No. 8940. EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD (ADR). DONE AT GENEVA ON 30 SEPTEMBER 1957[1]

ENTRY INTO FORCE of amendments to annex B[2] of the above-mentioned Agreement

The amendments were proposed by the Netherlands and circulated by the Secretary-General on 9 October 1979. They came into force on 1 March 1980, in accordance with article 14 (3) of the Agreement.

ANNEX B

Appendix B.5. LIST OF SUBSTANCES REFERRED TO IN MARGINAL 10 500 (2)

Amendments adopted by the Group of Experts

A. *Amendments to be made to the nota*

NOTA

—First and second subparagraphs, no change.

—Third subparagraph, read:

"When the first and second figures are the same, an intensification of the primary hazard is usually indicated; where the second and third figures are the same, an intensification of the secondary hazard is indicated; thus 33 means a highly inflammable liquid (flash point below 21°C); 66 indicates a very dangerous toxic substance; 88 means a very dangerous corrosive substance. However when the first two figures are 22, a deeply refrigerated gas is indicated; when the first two figures are 44, an inflammable solid in the melted state and at an elevated temperature is indicated. The combination 42 indicates a solid which may give off a gas on contact with water. When the identification number is 333, a spontaneously combustible liquid is indicated."

—Fourth subparagraph, no change.

B. *Amendments to be made to the list in marginal 250 000*

Hydrocyanic acid, to read "663" instead of 66.

Natural gas, liquid, to read "1972" instead of 2043.

Phenol, to read:

"Phenol in the melted state	6.1, 13° (c)	68	2312"

Phosphorus, white or yellow, to read:

"Phosphorus, white, in the melted state ...	4.2, 1°	436	2447"

Pyridine, to read "336" instead of 36.

Triethylamine, to read "338" instead of 336.

C. *Substances to be added to the list in marginal 250 000*

[1] United Nations, *Treaty Series*, vol. 619, p. 77; for subsequent actions, see references in Cumulative Indexes Nos. 9 and 11 to 13, as well as annex A in volumes 883, 892, 905, 907, 920, 921, 922, 926, 940, 943, 951, 966, 973, 982, 987, 995, 1003, 1023, 1035, 1074, 1107, 1129 and 1141.

[2] *Ibid.*, vol. 731, p. 363.

Name of substance (a)	*Class and item number* (b)	*Hazard identification number (upper part)* (c)	*Substance identification number (lower part)* (d)
A			
Acetylene tetrachloride (1,1,2,2-tetrachloroethane)	6.1, 12°(c)	60	1702
Acrylamide, solution of	6.1, 21°	60	2074
Adiponitrile	6.1, 21°	60	2205
Alcohol, denatured	3, 5°	33	1095
Alcohols, liquid, non-toxic, pure or in mixtures, not otherwise specified in this Appendix (2-Ethyl butyl alcohol, 2-Ethyl hexyl alcohol, Heptanols, Hexanols, Octanols)	3, 3° or 4°	30	1987
Alkyl phenols, not otherwise specified in this Appendix (Di-tertiary-butyl-m-cresol, Heptyl phenol, tertiary-butyl cresol)	6.1, 22°	60	2430
Alkyl sulphonic acid, containing more than 3% free sulphuric acid	8, 1°(c)	80	2584
Allylamine	3, 5°	336	2334
Allyl glycidyl ether (1-Allyloxy-2,3-epoxpropane)	3, 3°	36	2219
Alphamethylstyrene	3, 3°	30	2303
Alpha-methyl valeraldehyde	3, 4°	30	2367
Aminophenols	6.1, 21°	60	2512
Ammonium difluoride solution	8, 15° (a)	86	1727
Ammonium nitrate, hot concentrated solutions	5.1, 6° (a)	589	2426
Anisole	3, 3°	30	2222
Arsenic acid, aqueous solution	6.1, 52°	668	1553
Aryl sulphonic acid, containing more than 3% free sulphuric acid	8, 1° (c)	80	2584
B			
Benzotrichloride	6.1, 62°	68	2226
Benzyl chloride	6.1, 61° (k)	68	1738
Benzylidene chloride	6.1, 62°	68	1886
Boron trifluoride-acetic acid complex	8, 15° (c)	80	1742
Bromoacetyl bromide	8, 22°	X80	2513
Bromobenzene	3, 4°	30	2514
Bromochlorodifluoromethane (R 12 B1)	2, 3°(a)	20	1974
1-Bromo-3-chloropropane	6.1, 61°	60	2688
Bromoform	6.1, 61°	60	2515
Bromotrifluoromethane (R 13 B1)	2, 5°(a)	20	1009
n-Butyl acrylate	3, 3°	39	2348
tertiary-Butyl cyclohexyl chloroformate	6.1, 61°	68	2747
n-Butyl ether	3, 3°	30	1149
n-Butyl isocyanate	6.1, 3°	633	2485
tert-Butyl isocyanate	6.1, 3°	633	2484
Butyl methacrylate	3, 3°	39	2227
Butyric	3, 4°	38	2739
Butyryl chloride	8, 35°	83	2353
C			
Carbamate pesticides (compounds and preparations) — with a flash point below 32° C	6.1, 81° (d) 6.1, 82° (d)	663	2758
	6.1, 83° (d)	63	2758
— not otherwise specified in this Appendix	6.1, 81° (d) 6.1, 82° (d)	66	2757
	6.1, 83° (d)	60	2757
Carbon tetrabromide	6.1, 61°	60	2516
Carbon tetrachloride	6.1, 61°	60	1846

Name of substance (a)	*Class and item number* (b)	*Hazard identification number (upper part)* (c)	*Substance identification number (lower part)* (d)
Chloroacetic acids, liquid (Dichloroacetic acid, Monochloroacetic acid)	8, 21° (a)	80	1750
Chloroacetone	6.1, 61° (b)	60	1695
Chloroacetyl chloride	8, 22°	80	1752
Chloroanilines, liquids	6.1, 21° (e)	60	2019
Chlorocresols	6.1, 22°	60	2669
1-Chloro-1, 1-difluoroethane (R 142b)	2, 3°(b)	23	2517
Chloroform	6.1, 61°	60	1888
Chloronitrobenzenes	6.1, 21° (k)	60	1578
Chloronitrotoluenes	6.1, 21°	60	2433
Chloropentafluorethane (R 115)	2, 3° (a)	20	1020
Chloropicrin	6.1, 12° (d)	66	1580
2-Chloropropane (Isopropyl chloride)	3, 1° (a)	33	2356
Chlorotoluenes (o-, m-, p-)	3, 3°	30	2238
Cresylic acid	6.1, 22° (a)	60	2022
Crotonic aldehyde (Crotonaldehyde)	3, 1° (a)	336	1143
Cyclohexyl acetate	3, 4°	30	2243
Cyclooctadiene	3, 3°	36	2520
Cyclopentanone	3, 3°	30	2245
Cyclohexylamine	8, 35°	83	2357
D			
Di-n-butylamine	8, 35°	83	2248
Dichloroacetyl chloride	8, 22°	80	1765
o-Dichlorobenzene	3, 4°	36	1591
2,2'-Dichlorodiethyl ether (Chloroethyl-ether, 2-Chloroethyl ether)	6.1, 12° (f)	663	1916
1,2-Dichloroethylene	3, 1° (a)	33	1150
Dichloromethane (Methylene chloride)	6.1, 61°	60	1593
Dichlorophenols	6.1, 62°	60	2021
Dicycloheptadiene	3, 1° (a)	33	2251
Dicyclopentadiene technical	3, 3°	30	2048
N,N-Diethylaniline	6.1, 21°	60	2432
Diethyl carbonate (Ethyl carbonate)	3, 3°	30	2366
1,1-Difluoroethylene (Vinylidene fluoride) (R 1132a)	2, 5° (c)	239	1959
Diisobutylamine	3, 1° (a)	338	2361
Diisobutylene	3, 1° (a)	33	2050
2,4-Diisocyanatotoluene	6.1, 21° (c)	60	2078
Diisopropylamine	3, 5°	338	1158
Diisopropylbenzene hydroperoxide (Isopropyl cumyl hydroperoxide)	5.2, 18°	539	2171
Diketene	3, 3°	39	2521
Dimethylamine, anhydrous	2, 3° (bt)	236	1032
Dimethylamine, aqueous solutions of, with a flash point below 21°C	3, 5°	338	1160
Dimethylaminoethyl methacrylate	6.1, 11°	69	2522
N,N-Dimethylaniline	6.1, 11° (b)	60	2253
N,N-Dimethylcyclohexylamine	3, 3°	38	2264
Dimethyl disulphide	3, 1° (a)	336	2381
1,1-Dimethylhydrazine	3, 5°	338	1163
Dinitrotoluenes	6.1, 21° (m)	60	1600
Dipropylene triamine	8, 35°	80	2269
E			
Ethylamine, Anhydrous (Monoethylamine)	2, 3° (bt)	236	1036
Ethylamine in aqueous solutions 50 to 70% strength	3, 5°	338	2270

Name of substance (a)	*Class and item number* (b)	*Hazard identification number (upper part)* (c)	*Substance identification number (lower part)* (d)
Ethyl amyl ketone	3, 3°	30	2271
N-Ethylaniline	6.1, 21°	60	2272
Ethyl bromide	6.1, 61°	60	1891
Ethyl bromoacetate	6.1, 61° (h)	63	1603
Ethyl-n-butyrate	3, 3°	30	1180
Ethyl chloroacetate	6.1, 61° (f)	63	1181
Ethyl chloroformate	6.1, 4° (c)	638	1182
Ethylene dibromide (Dibromoethane, symmetrical)	6.1, 61° (a)	60	1605
Ethylene-imine	6.1, 3°	663	1185
2-Ethylhexylamine	8, 35°	83	2276
2-Ethylhexyl chloroformate	6.1, 61°	683	2748
Ethyl methacrylate	3, 1° (a)	339	2277
Ethyl orthoformate	3, 3°	30	2524
Ethyl oxalate	6.1, 13°	60	2525
Ethyl oxide with nitrogen	2, 4° (ct)	236	1040
1-Ethylpiperidine	3, 1° (a)	336	2386
Ethyl propionate	3, 1° (a)	33	1195
Ethyl sulphate (Diethyl sulphate)	6.1, 22°	60	1594
F			
Fluorobenzene	3, 1° (a)	33	2387
Fluorotoluenes	3, 1° (a)	33	2388
Fluosilicic acid	8, 8°	88	1778
G			
Gas mixture R 502	2, 4° (a)	20	1973
H			
Helium refrigerated liquid	2, 7° (a)	22	1963
Heptylic aldehyde (Enanthal, heptanal)	3, 3°	30	1989
Hexachloroacetone	6.1, 62°	60	2661
Hexachlorobutadiene	6.1, 61°	60	2279
Hydrogen sulphide, liquefied	2, 3° (bt)	263	1053
I			
Isobutyl acrylate	3, 3°	39	2527
Isobutyl alcohol	3, 3°	30	1212
Isobutyl isobutyrate	3, 3°	30	2528
Isobutyl methacrylate	3, 3°	39	2283
Isobutyraldehyde	3, 1° (a)	33	2045
Isobutyric anhydride	3, 4°	38	2530
Isobutyronitrile	6.1, 2° (c)	633	2284
Isobutyl isocyanate	6.1, 3°	633	2486
Isopropyl isocyanate	6.1, 3°	633	2483
Isopropyl nitrate	3, 1° (a)	33	1222
M			
Mesityl oxide	3, 3°	38	1229
Methyl bromoacetate	6.1, 61° (g)	63	2643
Methyl chloroacetate	6.1, 61° (e)	63	2295
Methyl chloroformate	6.1, 4° (b)	638	1238
Methylcyclohexane	3, 1° (a)	33	2296
Methylcyclohexanone	3, 3°	30	2297
Methylcyclopentane	3, 1° (a)	33	2298
Methyl dichloroacetate	6.1, 61°	60	2299

Name of substance (a)	*Class and item number* (b)	*Hazard identification number (upper part)* (c)	*Substance identification number (lower part)* (d)
Methyldichlorosilane	8, 23° (a)	X338	1242
Methylene bromide (Dibromomethane)	6.1, 61°	60	2664
2-Methyl-5-ethyl pyridine	6.1, 11°	60	2300
2-Methylfuran	3, 1° (a)	33	2301
Methyl mercaptan (Methanethiol)	2, 3° (bt)	263	1064
Methylmorpholine	8, 35°	83	2535
Methyltetrahydrofuran	3, 1° (a)	33	2536
Methyl trichloroacetate	6.1, 61°	60	2533
Methyltrichlorosilane	8, 23° (a)	X338	1250
Mixtures F1, F2 and F3	2, 4° (a)	20	1078
Mixtures of methylacetylene and propadiene with hydrocarbons (Mixtures P1 and P2)	2, 4° (c)	239	1060
Monobromobutanes	3, 1° (a)	33	1126
Monochloro dimethylether	3, 1° (a)	336	1239
Mononitrocresols	6.1, 22°	60	2446
Mononitrotoluenes	6.1, 21° (n)	60	1664
N			
Nitroanisoles	6.1, 21°	60	2730
Nitropropanes (mono)	3, 3°	30	2608
Nitrosyl sulphuric acid, solution in sulphuric acid	8, 1° (c)	886	2308
Nitroxylenes	6.1, 21° (n)	60	1665
O			
Octyl aldehyde (Octanal)	3, 3°	30	2539
Organochlorine pesticides (compounds and preparations):			
— with a flash point below 32°C	6.1, 81° (b) 6.1, 82° (b)	663	2762
	6.1, 83° (b)	63	2762
— not otherwise specified in this Appendix	6.1, 81° (b) 6.1, 82° (b)	66	2761
	6.1, 83° (b)	60	2761
Organophosphorus pesticides (compounds and preparations):			
— with a flash point below 32°C	6.1, 81° (a) 6.1, 82° (a)	663	2784
	6.1, 83° (a)	63	2784
— not otherwise specified in this Appendix	6.1, 81° (a) 6.1, 82° (a)	66	2783
	6.1, 83° (a)	60	2783
Orthoanisidine	6.1, 21°	60	2431
Orthochlorophenol	6.1, 13°	68	2021
P			
Parachloro-orthoanisidine	6.1, 21°	60	2233
Pentane and isopentane	3, 1° (a)	33	1265
Petroleum ether, *see* Hydrocarbons, liquid with a flash point below 21°C			
Phenetidines	6.1, 21°	60	2311
Phenylenediamines	6.1, 21°	60	1673
Phosphorus tribromide	8, 11° (b)	86	1808
Pivaloyl chloride	8, 22°	80	2438
Printers Inks:			
— with a flash point below 21°C, and containing not more than 30% solids	3, 2°	33	1210
— with a flash point equal to or greater than 21°C	3, 3°	30	1210

Name of substance (a)	*Class and item number* (b)	*Hazard identification number (upper part)* (c)	*Substance identification number (lower part)* (d)
Propionic acid	8, 21° (d)	80	1848
Propionyl chloride	3, 1° (a)	338	1815
n-Propylbenzene	3, 3°	30	2364
Propylene dichloride (1, 2-dichloropropane)	3, 1° (a)	33	1279
Propylene-imine	6.1, 3°	633	1921
R			
Resins in solution in inflammable liquids:			
— with a flash point below 21°C	3, 1° (a) or 2°	33	1866
— containing 30% at most of resin, with a flash point between 21°C and 100°C	3, 3° or 4°	30	1866
S			
Silicochloroform	4.3, 4°	X338	1295
Sodium aluminate solution	8, 32°	88	1819
Sodium chlorate, solid	5.1, 4° (a)	50	1495
Sodium sulphide solution	8, 36°	86	1849
Sulphur dichloride	8, 11°	X886	1828
Sulphur hexafluoride	2, 5° (a)	20	1080
T			
Terpene hydrocarbons (Alpha-pinene, terebenthine, Terpinolene)	3, 3° or 4°	30	2319
Tetrahydrothiophen	3, 1° (a)	33	2412
Toluidines	6.1, 21° (o)	60	1708
2,4-Toluylenediamine	6.1, 21° (h)	60	1709
Tributylamine	8, 35°	80	2542
Trichloroacetaldehyde (Chloral anhydrous)	6.1, 12°	68	2075
Trichloroacetyl chloride	8, 22°	80	2442
Trichlorobenzenes, liquid	6.1, 62°	60	2321
Trichloromethanesulphenyl chloride	6.1, 12° (c)	668	1670
Trifluoromethane (Fluoroform) (R 23)	2, 5° (a)	20	1984
Triisobutylene (Isobutylene trimer)	3, 3°	30	2324
1,3,5-Trimethylbenzene	3, 3°	30	2325
Trimethyl borate	3, 1° (a)	33	2416
Trimethylchlorosilane	8, 23° (a)	X338	1298
Tripropylene (Propylene trimer)	3, 3°	30	2057
V			
Vanadium oxytrichloride solution	8, 11°	86	2443
Vinylidene chloride	3, 1° (a)	339	1303

ANNEX B

CHAPTER II. SPECIAL PROVISIONS APPLICABLE TO THE CARRIAGE OF DANGEROUS SUBSTANCES OF CLASSES 1 TO 8

Amendments adopted by the Group of Experts

Marginal 21 500 (2)

Add the following substances to the current list:

1,1-Difluorethylene	2A
1-Chloro-1, 1-difluoroethane	2A

Dimethylamine, anhydrous	2A+4
Ethylamine, anhydrous	2A+4
Mixtures of methylacetylene and propadiene and hydrocarbons	2A
Methyl mercaptan	4+2A
Hydrogen sulphide, liquefied	4+2A
Propane	2A

Marginal 31 500 (2)

(*a*) Add to the text of the second part of the sentence the names underlined[1] below; the text will then read:

"those containing or (empty tanks, uncleaned) having contained acrylaldehyde (acrolein) or chloroprene or *crotonaldehyde* or *monochloro dimethylether* [1°(a)] or *allyl glycidyl ether* or *cyclooctadiene* (3°) or *mesityl oxide* (3°) or methanol (methyl alcohol) or *allylamine* (5°) shall in addition bear labels conforming to model No. 4."

(*b*) Add a new sentence to read:

"Those containing or (empty tanks, uncleaned) having contained propionyl chloride or diisobutylamine [1°(a)] or N,N-dimethylcyclohexylamine (3°) or butyric anhydride or isobutryic anhydride (4°) or diisopropylamine or dimethylamine (aqueous solution) or 1,1-dimethylhydrazine or ethylamine (in solutions 50-70 per cent strength) (5°) shall in addition bear labels conforming to model No. 5".

Marginals 41 500 (2) and 42 500 (2)

Amend the end of the sentence to read:

"... labels conforming to model No. ..." instead of "... a label conforming to model No. ...".

Marginal 43 500 (2)

Add:

"Those containing or having contained silicochloroform (4°) shall in addition bear a label conforming to model No. 2A and 5. Those containing or having contained aluminium alkyls (3°) shall in addition bear labels conforming to model 2A".

Marginal 51 500 (2)

Add:

"Those containing or having contained ammonium nitrate (hot concentrated aqueous solutions) (6°) shall in addition bear labels conforming to model No. 5".

Marginal 52 500 (2)

Amend the end of the sentence to read:

"... labels conforming to model No. ..." instead of "... a label conforming to model No. 3".

Marginal 61 500

(*a*) Add to the text of the first sentence of paragraph (3) the names and particulars underlined;[1] the paragraph will then read:

"Fixed tanks containing substances listed in Appendix B.5 *with the exception of those mentioned in (4)* shall in addition bear on both sides and at the rear labels conforming to model No. 4. Those ... (etc.) acrylonitrile, *methyl chloroformate, ethyl chloroformate, 2-2-dichlorodiethyl ether, ethylene-imine, n-butylisocyanate, tert-butylisocyanate, isobutyl isocyanate, isopropyl isocyanate, isobutyronitrile, carbamate pesticides (with a flashpoint below 32°C) of 81° (d) and 82° (d), organochlorine pesticides (with a flashpoint below 32°C) of 81° (b) and 82° (b), organophosphorus pesticides (with a flashpoint below 32°C) of 81° (a) and 82° (a) or propylene-imine* shall in addition bear labels conforming to model No. 2A".

[1] Printed in italics in this volume.

(*b*) Add a new paragraph numbered (4) to read:

"Fixed tanks containing methyl bromoacetate, ethyl bromoacetate, 1-bromo-3-chloropropane, bromoform, methylene bromide, ethyl bromide, methyl chloroacetate, ethyl chloroacetate, chloroacetone, chloroform, tertiary-butyl cyclohexyl chloroformate, 2-ethylhexyl chloroformate, benzyl chloride, benzylidene chloride, benzotrichloride, ethylene dibromide, methyl dichloroacetate, dichloromethane, dichlorophenols, hexachloroacetone, hexachlorobutadiene, carbamate pesticides of 83° (d), organochlorine pesticides of 83° (b), organophosphorus pesticides of 83° (a), carbon tetrabromide, carbon tetrachloride, methylene trichloroacetate or liquid trichlorolorbenzines shall bear on both sides and at the rear labels conforming to model No. 4A instead of labels conforming to model No. 4.

Those containing or (empty tanks, uncleaned) having contained methyl bromoacetate, ethyl bromoacetate, methyl chloroacetate, ethyl chloroacetate, carbamate pesticides (with a flashpoint below 32°C) of 83° (d), organochlorine pesticides (with a flashpoint below 32°C) of 83° (b) or organophosphorus pesticides (with a flashpoint below 32°C) of 83° (a) shall in addition bear labels conforming to model No. 2A".

Marginal 81 500 (2)

Add:

"Those containing or (empty tanks, uncleaned) having contained butyryl chloride or cyclohexylamine or di-n-butylamine or methyldichlorosilane or methylmorpholine or trimethylchlorosilane shall in addition bear labels conforming to model No. 2A".

ANNEX B

PROVISIONS COMMON TO THE B.1 APPENDICES

Amendments adopted by the Group of Experts

Marginal 211 173

Replace the existing text of foot-note [8] by the following:

"[8]Under this provision, substances whose kinematic viscosity at 20°C is below 25 stokes shall be deemed to be liquids".

Marginal 212 173

Replace the existing text of foot-note [9] by the following:

"[9]Under this provision, substances whose kinematic viscosity at 20°C is below 25 stokes shall be deemed to be liquids".

Appendix B.2. ELECTRICAL EQUIPMENT

Amendments adopted by the Group of Experts

Marginal 220 000 (2) (b)

Amend the beginning of the paragraph to read:

"*Storage batteries:* In the case of vehicles used for the carriage of inflammable dangerous goods in tanks (fixed or demountable) or in batteries of receptacles, a switch for breaking..." (remainder unchanged).

Authentic texts of the amendments: English and French.

Registered ex officio *on 1 March 1980.*