ} C$	(18)	Replace "PP, EX, A" with "PP, EP, EX, TOX, A".
1208		(5)	Replace "3+N1" with "3+N2".
		(6)	Replace "C" with "N".
		(8)	Replace "2" with "3".
		(11)	Replace "95" with "97".
1214		(5)	Replace "3+8" with "3+8+N3".
		(16)	Replace "II A" with "II A ⁷)".
1218		(18)	Replace "PP, EX, A" with "PP, EP, EX, TOX, A".
1220		(16)	Replace "II A" with "II A ⁷)".
1223		(16)	Replace "II A" with "II A ⁷)".
1224	For the 2 entries	(18)	Replace "PP, EX, A" with "*".
1235		(5)	Replace "3+8" with "3+8+N3".
1247		(5)	Replace "3+inst." with "3+inst.+N3".
1267	For the 9 entries PETROLEUM CRUDE OIL WITH MORE THAN 10% BENZENE	(18)	Replace "PP, EX, A" with "PP, EP, EX, TOX, A".
1267	For the 3 entries PETROLEUM CRUDE OIL	(18)	Replace "PP, EX, A" with "*".
1268	PETROLEUM DISTILLATES, N.O.S. or	(9)	Delete "3".
	PETROLEUM PRODUCTS, N.O.S. (NAPHTHA) 110 kPa $\leq yrp50 \leq 175$ kPa	(10)	Replace "10" with "50".
	(NAPHTHA) 110 kPa < vp50 ≤ 175 kPa	(18)	Replace "PP, EX, A" with "PP, EP, EX, TOX, A".
1268	PETROLEUM DISTILLATES, N.O.S. or PETROLEUM PRODUCTS, N.O.S. (NAPHTHA) 110 kPa < vp50 ≤ 150 kPa	(18)	Replace "PP, EX, A" with "PP, EP, EX, TOX, A".

UN No.	(with description/comments if necessary)	Column	Amendment
1268	PETROLEUM DISTILLATES, N.O.S. or PETROLEUM PRODUCTS, N.O.S. (NAPHTHA) vp50 ≤ 110 kPa	(18)	Replace "PP, EX, A" with "PP, EP, EX, TOX, A".
1268	For the 10 entries PETROLEUM DISTILLATES, N.O.S. WITH MORE THAN 10% BENZENE or PETROLEUM PRODUCTS, N.O.S. WITH MORE THAN 10% BENZENE	(18)	Replace "PP, EX, A" with "PP, EP, EX, TOX, A".
1268	PETROLEUM DISTILLATES, N.O.S. or PETROLEUM PRODUCTS, N.O.S. (BENZENE HEART CUT) $vp50 \le 110$ kPa	(18)	Replace "PP, EX, A" with "PP, EP, EX, TOX, A".
1268	For the 3 entries PETROLEUM DISTILLATES, N.O.S. or PETROLEUM PRODUCTS, N.O.S.	(18)	Replace "PP, EX, A" with "*".
1277		(15)	Replace "T3 ²)" with "T2".
1280		(18)	Replace "PP, EX, A" with "PP, EP, EX, TOX, A".
1294		(16)	Replace "II A ⁸)" with "II A".
1578	For the entry with "2" in the "cargo tank equipment" column	(15)	Replace "T4 ³)" with "T1".
1595		(13)	Replace "2" with "1".
1719	For the 2 entries	(18)	Replace "PP, EP" with "*".
1760	For the 3 entries	(18)	Replace "PP, EP" with "*".
1764		(16)	Replace "II A" with "II A ⁷)".
		(20)	Before "17", insert "6: 17° C;".
1848		(15)	Delete "T1".
		(16)	Delete "II A ⁷)".
		(17)	Replace "yes" with "no".
		(18)	Replace "PP, EP, EX, A" with "PP, EP".
1863	For the 6 entries FUEL, AVIATION, TURBINE ENGINE WITH MORE THAN 10% BENZENE	(18)	Replace "PP, EX, A" with "PP, EP, EX, TOX, A".
1863	For the 3 entries FUEL, AVIATION, TURBINE ENGINE	(18)	Replace "PP, EX, A" with "*".
1922		(16)	Replace "II A" with "II A ⁷)".
1969		(2)	Insert at the end "(contains less than 0.1% 1.3-butadiene)".
		(16)	Replace "II A" with "II A ⁷)".
		(20)	Delete "; 99".
1987	For the 2 entries ALCOHOLS, N.O.S.	(18)	Replace "PP, EX, A" with "*".
1989	For the 2 entries	(18)	Replace "PP, EX, A" with "*".
1993	For the 9 entries FLAMMABLE LIQUID, N.O.S. WITH MORE THAN 10% BENZENE	(18)	Replace "PP, EX, A" with "PP, EP, EX, TOX, A".

UN No.	(with description/comments if necessary)	Column	Amendment
1993	For the 3 entries FLAMMABLE LIQUID, N.O.S.	(18)	Replace "PP, EX, A" with "*".
2022		(16)	Replace "II A" with "II A ⁷)".
2046		(16)	Replace "II A" with "II A ⁷)".
2047	DICHLOROPROPENES (2,3-	(16)	Replace "II A" with "II A ⁷)".
	DICHLOROPROP-1-ENE)	(18)	Replace "PP, EX, A" with "PP, EP, EX, TOX, A".
2047	DICHLOROPROPENES (MIXTURES of 2,3- DICHLOROPROP-1-ENE and 1,3-	(5)	Replace "3+N2+CMR" with "3+N1+CMR".
	DICHLOROPROPENE)	(16)	Replace "II A" with "II A ⁷)".
		(18)	Replace "PP, EX, A" with "PP, EP, EX, TOX, A".
2047	DICHLOROPROPENES (MIXTURES of 2,3- DICHLOROPROP-1-ENE and 1,3-	(5)	Replace "3+N2+CMR" with "3+N1+CMR".
	DICHLOROPROPENE)	(16)	Replace "II A" with "II A ⁷)".
		(18)	Replace "PP, EX, A" with "PP, EP, EX, TOX, A".
2047	DICHLOROPROPENES (1,3- DICHLOROPROPENE)	(5)	Replace "3+N2+CMR" with "3+N1+CMR".
		(18)	Replace "PP, EX, A" with "PP, EP, EX, TOX, A".
2051		(16)	Replace "II A" with "II A ⁷)".
2057	For the 2 entries	(5)	After "3", insert "+N2".
		(8)	Replace "2" with "3".
2205		(15)	Replace "T4 ³)" with "T4".
		(20)	Before "17", insert "6: 6° C;".
2218		(16)	Replace "II A ⁷)" with "II B".
2227		(5)	After "3+inst." insert "+N3+F".
2238	CHLOROTOLUENES (o-CHLOROTOLUENE)	(5)	Replace "3+S" with "3+N2+S".
2238	CHLOROTOLUENES (p-CHLOROTOLUENE)	(5)	Replace "3+S" with "3+N2+S".
2241		(16)	Replace "II A" with "II A^{7} ".
2259		(20)	Before "34", insert "6: 16° C; 17;"
2265		(18)	Replace "PP, EX, A" with "PP, EP, EX, TOX, A".
2266		(16)	Replace "II A" with "II A ⁷)".
2288		(5)	After "3+inst." insert "+N3".
2289		(16)	Replace "II A" with "II A ⁷)".
		(20)	Before "17; 34", insert "6: 14° C;".
2321		(16)	Replace "II A" with "II A ⁷)".
2325		(16)	Replace "II A" with "II A ⁷)".
2357		(16)	Replace "II A^{8} " with "II B^{4} ".
2382		(14)	Replace "yes" with "no".

UN No.	(with description/comments if necessary)	Column	Amendment
		(16)	Replace "II C" with "II C ⁵)".
2383		(5)	After "3+8" insert "+N2".
		(14)	Replace "no" with "yes".
2397		(16)	Replace "II A" with "II A ⁷)".
2404		(16)	Replace "II A" with "II A ⁷)".
2430	For the entry anti-explosion protection required	(8)	Replace "1" with "2".
2430	For the entry anti-explosion protection required	(8)	Replace "2" with "1".
2477		(13)	Replace "2" with "1".
2486		(19)	Replace "1" with "2".
2491		(20)	Before "17; 34", insert "6: 14° C;"
2531		(20)	Replace "3; 4; 5; 17" with "3; 4; 5; 7; 17".
2564	For the entry packing group III	(15)	Delete "T1".
		(16)	Delete "II A ⁷)".
		(17)	Replace "yes" with "no".
		(18)	Delete ", EX, A".
2574		(5)	Replace "6.1+S" with "6.1+N1+S".
2618		(5)	Replace "3+inst.+F" with "3+inst.+N2+F".
2672	AMMONIA SOLUTION, relative density between 0.880 and 0.957 at 15° C in water, with more than 10% but not more than 35% ammonia (not more than 25% ammonia)	(20)	Insert "34".
2709		(16)	Replace "II A" with "II A ⁷)".
2733		(5)	After "3+8" insert "+N1".
		(16)	Replace "II A" with "II A ⁷)".
2735	For the 3 entries	(18)	Replace "PP, EP" with "*".
2789		(16)	Replace "II A" with "II A ⁷)".
2790	For the 2 entries	(11)	Replace "95" with "97".
2850		(15)	Insert "T3".
		(16)	Insert "II B ⁴)".
		(17)	Replace "no" with "yes".
		(18)	After "PP" insert ", EX, A".
2920	CORROSIVE LIQUID, FLAMMABLE, N.O.S. (2-PROPANOL AND DIDECYLDIMETHYL AMMONIUM CHLORIDE, AQUEOUS SOLUTION)	(11)	Replace "95" with "97".
2924	For the 3 entries FLAMMABLE LIQUID, CORROSIVE, N.O.S.	(18)	Replace "PP, EP, EX, A" with "*".
3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	(18)	Replace "PP" with "*".
3175		(16)	Replace "II A" with "II A ⁷)".

UN No.	(with description/comments if necessary)	Column	Amendment
3256	ELEVATED TEMPERATURE LIQUID, FLAMMABLE, N.O.S. with flashpoint above 60° C, at or above its flashpoint (Low QI Pitch)	(18)	Replace "PP, EX, A" with "PP, EP, EX, TOX, A".
3256	ELEVATED TEMPERATURE LIQUID, FLAMMABLE, N.O.S. with flashpoint above 60° C, at or above its flashpoint	(18)	Replace "PP, EX, A" with "*".
3257	For the 2 entries	(18)	Replace "PP" with "*".
3264	For the 3 entries CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.	(18)	Replace "PP, EP" with "*".
3265	For the 3 entries	(18)	Replace "PP, EP" with "*".
3266	For the 3 entries	(18)	Replace "PP, EP" with "*".
3267	For the 3 entries	(18)	Replace "PP, EP" with "*".
3271	For the 2 entries ETHERS, N.O.S.	(18)	Replace "PP, EX, A" with "*".
3272	For the 2 entries	(18)	Replace "PP, EX, A" with "*".
3289	For the entry with "I" in the "Packing group" column	(13)	Replace "2" with "1".
3295	HYDROCARBONS, LIQUID, N.O.S. CONTAINS ISOPRENE AND PENTADIENE	(5)	Replace "3+inst. (N2, CMR)" with "3+inst.+N2+CMR".
	(vp50 > 110 kPa), STABILIZED	(18)	Replace "PP, EX, A" with "PP, EP, EX, TOX, A".
3295	HYDROCARBONS, LIQUID, N.O.S. (POLYCYCLIC AROMATIC HYDROCARBONS MIXTURE)	(18)	Replace "PP, EX, A" with "PP, EP, EX, TOX, A".
3295	For the 13 entries HYDROCARBONS, LIQUID, N.O.S. WITH MORE THAN 10% BENZENE	(18)	Replace "PP, EX, A" with "PP, EP, EX, TOX, A".
3295	For the 3 entries HYDROCARBONS, LIQUID, N.O.S.	(18)	Replace "PP, EX, A" with "*".
3446	For the 2 entries	(5)	Replace "6.1+S" with "6.1+N2+S".
3451	For the 2 entries	(5)	After "6.1" insert "+N1".
3455	For the 2 entries	(5)	After "6.1+8" insert "+N3".
9001		(18)	Replace "PP, EX, A" with "*".
9002		(18)	Replace "PP, EX, A" with "*".
9003	SUBSTANCES WITH A FLASHPOINT ABOVE 60° C BUT NOT MORE THAN 100° C or SUBSTANCES WHERE 60° C < flashpoint ≤ 100° C, which are not assigned to another class	(18)	Replace "PP" with "*".
9005		(18)	Replace "PP" with "*".
9006		(18)	Replace "PP" with "*".

(*Reference document: ECE/TRANS/WP.15/AC.2/2011/36*)

After UN No. 1010, 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, insert the following new entry:

ECE/TI	
RANS/V	
VP.15/A	
AC.2/40,	
/Add.1	

(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
UN No. or substance identification No.	Name and description	Class	Classification code	Packing Group	Danger	Type of tank vessel	Cargo tank design	Cargo tank type	Cargo tank equipment	Opening pressure of the high- velocity vent valve in kPa	Maximum degree of filling in %	Relative density at 20° C	Type of sampling device	Pump-room below deck permitted	Temperature class	Explosion Group	Anti-explosion protection required	Equipment required	Number of blue cones/lights	Additional requirements/remarks
1010	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, (with 0.1% or more 1.3-butadiene)	2	2F		2.1+inst.+ CMR	G	1	13			91		1	no	Т2	П В ⁴⁾	yes	PP, EP, EX, TOX, A	1	2; 3; 31

(Reference document: ECE/TRANS/WP.15/AC.2/2011/36)

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After UN No. 1011, insert the following new entry:

(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
UN No. or substance identification No.	Name and description	Class	Classification code	Packing Group	Danger	Type of tank vessel	Cargo tank design	Cargo tank type	Cargo tank equipment	Opening pressure of the high- velocity vent valve in kPa	Maximum degree of filling in %	Relative density at 20° C	Type of sampling device	Pump-room below deck permitted	Temperature class	Explosion Group	Anti-explosion protection required	Equipment required	Number of blue cones/lights	Additional requirements/remarks
	BUTANE (with 0.1% or more 1.3- butadiene)	2	2F		2.1+ CMR	G	1	13			91		1	no	Τ2	II A	yes	PP, EP, EX, TOX, A	1	31

After UN No. 1969, insert the following new entry:

(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
UN No. or substance identification No.	Name and description	Class	Classification code	Packing Group	Danger	Type of tank vessel	Cargo tank design	Cargo tank type	Cargo tank equipment	Opening pressure of the high- velocity vent valve in kPa	Maximum degree of filling in %	Relative density at 20° C	Type of sampling device	Pump-room below deck permitted	Temperature class	Explosion Group	Anti-explosion protection required	Equipment required	Number of blue cones/lights	Additional requirements/remarks
1969	ISOBUTANE (with 0.1% or more 1.3- butadiene)	2	2F		2.1+C MR	G	1	13			91		1	no	T2 ¹⁾	II A	yes	PP, EP, EX, TOX, A	1	31

(Reference document: ECE/TRANS/WP.15/AC.2/2011/36)

Consequential amendments

Part 1

Chapter 1.6

1.6.7.4.2 Transitional periods applicable to substances

In Table 2, make the following amendments:

UN No.	(with description/comments if necessary)	Column	Amendment
1203	MOTOR SPIRIT or GASOLINE or PETROL	(18)	Replace "PP, EX, A" with: "PP, EP, EX, TOX, A".
1268	PETROLEUM DISTILLATES, N.O.S. or PETROLEUM PRODUCTS, N.O.S. (NAPHTHA) 110 kPa < vp50 ≤ 175 kPa	(18)	Replace "PP, EX, A" with: "PP, EP, EX, TOX, A".
1268	PETROLEUM DISTILLATES, N.O.S. or PETROLEUM PRODUCTS, N.O.S. (NAPHTHA) 110 kPa < vp50 ≤ 150 kPa	(18)	Replace "PP, EX, A" with: "PP, EP, EX, TOX, A".
1268	PETROLEUM DISTILLATES, N.O.S. or PETROLEUM PRODUCTS, N.O.S. (NAPHTHA) vp50 ≤ 110 kPa	(18)	Replace "PP, EX, A" with: "PP, EP, EX, TOX, A".
1268	PETROLEUM DISTILLATES, N.O.S. with more than 10% BENZENE or PETROLEUM PRODUCTS, N.O.S. (BENZENE HEART CUT) $vp50 \le 110$ kPa	(18)	Replace "PP, EX, A" with: "PP, EP, EX, TOX, A".
3256	ELEVATED TEMPERATURE LIQUID, FLAMMABLE, N.O.S. with flashpoint above 60° C, at or above its flashpoint (Low QI Pitch)	(18)	Replace "PP, EX, A" with: "PP, EP, EX, TOX, A".
3257	For the 2 entries	(18)	Replace "PP" with: "*".
3295	HYDROCARBONS LIQUID, N.O.S. (POLYCYCLIC AROMATIC HYDROCARBONS MIXTURE)	(18)	Replace "PP, EX, A" with: "PP, EP, EX, TOX, A".
3295	HYDROCARBONS, LIQUID, N.O.S.	(18)	Replace "PP, EX, A" with: "*".

In Table 3, make the following amendments:

UN No.	(with description/comments if necessary)	Column	Amendment
1202	GAS OIL or DIESEL FUEL or HEATING OIL (LIGHT) (flashpoint not more than 60° C)	(18)	Replace "PP" with: "*".
1202	GAS OIL or DIESEL FUEL or HEATING OIL (LIGHT) (flashpoint more than 60° C but not more than 100° C)	(18)	Replace "PP" with: "*".
1223		(16)	Replace "II A" with: "II A7)".
1863	FUEL, AVIATION, TURBINE ENGINE	(18)	Replace "PP, EX, A" with: "*".

(Reference document: ECE/TRANS/WP.15/AC.2/2011/36)

Part 3

Chapter 3.2

3.2.3 Table C

Insert the following new entries:

(1)	(2)	(3a)	(3b)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
UN No. or substance identification No.	Name and description	Class	Classification code	Packing Group	Danger	Type of tank vessel	Cargo tank design	Cargo tank type	Cargo tank equipment	Opening pressure of the high- velocity vent valve in kPa	Maximum degree of filling (%)	Relative density	Type of sampling device	Pump-room below deck permitted	Temperature class	Explosion Group	Anti-explosion protection required	Equipment required	Number of blue cones/lights	Additional requirements/Remarks
	ETHANOL AND GASOLINE MIXTURE or ETHANOL AND MOTOR SPIRIT MIXTURE or ETHANOL AND PETROL MIXTURE, with more than 10% but not more than 90% ethanol	3	F1		3+N2+CM R+F	N	2	3	3	10	97	0.69 – 0.78 ¹⁰⁾	3	Yes	Τ3	II A	Yes	PP, EP, EX, TOX, A	1	
	ETHANOL AND GASOLINE MIXTURE or ETHANOL AND MOTOR SPIRIT MIXTURE or ETHANOL AND PETROL MIXTURE, with more than 90% ethanol	3	F1		3+N2+CM R+F	N	2	3	3	10	97	0.78 – 0.79 ¹⁰⁾	3	Yes	T2	II B	Yes	PP, EP, EX, TOX, A	1	

(Reference document: ECE/TRANS/WP.15/AC.2/2011/37)

14

Chapter 3.3

3.3.1

SP 636 (b) Amend the introductory sentence to read as follows:

"Up to the intermediate processing facility, used lithium cells and batteries with a gross mass of not more than 500 g each, whether or not contained in equipment, collected and handed over for carriage for disposal, together or without other non-lithium cells or batteries, are not subject to the other provisions of ADN if they meet the following conditions:".

(Reference document: ECE/TRANS/WP.15/AC.1/122)

Add the following new special provision:

"657 This entry shall be used for the technically pure substance only; for mixtures of LPG components, see UN 1965 or see UN 1075 in conjunction with NOTE 2 in 2.2.2.3.".

(Reference document: ECE/TRANS/WP.15/AC.1/120)

Add a new special provision 658 to read as follows:

"658 UN No. 1057 LIGHTERS complying with standard EN ISO 9994:2006 + A1:2008 "Lighters – Safety Specification" and UN No. 1057 LIGHTER REFILLS, may be carried subject only to the provisions of 3.4.1 (a) to (f), 3.4.2 (except for the total gross mass of 30 kg), 3.4.3 (except for the total gross mass of 20 kg), 3.4.11 and 3.4.12, provided the following conditions are met:

(a) The total gross mass of each package is not more than 10 kg;

(b) Not more than 100 kg gross mass of such packages is carried in a wagon/vehicle; and

(c) Each outer packaging is clearly and durably marked with "UN 1057 LIGHTERS" or "UN 1057 LIGHTER REFILLS", as appropriate.".

(Reference document: ECE/TRANS/WP.15/AC.1/122)

Part 5

Chapter 5.2

5.2.2.2.1.2 In the first paragraph, add "and the environmentally hazardous substance mark when appropriate" after "specified in this section". In the second paragraph, add "and the environmentally hazardous substance mark (see 5.2.1.8.3)" before "may overlap to the extent".

(Reference document: ECE/TRANS/WP.15/AC.1/120)

Chapter 5.3

5.3.1.7.2 In the description under the placard in accordance with Model No. 7D, delete ", when required," and "(see 5.3.2.1.2)".

(Reference document: ECE/TRANS/WP.15/AC.1/120)

Chapter 5.4

5.4.1.1.2 (c) Add the following text at the end:

"For substances not mentioned by name in Table C (assigned to a generic entry or a N.O.S. entry and for which the flowchart in 3.2.3 is applicable) only the actual dangerous properties of the substance shall be mentioned."

(Reference document: ECE/TRANS/WP.15/AC.2/2011/21 as amended)

Part 7

Chapter 7.1

7.1.6.11 Add the following text to the end of RA02:

"Surface contaminated objects group (SCO-II) shall not be carried in bulk."

Amend RA03 to read as follows:

"RA03: Merged with RA02"

7.1.6.14 Add the following text to the end of HA03:

"Stacking of non-dangerous goods on top of packages containing these substances or articles is prohibited.

Where these substances or articles are loaded together with other goods in the same hold, these substances or articles shall be loaded after, and unloaded before, all the other goods.

There is no need for these substances or articles to be loaded after, and unloaded before, all others if these substances or articles are contained in containers.

While these substances or articles are being loaded or unloaded, no loading or unloading operations shall take place in the other holds and no filling or emptying of fuel tanks shall be allowed. The local competent authority may, however, permit exceptions to this provision."

Amend HA04, HA05 and HA06 to read as follows:

"HA04: Merged with HA03

HA05: *Merged with HA03*

HA06: Merged with HA03"

Consequential amendments:

Part 3

Chapter 3.2

3.2.1 Table A

In column (11), middle, delete "HA04, HA05, HA06" in entries with UN Nos. 0004, 0005, 0006, 0007, 0009, 0010, 0012, 0014, 0015 (twice), 0016 (twice), 0018, 0019, 0027, 0028, 0029, 0030, 0033, 0034, 0035, 0037, 0038, 0039, 0042, 0043, 0044, 0048, 0049, 0050, 0054, 0055, 0056, 0059, 0060, 0065, 0066, 0070, 0072, 0073, 0074, 0075, 0076, 0077, 0078, 0079, 0081, 0082, 0083, 0084, 0092, 0093, 0094, 0099, 0101, 0102, 0103, 0104, 0105, 0106, 0107, 0110, 0113, 0114, 0118, 0121, 0124, 0129, 0130, 0131, 0132, 0133, 0135, 0136, 0137, 0138, 0143, 0144, 0146, 0147, 0150, 0151, 0153, 0154, 0155, 0159,

0160, 0161, 0167, 0168, 0169, 0171, 0173, 0174, 0180, 0181, 0182, 0183, 0186, 0190, 0191, 0192, 0193, 0194, 0195, 0196, 0197, 0204, 0207, 0208, 0209, 0212, 0213, 0214, 0215, 0216, 0217, 0218, 0219, 0220, 0221, 0222, 0224, 0225, 0226, 0234, 0235, 0236, 0237, 0238, 0240, 0241, 0242, 0243, 0244, 0245, 0246, 0247, 0248, 0249, 0250, 0254, 0255, 0257, 0266, 0267, 0268, 0271, 0272, 0275, 0276, 0277, 0278, 0279, 0280, 0281, 0282, 0283, 0284, 0285, 0286, 0287, 0288, 0289, 0290, 0291, 0292, 0293, 0294, 0295, 0296, 0297, 0299, 0300, 0301, 0303 (twice), 0305, 0306, 0312, 0313, 0314, 0315, 0316, 0317, 0318, 0319, 0320, 0321, 0322, 0323, 0324, 0325, 0326, 0327, 0328, 0329, 0330, 0331, 0332, 0333, 0334, 0335, 0336, 0337, 0338, 0339, 0340, 0341, 0342, 0343, 0344, 0345, 0346, 0347, 0348, 0349, 0350, 0351, 0352, 0353, 0354, 0355, 0356, 0357, 0358, 0359, 0360, 0361, 0362, 0363, 0364, 0365, 0366, 0367, 0368, 0369, 0370, 0371, 0372, 0373, 0374, 0375, 0376, 0377, 0378, 0379, 0380, 0381, 0382, 0383, 0384, 0385, 0386, 0387, 0388, 0389, 0390, 0391, 0392, 0393, 0394, 0395, 0396, 0397, 0398, 0399, 0400, 0401, 0402, 0403, 0404, 0405, 0406, 0407, 0408, 0409, 0410, 0411, 0412, 0413, 0414, 0415, 0417, 0418, 0419, 0420, 0421, 0424, 0425, 0426, 0427, 0428, 0429, 0430, 0431, 0432, 0433, 0434, 0435, 0436, 0437, 0438, 0439, 0440, 0441, 0442, 0443, 0444, 0445, 0446, 0447, 0448, 0449, 0450, 0451, 0452, 0453, 0454, 0455, 0456, 0457, 0458, 0459, 0460, 0461, 0462, 0463, 0464, 0465, 0466, 0467, 0468, 0469, 0470, 0471, 0472, 0473, 0474, 0475, 0476, 0477, 0478, 0479, 0480, 0481, 0482, 0483, 0484, 0485, 0486, 0487, 0488, 0489, 0490, 0491, 0492, 0493, 0494, 0495, 0496, 0497, 0498, 0499, 0500, 0501, 0502, 0503, 0504, 0505, 0506, 0507, 508 and 0509.

For the entry for UN 2913 column (11), delete "RA03" on the right.

(Reference document: ECE/TRANS/WP.15/AC.2/2011/33)

Part 7

Chapter 7.2

7.2.4.40 Modify the text to read as follows:

"During loading and unloading, the fire extinguishing systems, the fire main with hydrants complete with couplings and jet/spray nozzles or with couplings and hoses with couplings and jet/spray nozzles shall be kept ready for operation in the cargo area on deck. The water supply system shall be capable of being put into operation from the wheelhouse and from the deck.

The freezing of fire-mains and hydrants shall be prevented."

(Reference document: ECE/TRANS/WP.15/AC.2/2011/28 as amended)

Part 8

Chapter 8.1

8.1.2.4 At the end of the second sentence, insert "and before the journey commences".

(Reference document: INF.18)

8.1.6.1 Amend to read as follows:

"8.1.6.1 Hand fire-extinguishers and fire-extinguishing hoses shall be inspected at least once every two years by persons authorized for this purpose by the competent authority. Proof of inspection shall be affixed to the hand fire-extinguishers. A certificate concerning this inspection shall be carried on board."

8.1.2.2 Add the following text:

"(d) The inspection certificates concerning the fixed fire extinguishing systems prescribed in 9.1.0.40.2.9."

8.1.2.3 Add the following text:

"(p) The inspection certificates concerning the fixed fire extinguishing systems prescribed in 9.3.1.40.2.9, 9.3.2.40.2.9 or 9.3.3.40.2.9."

(Reference document: ECE/TRANS/WP.15/AC.2/2011/23 as amended)

Chapter 8.2

8.2.1.4 Amend to read as follows:

"8.2.1.4 After five years the expert shall furnish proof, in the form of relevant particulars entered in the certificate by the competent authority or by a body recognized by it, of successful completion of a refresher course taken in the last year prior to the expiry of the certificate, covering at least the objectives referred to in 8.2.2.3.1.1 and in 8.2.2.3.1.2 or 8.2.2.3.1.3 and comprising current new developments in particular. A refresher course shall be considered to have been successfully completed if a final written test conducted by the course organizer under 8.2.2.2 has been passed. The test can be retaken as often as desired during the validity of the certificate. The new period of validity shall begin on the expiry of the certificate, it shall begin on the date of the certificate of participation in the course."

- 8.2.2.6.3 Insert a new subparagraph (e) to read as follows:
 - "(e) Detailed plan for final tests"
- 8.2.2.6.5 Amend the second sentence to read as follows:

"Approval shall be granted in writing for a limited period."

8.2.2.7 Amend the title to read as follows:

"Examinations and final tests"

- 8.2.2.7.3 Add a new paragraph to read as follows:
- "8.2.2.7.3 Refresher training course

8.2.2.7.3.1 At the end of the refresher course, the course organizer shall conduct a test in accordance with paragraph 8.2.1.4.

8.2.2.7.3.2 The test shall be in writing. Candidates shall be asked 20 multiple-choice questions. At the end of every refresher course, a fresh question paper shall be prepared. The test shall last 40 minutes. It shall be deemed to have been passed if at least 16 of the 20 questions have been answered correctly. During the test, the texts of ADN and CEVNI or related police regulations may be consulted.

8.2.2.7.3.3 The provisions of paragraphs 8.2.2.7.1.2 and 8.2.2.7.1.3 shall apply to the administration of the tests.

8.2.2.7.3.4 The course organizer shall deliver to successful candidates a written certificate for presentation to the competent authority under paragraph 8.2.2.8.

8.2.2.7.3.5 The course organizer shall keep test papers of candidates for five years from the date of the test."

Consequential amendment:

8.2.2.7.1.5 Amend the last sentence to read as follows:

"8.2.2.7.3.6 During the test, the texts of ADN and CEVNI or related police regulations may be consulted.

(*Reference document: ECE/TRANS/WP.15/AC.2/2011/29 as amended*)

Chapter 8.6

8.6.1.3 and 8.6.1.4 Amend the seventh point under entry 8 to read as follows and delete the reference to footnote 2:

"Ventilation system ensuring an overpressure"

(Reference document: ECE/TRANS/WP.15/AC.2/2011/26)

8.6.3 Amend page 1 of the ADN Checklist to read as follows:

		ADN Checklist			1					
concerning the loading/unload	observance of safety provisi	ons and the implem	entation of the r	necessary measure	es for					
- Particulars o	f vessel									
(name of vesse	l)	No (official number)								
(vessel type)										
- Particulars o	f loading or unloading ope	rations								
(shore loading	or unloading installation)	(place)								
(date)		(time)								
- Particulars o	f the cargo as indicated in	the transport docu	ment							
Quantity m ³	Proper shipping name sup applicable, by the technical		UN Number or Identification number	Dangers*	Packing Group					
- Particulars o	f last cargo**									
Proper shipping technical name	g name supplemented, when	applicable, by the	UN Number or Identification number	Dangers*	Packing Group					

* Dangers indicated in column (5) of Table C, as relevant (as mentioned in the transport document in accordance with 5.4.1.1.2 (c).

**To be filled in only if vessel is to be loaded.

(Reference document: ECE/TRANS/WP.15/AC.2/2011/25 as amended)

Part 9

Chapter 9.3

9.3.x.40.1 In the first paragraph of the second indent:

[- In the second sentence, replace "spray nozzles" by "jet/spray nozzles".]

- Insert a new third sentence to read as follows:

"Alternatively one or more of the hoses may be substituted by directable jet/spray nozzles having a diameter of not less than 12 mm."

(Reference document: ECE/TRANS/WP.15/AC.2/2011/28 as amended)