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Sub-section 6.1.6.2: Review of the list of substances

Comments on document TRANS/WP.15/AC.1/2002/1 transmitted by Germany

In document TRANS/WP.15/AC.1/2002/1 deficiencies of the existing list of substances in 6.1.6.2 of RID/ADR are demonstrated by means of some examples. For the purpose of the verification of these deficiencies in each individual case a detailed assessment of the assignment of substances to standard liquids is undertaken in this information paper on the basis of the actual level of awareness according to the principles mentioned in TRANS/WP.15/AC.1/2002/1.

For this purpose, with the aid of the list of substances of the old RID/ADR, a list of all single entries and all collective entries has been made out of the restructured RID/ADR, which are referred to substances or groups of substances in 6.1.6.2. This list of single entries and collective entries is ordered by their respective UN Number. For each entry the actual classification characteristics and the assigned standard liquid(s) are indicated as well as the item number and the letter of the old RID/ADR for verification purposes. Where required, explanations are given in the last column of the table to which chemical group of substances in 6.1.6.2 the entry is belonging. Where required, proposals are made on the basis of appropriate rationales, whether the assignment of the entry to standard liquids should be changed or the whole entry should be cancelled from the list of substances.

If a modification of the assignment of entries to standard liquids is proposed in relation to the present regulations, the concerned cells of the table have a grey background colour (yellow background colour if printed on a colour printer). If it is proposed to cancel the whole entry from the substance list, the complete row is coloured grey (resp. yellow) in the background.

Aus Kostengründen wurde dieses Dokument nur in begrenzter Auflage gedruckt. Die Delegierten werden daher gebeten, die ihnen zugesandten Exemplare zu den Sitzungen mitzubringen. Das Zentralamt verfügt nur über eine sehr geringe Reserve.

UN No.	Name	Description	Class	Classification-code	Packing Group	Item	Letter	Standard Liquid according to 6.1.6.2 of the RID/ADR	Comment/Proposal
1088	Acetal		3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to ethers; no experience by reason of high permeation; entry should be cancelled
1090	Acetone		3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to ketones Remark: applicable only, if it is proved that the permeability of the substance out of the package intended for carriage has an acceptable level
1104	Amyl acetates		3	F1	III	31°	(c)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	
1105	Pentanol	flashpoint below 23 °C	3	F1	II	3°	(b)	Acetic acid	Proposed new assignment: n-Butyl acetate/ n-butyl acetate-saturated wetting solution
1105	Pentanol	flashpoint between 23 °C and 61 °C	3	F1	III	31°	(c)	Acetic acid	Proposed new assignment: n-Butyl acetate/ n-butyl acetate-saturated wetting solution
1107	Amyl chloride		3	F1	II	3°	(b)	Mixture of hydrocarbons	halogenated substance: no experience by reason of high permeation; entry should be cancelled
1109	Amyl formates		3	F1	III	31°	(c)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	
1110	n-Amyl methyl ketone		3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to ketones no experience by reason of high permeation; entry should be cancelled
1112	Amyl nitrate		3	F1	III	31°	(c)	Mixture of hydrocarbons	nitrogenous substance: no test results; entry should be cancelled
1114	Benzene		3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to hydrocarbons; substance has a higher swelling effect than "Mixture of hydrocarbons"; entry should be cancelled
1120	Butanol	flashpoint below 23 °C	3	F1	II	3°	(b)	Acetic acid	
1120	Butanol	flashpoint between 23 °C and 61 °C	3	F1	III	31°	(c)	Acetic acid	
1123	Butyl acetates	flashpoint below 23 °C	3	F1	II	3°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	
1123	Butyl acetates	flashpoint between 23 °C and 61 °C	3	F1	III	31°	(c)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	
1126	1-Bromobutane		3	F1	II	3°	(b)	Mixture of hydrocarbons	halogenated substance: no experience by reason of high permeation; entry should be cancelled
1127	1-Chlorobutane		3	F1	II	3°	(b)	Mixture of hydrocarbons	halogenated substance: no experience by reason of high permeation; entry should be cancelled
1128	n-Butyl formate		3	F1	II	3°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	
1129	Butyraldehyde		3	F1	II	3°	(b)	Mixture of hydrocarbons	
1133	Adhesives containing flammable liquid	(having a flashpoint below 23°C and viscous according to 2.2.3.1.4) (vapour pressure at 50°C more than 175 kPa)	3	F1	III	31°	(c)	Mixture of hydrocarbons (in fact only for packing group II)	substance belongs to "viscous substances"; is not sufficiently specified; proposed assignment: Rule for collective entries

UN No.	Name	Description	Class	Classification-code	Packing Group	Item	Letter	Standard Liquid according to 6.1.6.2 of the RID/ADR	Comment/Proposal
1133	Adhesives containing flammable liquid	(having a flashpoint below 23°C and viscous according to 2.2.3.1.4) (vapour pressure at 50°C more than 110 kPa but not more than 175 kPa)	3	F1	III	31°	(c)	Mixture of hydrocarbons (in fact only for packing group II)	substance belongs to "viscous substances"; is not sufficiently specified; proposed assignment: Rule for collective entries
1133	Adhesives containing flammable liquid	(having a flashpoint below 23°C and viscous according to 2.2.3.1.4) (vapour pressure at 50°C not more than 110 kPa)	3	F1	III	31°	(c)	Mixture of hydrocarbons (in fact only for packing group II)	substance belongs to "viscous substances"; is not sufficiently specified; proposed assignment: Rule for collective entries
1134	Chlorobenzene		3	F1	III	31°	(c)	Mixture of hydrocarbons	halogenated substance: no experience by reason of high permeation and too high swelling effect; entry should be cancelled
1136	Coal tar distillates	flashpoint below 23 °C	3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to hydrocarbons; components are not sufficiently specified; entry should be cancelled
1136	Coal tar distillates	flashpoint between 23 °C and 61 °C	3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to hydrocarbons; components are not sufficiently specified; entry should be cancelled
1139	Coating solution (includes surface treatments or coatings used for Industrial or other purposes such as vehicle under coating, drum or barrel lining)	(having a flashpoint below 23°C and viscous according to 2.2.3.1.4) (vapour pressure at 50°C more than 175 kPa)	3	F1	III	31°	(c)	Mixture of hydrocarbons (in fact only for packing group II)	substance belongs to "viscous substances"; is not sufficiently specified; proposed assignment: Rule for collective entries
1139	Coating solution (includes surface treatments or coatings used for Industrial or other purposes such as vehicle under coating, drum or barrel lining)	(having a flashpoint below 23°C and viscous according to 2.2.3.1.4) (vapour pressure at 50°C more than 110 kPa but not more than 175 kPa)	3	F1	III	31°	(c)	Mixture of hydrocarbons (in fact only for packing group II)	substance belongs to "viscous substances"; is not sufficiently specified; proposed assignment: Rule for collective entries
1139	Coating solution (includes surface treatments or coatings used for Industrial or other purposes such as vehicle under coating, drum or barrel lining)	(having a flashpoint below 23°C and viscous according to 2.2.3.1.4) (vapour pressure at 50°C not more than 110 kPa)	3	F1	III	31°	(c)	Mixture of hydrocarbons (in fact only for packing group II)	substance belongs to "viscous substances"; is not sufficiently specified; proposed assignment: Rule for collective entries
1145	Cyclohexane		3	F1	II	3°	(b)	Mixture of hydrocarbons	
1146	Cyclopentane		3	F1	II	3°	(b)	Mixture of hydrocarbons	
1147	Decahydronaphthalene		3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to hydrocarbons; substance is a solvent for PE-HD; entry should be cancelled
1148	Diacetone alcohol	flashpoint below 23 °C	3	F1	II	3°	(b)	Acetic acid	substance belongs to alcohols; no test results; entry should be cancelled
1148	Diacetone alcohol	flashpoint between 23 °C and 61 °C	3	F1	III	31°	(c)	Acetic acid	substance belongs to alcohols; no test results; entry should be cancelled
1149	Dibutylether		3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to ethers; no experience by reason of high permeation; entry should be cancelled
1150	1,2-Dichloroethylene		3	F1	II	3°	(b)	Mixture of hydrocarbons	halogenated substance: no experience by reason of high permeation; entry should be cancelled

UN No.	Name	Description	Class	Classification-code	Packing Group	Item	Letter	Standard Liquid according to 6.1.6.2 of the RID/ADR	Comment/Proposal
1152	Dichloropentanes		3	F1	III	31°	(c)	Mixture of hydrocarbons	halogenated substance: no experience by reason of high permeation; entry should be cancelled
1153	Ethylene glycol diethyl ether		3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to ethers; proposed new assignment: n-Butyl acetate/ n-butyl acetate-saturated wetting solution and mixture of hydrocarbons
1156	Diethyl ketone		3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to ketones no experience by reason of high permeation; entry should be cancelled
1157	Diisobutyl ketone		3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to ketones no experience by reason of high permeation; entry should be cancelled
1159	Diisopropyl ether		3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to ethers; no experience by reason of high permeation; entry should be cancelled
1161	Dimethyl carbonate		3	F1	II	3°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	no test results, but assignment seems reasonable
1165	Dioxane		3	F1	II	3°	(b)	Mixture of hydrocarbons	
1166	Dioxolane		3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to ethers; no test results; entry should be cancelled
1169	Extracts, aromatic, liquid	(having a flashpoint below 23°C and viscous according to 2.2.3.1.4) (vapour pressure at 50°C more than 175 kPa)	3	F1	III	31°	(c)	Mixture of hydrocarbons (in fact only for packing group II)	substance belongs to "viscous substances"; is not sufficiently specified; proposed assignment: Rule for collective entries
1169	Extracts, aromatic, liquid	(having a flashpoint below 23°C and viscous according to 2.2.3.1.4) (vapour pressure at 50°C more than 110 kPa but not more than 175 kPa)	3	F1	III	31°	(c)	Mixture of hydrocarbons (in fact only for packing group II)	substance belongs to "viscous substances"; is not sufficiently specified; proposed assignment: Rule for collective entries
1169	Extracts, aromatic, liquid	(having a flashpoint below 23°C and viscous according to 2.2.3.1.4) (vapour pressure at 50°C not more than 110 kPa)	3	F1	III	31°	(c)	Mixture of hydrocarbons (in fact only for packing group II)	substance belongs to "viscous substances"; is not sufficiently specified; proposed assignment: Rule for collective entries
1170	Ethanol		3	F1	II	3°	(b)	Acetic acid	
1170	Ethanol	aqueous solution, concentration of ethanol more than 70% by volume	3	F1	II	3°	(b)	Acetic acid	
1170	Ethanol	aqueous solution, concentration of ethanol more than 24% and not more than 70% by volume	3	F1	III	31°	(c)	Acetic acid	
1171	Ethylene glycol monoethyl ether		3	F1	III	31°	(c)	Acetic acid	substance belongs to alcohols; proposed new assignment: n-Butyl acetate/ n-butyl acetate-saturated wetting solution and mixture of hydrocarbons

UN No.	Name	Description	Class	Classification-code	Packing Group	Item	Letter	Standard Liquid according to 6.1.6.2 of the RID/ADR	Comment/Proposal
1172	Ethylene glycol monoethyl ether acetate		3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to esters; proposed new assignment: n-Butyl acetate/ n-butyl acetate-saturated wetting solution and mixture of hydrocarbons
1173	Ethyl acetate		3	F1	II	3°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	
1175	Ethylbenzene		3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to hydrocarbons; substance has a higher swelling effect than "Mixture of hydrocarbons"; entry should be cancelled
1176	Ethyl borate		3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to esters; no test results; may have other properties than "normal" esters; entry should be cancelled
1177	Ethylbutyl acetate		3	F1	III	31°	(c)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	substance belongs to esters; no test results; assignment seems reasonable
1178	2-Ethylbutyraldehyde		3	F1	II	3°	(b)	Mixture of hydrocarbons	
1179	Ethyl butyl ether		3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to ethers; no experience by reason of high permeation; entry should be cancelled
1180	Ethyl butyrate		3	F1	III	31°	(c)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	
1188	Ethylene glycol monomethyl ether		3	F1	III	31°	(c)	Acetic acid	substance belongs to alcohols; proposed new assignment: n-Butyl acetate/ n-butyl acetate-saturated wetting solution and mixture of hydrocarbons
1189	Ethylene glycol monomethyl ether acetate		3	F1	III	31°	(c)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	substance belongs to esters; proposed new assignment: n-Butyl acetate/ n-butyl acetate-saturated wetting solution and mixture of hydrocarbons
1190	Ethyl formate		3	F1	II	3°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	
1191	Octyl aldehydes		3	F1	III	31°	(c)	Mixture of hydrocarbons	
1192	Ethyl lactate		3	F1	III	31°	(c)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	
1193	Ethyl methyl ketone (Methyl ethyl ketone)		3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to ketones no experience by reason of high permeation; entry should be cancelled
1195	Ethyl propionate		3	F1	II	3°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	
1197	Extracts, flavouring, liquid	(having a flashpoint below 23°C and viscous according to 2.2.3.1.4) (vapour pressure at 50°C more than 175 kPa)	3	F1	III	31°	(c)	Mixture of hydrocarbons (in fact only for packing group II)	substance belongs to "viscous substances"; is not sufficiently specified; proposed assignment: Rule for collective entries

UN No.	Name	Description	Class	Classification-code	Packing Group	Item	Letter	Standard Liquid according to 6.1.6.2 of the RID/ADR	Comment/Proposal
1197	Extracts, flavouring, liquid	(having a flashpoint below 23°C and viscous according to 2.2.3.1.4) (vapour pressure at 50°C more than 110 kPa but not more than 175 kPa)	3	F1	III	31°	(c)	Mixture of hydrocarbons (in fact only for packing group II)	substance belongs to "viscous substances"; is not sufficiently specified; proposed assignment: Rule for collective entries
1197	Extracts, flavouring, liquid	(having a flashpoint below 23°C and viscous according to 2.2.3.1.4) (vapour pressure at 50°C not more than 110 kPa)	3	F1	III	31°	(c)	Mixture of hydrocarbons (in fact only for packing group II)	substance belongs to "viscous substances"; is not sufficiently specified; proposed assignment: Rule for collective entries
1202	Diesel fuel	flashpoint not more than 100 °C	3	F1	III	31°	(c)	Mixture of hydrocarbons	
1202	Gas oil	flashpoint not more than 100 °C	3	F1	III	31°	(c)	Mixture of hydrocarbons	
1202	Heating oil, light		3	F1	III	31°	(c)	Mixture of hydrocarbons	
1203	Motor spirit		3	F1	II	3°	(b)	Mixture of hydrocarbons	
1203	Gasoline		3	F1	II	3°	(b)	Mixture of hydrocarbons	
1203	Petrol		3	F1	II	3°	(b)	Mixture of hydrocarbons	
1206	Heptanes		3	F1	II	3°	(b)	Mixture of hydrocarbons	
1207	Hexaldehyde		3	F1	III	31°	(c)	Mixture of hydrocarbons	
1208	Hexanes		3	F1	II	3°	(b)	Mixture of hydrocarbons	
1210	Printing ink, flammable or Printing ink related material, including printing ink thinning or reducing compound	(having a flashpoint below 23°C and viscous according to 2.2.3.1.4) (vapour pressure at 50°C more than 175 kPa)	3	F1	III	31°	(c)	Mixture of hydrocarbons (in fact only for packing group II)	substance belongs to "viscous substances"; is not sufficiently specified; proposed assignment: Rule for collective entries
1210	Printing ink, flammable or Printing ink related material, including printing ink thinning or reducing compound	(having a flashpoint below 23°C and viscous according to 2.2.3.1.4) (vapour pressure at 50°C more than 110 kPa but not more than 175 kPa)	3	F1	III	31°	(c)	Mixture of hydrocarbons (in fact only for packing group II)	substance belongs to "viscous substances"; is not sufficiently specified; proposed assignment: Rule for collective entries
1210	Printing ink, flammable or Printing ink related material, including printing ink thinning or reducing compound	(having a flashpoint below 23°C and viscous according to 2.2.3.1.4) (vapour pressure at 50°C not more than 110 kPa)	3	F1	III	31°	(c)	Mixture of hydrocarbons (in fact only for packing group II)	substance belongs to "viscous substances"; is not sufficiently specified; proposed assignment: Rule for collective entries
1212	Isobutanol		3	F1	III	31°	(c)	Acetic acid	
1213	Isobutyl acetate		3	F1	II	3°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	
1216	Isooctenes		3	F1	II	3°	(b)	Mixture of hydrocarbons	
1219	Isopropanol		3	F1	II	3°	(b)	Acetic acid	
1220	Isopropyl acetate		3	F1	II	3°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	
1223	Kerosene		3	F1	III	31°	(c)	Mixture of hydrocarbons	
1224	Ketones	liquid, n.o.s., vapour pressure at 50°C not more than 110 kPa	3	F1	II	3°	(b)	Mixture of hydrocarbons	specific n.o.s entry: is not sufficiently specified; proposed assignment: rule for collective entries

UN No.	Name	Description	Class	Classification-code	Packing Group	Item	Letter	Standard Liquid according to 6.1.6.2 of the RID/ADR	Comment/Proposal
1224	Ketones	liquid, n.o.s., flashpoint between 23 °C and 61 °C	3	F1	III	31°	(c)	Mixture of hydrocarbons	specific n.o.s entry: is not sufficiently specified; proposed assignment: rule for collective entries
1229	Mesityl oxide		3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to ketones no experience by reason of high permeation; entry should be cancelled
1230	Methanol		3	FT1	II	17°	(b)	Acetic acid	
1231	Methyl acetate		3	F1	II	3°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	
1233	Methylamyl acetate		3	F1	III	31°	(c)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	
1237	Methyl butyrate		3	F1	II	3°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	
1245	Methyl isobutyl ketone		3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to ketones no experience by reason of high permeation; entry should be cancelled
1246	Methyl isopropenyl ketone	stabilized	3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to ketones no experience by reason of high permeation; entry should be cancelled
1247	Methyl methacrylate	monomer, stabilized	3	F1	II	3°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	
1248	Methyl propionate		3	F1	II	3°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	
1249	Methyl propyl ketone	stabilized	3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to ketones no experience by reason of high permeation; entry should be cancelled
1262	Octanes		3	F1	II	3°	(b)	Mixture of hydrocarbons	
1263	Paint (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or Paint related material (including paint thinning and reducing compound)	(having a flashpoint below 23°C and viscous according to 2.2.3.1.4) (vapour pressure at 50°C more than 175 kPa)	3	F1	III	31°	(c)	Mixture of hydrocarbons (in fact only for packing group II)	substance belongs to "viscous substances"; is not sufficiently specified; proposed assignment: Rule for collective entries
1263	Paint (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or Paint related material (including paint thinning and reducing compound)	(having a flashpoint below 23°C and viscous according to 2.2.3.1.4) (vapour pressure at 50°C more than 110 kPa but not more than 175 kPa)	3	F1	III	31°	(c)	Mixture of hydrocarbons (in fact only for packing group II)	substance belongs to "viscous substances"; is not sufficiently specified; proposed assignment: Rule for collective entries
1263	Paint (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or Paint related material (including paint thinning and reducing compound)	(having a flashpoint below 23°C and viscous according to 2.2.3.1.4) (vapour pressure at 50°C not more than 110 kPa)	3	F1	III	31°	(c)	Mixture of hydrocarbons (in fact only for packing group II)	substance belongs to "viscous substances"; is not sufficiently specified; proposed assignment: Rule for collective entries

UN No.	Name	Description	Class	Classification-code	Packing Group	Item	Letter	Standard Liquid according to 6.1.6.2 of the RID/ADR	Comment/Proposal
1264	Paraldehyde		3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to aldehydes; no test results; entry should be cancelled
1266	Perfumery products with flammable solvents	(having a flashpoint below 23°C and viscous according to 2.2.3.1.4) (vapour pressure at 50°C more than 175 kPa)	3	F1	III	31°	(c)	Mixture of hydrocarbons (in fact only for packing group II)	substance belongs to "viscous substances"; is not sufficiently specified; proposed assignment: Rule for collective entries
1266	Perfumery products with flammable solvents	(having a flashpoint below 23°C and viscous according to 2.2.3.1.4) (vapour pressure at 50°C more than 110 kPa but not more than 175 kPa)	3	F1	III	31°	(c)	Mixture of hydrocarbons (in fact only for packing group II)	substance belongs to "viscous substances"; is not sufficiently specified; proposed assignment: Rule for collective entries
1266	Perfumery products with flammable solvents	(having a flashpoint below 23°C and viscous according to 2.2.3.1.4) (vapour pressure at 50°C not more than 110 kPa)	3	F1	III	31°	(c)	Mixture of hydrocarbons (in fact only for packing group II)	substance belongs to "viscous substances"; is not sufficiently specified; proposed assignment: Rule for collective entries
1267	Petroleum crude oil	vapour pressure at 50°C not more than 110 kPa	3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to hydrocarbons; components are not sufficiently specified; entry should be cancelled
1267	Petroleum crude oil	flashpoint between 23 °C and 61 °C	3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to hydrocarbons; components are not sufficiently specified; entry should be cancelled
1268	Petroleum distillates or Petroleum products	n.o.s., vapour pressure at 50°C not more than 110 kPa	3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to hydrocarbons; is not sufficiently specified; proposed assignment: Rule for collective entries
1268	Petroleum distillates or Petroleum products	n.o.s., flashpoint between 23 °C and 61 °C	3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to hydrocarbons; is not sufficiently specified; proposed assignment: Rule for collective entries
1274	n-Propanol	flashpoint below 23 °C	3	F1	II	3°	(b)	Acetic acid	
1274	n-Propanol	flashpoint between 23 °C and 61 °C	3	F1	III	31°	(c)	Acetic acid	
1275	Propionaldehyde		3	F1	II	3°	(b)	Mixture of hydrocarbons	
1276	n-Propyl acetate		3	F1	II	3°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	
1279	1,2-Dichloropropane		3	F1	II	3°	(b)	Mixture of hydrocarbons	halogenated substance: no experience by reason of high permeation; entry should be cancelled
1281	Propyl formates		3	F1	II	3°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	
1286	Rosin oil	(having a flashpoint below 23°C and viscous according to 2.2.3.1.4) (vapour pressure at 50°C more than 175 kPa)	3	F1	III	31°	(c)	Mixture of hydrocarbons (in fact only for packing group II)	substance belongs to "viscous substances"; is not sufficiently specified; proposed assignment: Rule for collective entries
1286	Rosin oil	(having a flashpoint below 23°C and viscous according to 2.2.3.1.4) (vapour pressure at 50°C more than 110 kPa but not more than 175 kPa)	3	F1	III	31°	(c)	Mixture of hydrocarbons (in fact only for packing group II)	substance belongs to "viscous substances"; is not sufficiently specified; proposed assignment: Rule for collective entries

UN No.	Name	Description	Class	Classification-code	Packing Group	Item	Letter	Standard Liquid according to 6.1.6.2 of the RID/ADR	Comment/Proposal
1286	Rosin oil	(having a flashpoint below 23°C and viscous according to 2.2.3.1.4) (vapour pressure at 50°C not more than 110 kPa)	3	F1	III	31°	(c)	Mixture of hydrocarbons (in fact only for packing group II)	substance belongs to "viscous substances"; is not sufficiently specified; proposed assignment: Rule for collective entries
1287	Rubber solution	(having a flashpoint below 23°C and viscous according to 2.2.3.1.4) (vapour pressure at 50°C more than 175 kPa)	3	F1	III	31°	(c)	Mixture of hydrocarbons (in fact only for packing group II)	substance belongs to "viscous substances"; is not sufficiently specified; proposed assignment: Rule for collective entries
1286	Rubber solution	(having a flashpoint below 23°C and viscous according to 2.2.3.1.4) (vapour pressure at 50°C more than 110 kPa but not more than 175 kPa)	3	F1	III	31°	(c)	Mixture of hydrocarbons (in fact only for packing group II)	substance belongs to "viscous substances"; is not sufficiently specified; proposed assignment: Rule for collective entries
1286	Rubber solution	(having a flashpoint below 23°C and viscous according to 2.2.3.1.4) (vapour pressure at 50°C not more than 110 kPa)	3	F1	III	31°	(c)	Mixture of hydrocarbons (in fact only for packing group II)	substance belongs to "viscous substances"; is not sufficiently specified; proposed assignment: Rule for collective entries
1288	Shale oil		3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to hydrocarbons; components are not sufficiently specified: entry should be cancelled
1288	Shale oil		3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to hydrocarbons; components are not sufficiently specified: entry should be cancelled
1292	Tetraethyl silicate		3	F1	III	31°	(c)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	substance belongs to esters; no test results; may have other properties than "normal" esters; entry should be cancelled
1294	Toluene		3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to hydrocarbons; substance has a higher swelling effect than "Mixture of hydrocarbons"; entry should be cancelled
1299	Turpentine		3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to hydrocarbons; substance has a higher swelling effect than "Mixture of hydrocarbons"; entry should be cancelled
1300	Turpentine substitute	flashpoint below 23 °C	3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to hydrocarbons; substance has a higher swelling effect than "Mixture of hydrocarbons"; entry should be cancelled
1300	Turpentine substitute	flashpoint between 23 °C and 61 °C	3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to hydrocarbons; substance has a higher swelling effect than "Mixture of hydrocarbons"; entry should be cancelled
1301	Vinyl acetate	stabilized	3	F1	II	3°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	
1304	Vinyl isobutyl ether	stabilized	3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to ethers; no experience by reason of high permeation; entry should be cancelled
1306	Wood preservatives, liquid	(having a flashpoint below 23°C and viscous according to 2.2.3.1.4) (vapour pressure at 50°C more than 175 kPa)	3	F1	III	31°	(c)	Mixture of hydrocarbons (in fact only for packing group II)	substance belongs to "viscous substances"; is not sufficiently specified; proposed assignment: Rule for collective entries

UN No.	Name	Description	Class	Classification-code	Packing Group	Item	Letter	Standard Liquid according to 6.1.6.2 of the RID/ADR	Comment/Proposal
1306	Wood preservatives, liquid	(having a flashpoint below 23°C and viscous according to 2.2.3.1.4) (vapour pressure at 50°C more than 110 kPa but not more than 175 kPa)	3	F1	III	31°	(c)	Mixture of hydrocarbons (in fact only for packing group II)	substance belongs to "viscous substances"; is not sufficiently specified; proposed assignment: Rule for collective entries
1306	Wood preservatives, liquid	(having a flashpoint below 23°C and viscous according to 2.2.3.1.4) (vapour pressure at 50°C not more than 110 kPa)	3	F1	III	31°	(c)	Mixture of hydrocarbons (in fact only for packing group II)	substance belongs to "viscous substances"; is not sufficiently specified; proposed assignment: Rule for collective entries
1307	Xylenes	flashpoint below 23 °C	3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to hydrocarbons; substance has a higher swelling effect than "Mixture of hydrocarbons"; entry should be cancelled
1307	Xylenes	flashpoint between 23 °C and 61 °C	3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to hydrocarbons; substance has a higher swelling effect than "Mixture of hydrocarbons"; entry should be cancelled
1547	Aniline		6.1	T1	II	12°	(b)	Acetic acid	
1715	Acetic anhydride		8	CF1	II	32°	(b)	Acetic acid	
1755	Chromic acid	aqueous solution with not more than 30% chromic acid, corrosive	8	C1	II	17°	(b)	Nitric acid (55%)	
1755	Chromic acid	aqueous solution with not more than 30% chromic acid, slightly corrosive	8	C1	III	17°	(c)	Nitric acid (55%)	
1775	Fluoroboric acid	aqueous solution with not more than 50% fluoroboric acid	8	C1	II	8°	(b)	Water	
1778	Fluorosilicic acid		8	C1	II	8°	(b)	Water	
1779	Formic acid		8	C3	II	32°	(b)	Acetic acid	
1787	Hydriodic acid	aqueous solution, corrosive	8	C1	II	5°	(b)	Water	
1787	Hydriodic acid	aqueous solution, slightly corrosive	8	C1	III	5°	(c)	Water	
1788	Hydrobromic acid	aqueous solution, corrosive	8	C1	II	5°	(b)	Water	
1788	Hydrobromic acid	aqueous solution, slightly corrosive	8	C1	III	5°	(c)	Water	
1789	Hydrochloric acid	not more than 36% aqueous solution, corrosive	8	C1	II	5°	(b)	Water	Proposal: hydrochloric acid with not more than 38 % should be included
1789	Hydrochloric acid	aqueous solution, slightly corrosive	8	C1	III	5°	(c)	Water	
1790	Hydrogen fluoride	aqueous solution, with not more than 60% hydrogen fluoride	8	CT1	II	7°	(b)	Water the permissible period of use: not more than 2 years; maximum 60 litres	Proposal: condition "maximum 60 litres" should be cancelled
1791	Hypochlorite	aqueous solution, slightly corrosive	8	C9	III	61°	(c)	Nitric acid (55%) *	
		*) Test to be carried out only with vent. If the test is carried out with nitric acid as the standard liquid, an acid-resistant vent and gasket shall be used. For hypochlorite solutions, vents and gaskets of the same design type, resistant to hypochlorite (e.g. of silicone rubber) but not resistant to nitric acid, are also permitted.							
1802	Perchloric acid	aqueous solution with not more than 50% acid, by mass	8	CO1	II	4°	(b)	Nitric acid (55%)	Proposed new assignment: Water
1805	Phosphoric acid	liquid	8	C1	III	17°	(c)	Water	
1814	Potassium hydroxide	aqueous solution, corrosive	8	C5	II	42°	(b)	Water	

UN No.	Name	Description	Class	Classification-code	Packing Group	Item	Letter	Standard Liquid according to 6.1.6.2 of the RID/ADR	Comment/Proposal
1814	Potassium hydroxide	aqueous solution, slightly corrosive	8	C5	III	42°	(c)	Water	
1824	Sodium hydroxide	aqueous solution, corrosive	8	C5	II	42°	(b)	Water	
1824	Sodium hydroxide	aqueous solution, slightly corrosive	8	C5	III	42°	(c)	Water	
1830	Sulphuric acid	with more than 51% pure acid	8	C1	II	1°	(b)	Water	
1832	Sulphuric acid, spent	chemical stable	8	C1	II	1°	(b)	Water	
1848	Propionic acid		8	C3	III	32°	(c)	Acetic acid	Proposed new assignment: n-Butyl acetate/ n-butyl acetate-saturated wetting solution
1862	Ethyl crotonate		3	F1	II	3°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	
1863	Fuel, aviation, turbine engine	vapour pressure at 50°C not more than 110 kPa	3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to hydrocarbons; no test results; assignment seems to be reasonable
1863	Fuel, aviation, turbine engine	flashpoint between 23 °C and 61 °C	3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to hydrocarbons; no test results; assignment seems to be reasonable
1866	Resin solution, flammable	(having a flashpoint below 23°C and viscous according to 2.2.3.1.4) (vapour pressure at 50°C more than 175 kPa)	3	F1	III	31°	(c)	Mixture of hydrocarbons (in fact only for packing group II)	substance belongs to "viscous substances"; is not sufficiently specified; proposed assignment: Rule for collective entries
1866	Resin solution, flammable	(having a flashpoint below 23°C and viscous according to 2.2.3.1.4) (vapour pressure at 50°C more than 110 kPa but not more than 175 kPa)	3	F1	III	31°	(c)	Mixture of hydrocarbons (in fact only for packing group II)	substance belongs to "viscous substances"; is not sufficiently specified; proposed assignment: Rule for collective entries
1866	Resin solution, flammable	(having a flashpoint below 23°C and viscous according to 2.2.3.1.4) (vapour pressure at 50°C not more than 110 kPa)	3	F1	III	31°	(c)	Mixture of hydrocarbons (in fact only for packing group II)	substance belongs to "viscous substances"; is not sufficiently specified; proposed assignment: Rule for collective entries
1908	Chlorite solution	aqueous solution, slightly corrosive	8	C9	III	61°	(c)	Nitric acid (55%)	Proposed new assignment: Acetic acid
1914	Butyl propionates		3	F1	III	31°	(c)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	
1915	Cyclohexanone		3	F1	III	31°	(c)	Mixture of hydrocarbons	
1917	Ethyl acrylate	stabilized	3	F1	II	3°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	
1918	Isopropylbenzene		3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to hydrocarbons; substance has a higher swelling effect than "Mixture of hydrocarbons"; entry should be cancelled
1919	Methyl acrylate	stabilized	3	F1	II	3°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	
1920	Nonanes		3	F1	III	31°	(c)	Mixture of hydrocarbons	
1940	Thioglycolic acid		8	C3	II	32°	(b)	Acetic acid	
1987	Alcohols	n.o.s., vapour pressure at 50°C not more than 110 kPa	3	F1	II	3°	(b)	Acetic acid	specific n.o.s entry: is not sufficiently specified; proposed assignment: rule for collective entries

UN No.	Name	Description	Class	Classification-code	Packing Group	Item	Letter	Standard Liquid according to 6.1.6.2 of the RID/ADR	Comment/Proposal
1987	Alcohols	n.o.s., flashpoint between 23 °C and 61 °C	3	F1	III	31°	(c)	Acetic acid	specific n.o.s entry: is not sufficiently specified; proposed assignment: rule for collective entries
1989	Aldehydes	n.o.s., vapour pressure at 50°C not more than 110 kPa	3	F1	II	3°	(b)	Mixture of hydrocarbons	specific n.o.s entry: is not sufficiently specified; proposed assignment: rule for collective entries
1989	Aldehydes	n.o.s., flashpoint between 23 °C and 61 °C	3	F1	III	31°	(c)	Mixture of hydrocarbons	specific n.o.s entry: is not sufficiently specified; proposed assignment: rule for collective entries
1999	Tars, liquid	(having a flashpoint below 23°C and viscous according to 2.2.3.1.4) (vapour pressure at 50°C more than 175 kPa)	3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to hydrocarbons; components are not sufficiently specified: entry should be cancelled
1999	Tars, liquid	(having a flashpoint below 23°C and viscous according to 2.2.3.1.4) (vapour pressure at 50°C more than 110 kPa but not more than 175 kPa)	3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to hydrocarbons; components are not sufficiently specified: entry should be cancelled
1999	Tars, liquid	(having a flashpoint below 23°C and viscous according to 2.2.3.1.4) (vapour pressure at 50°C not more than 110 kPa)	3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to hydrocarbons; components are not sufficiently specified: entry should be cancelled
2014	Hydrogen peroxide	aqueous solution, with not less than 20% but not more than 60% hydrogen peroxide, stabilized as necessary	5.1	OC1	II	1°	(b)	Water	Proposed new assignment: nitric acid (55%)
2022	Cresylic acid		6.1	TC1	II	27°	(b)	Acetic acid	
2030	Hydrazine hydrate	aqueous solution with 64% hydrazine	8	CT1	II	44°	(b)	Water	
2031	Nitric acid	with not more than 55% pure acid	8	CO1	II	2°	(b)	Nitric acid (55%)	
2045	Isobutyraldehyde		3	F1	II	3°	(b)	Mixture of hydrocarbons	
2046	Cymenes		3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to hydrocarbons; substance has a higher swelling effect than "Mixture of hydrocarbons"; entry should be cancelled
2047	Dichloropropenes	flashpoint below 23 °C	3	F1	II	3°	(b)	Mixture of hydrocarbons	halogenated substance: no experience by reason of high permeation; entry should be cancelled
2047	Dichloropropenes	flashpoint between 23 °C and 61 °C	3	F1	III	31°	(c)	Mixture of hydrocarbons	halogenated substance: no experience by reason of high permeation; entry should be cancelled
2048	Dicyclopentadiene		3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to hydrocarbons; no test results; may have higher swelling rates than mixture of hydrocarbons; entry should be cancelled
2049	Diethylbenzene		3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to hydrocarbons; substance has a higher swelling effect than "Mixture of hydrocarbons"; entry should be cancelled
2050	Diisobutylene	isomeric compounds	3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to hydrocarbons; no test results; assignment seems to be reasonable

UN No.	Name	Description	Class	Classification-code	Packing Group	Item	Letter	Standard Liquid according to 6.1.6.2 of the RID/ADR	Comment/Proposal
2052	Dipentene		3	F1	III	31°	(c)		substance belongs to hydrocarbons; no test results; may have higher swelling rates than mixture of hydrocarbons; entry should be cancelled
2053	Methyl isobutyl carbinol		3	F1	III	31°	(c)	Acetic acid	
2054	Morpholine		3	CF1	I	31°	(c)	Mixture of hydrocarbons	
2055	Styrene	monomer, stabilized	3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to hydrocarbons; substance has a higher swelling effect than "Mixture of hydrocarbons"; entry should be cancelled
2056	Tetrahydrofuran		3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to ethers; no experience by reason of high permeation; entry should be cancelled
2057	Tripropylene	flashpoint below 23 °C	3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to hydrocarbons; no test results; assignment seems to be reasonable
2057	Tripropylene	flashpoint between 23 °C and 61 °C	3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to hydrocarbons; no test results; assignment seems to be reasonable
2058	Valeraldehyde		3	F1	II	3°	(b)	Mixture of hydrocarbons	
2059	Nitrocellulose solution, flammable	containing not more than 55 % nitrocellulose with a nitrogen content not exceeding 12.6 %, vapour pressure at 50°C more than 110 kPa but not more than 175 kPa	3	D	II	4°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution and mixture of hydrocarbons	Components are not sufficiently specified; should be assigned to the Rule for collective entries
2059	Nitrocellulose solution, flammable	containing not more than 55 % nitrocellulose with a nitrogen content not exceeding 12.6 %, vapour pressure at 50°C not more than 110 kPa	3	D	II	4°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution and mixture of hydrocarbons	Components are not sufficiently specified; should be assigned to the Rule for collective entries
2059	Nitrocellulose solution, flammable	containing not more than 55 % nitrocellulose with a nitrogen content not exceeding 12.6 %, flashpoint between 23 °C and 61 °C	3	D	III	34°	(c)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution and mixture of hydrocarbons	Components are not sufficiently specified; should be assigned to the Rule for collective entries
2076	Cresols	liquid	6.1	TC1	II	27°	(b)	Acetic acid	
2209	Formaldehyde	aqueous solution, with not less than 25% formaldehyde	8	C9	III	63°	(c)	Water	
2218	Acrylic acid	stabilized	8	CF1	II	32°	(b)	Acetic acid	Proposed new assignment: n-Butyl acetate/ n-butyl acetate-saturated wetting solution
2219	Allylglycidylether		3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to ethers; no experience by reason of high permeation; entry should be cancelled
2222	Anisole		3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to ethers; no experience by reason of high permeation and too high swelling effect; entry should be cancelled
2227	n-Butyl methacrylate	stabilized	3	F1	III	31°	(c)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	

UN No.	Name	Description	Class	Classification-code	Packing Group	Item	Letter	Standard Liquid according to 6.1.6.2 of the RID/ADR	Comment/Proposal
2234	Chlorobenzotrifluorides		3	F1	III	31°	(c)	Mixture of hydrocarbons	halogenated substance: no test results; probably high swelling effect; entry should be cancelled
2238	Chlorotoluenes		3	F1	III	31°	(c)	Mixture of hydrocarbons	halogenated substance: no experience by reason of high permeation and too high swelling effect; entry should be cancelled
2241	Cycloheptane		3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to hydrocarbons; no test results; assignment seems to be reasonable
2242	Cycloheptene		3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to hydrocarbons; no test results; assignment seems to be reasonable
2243	Cyclohexyl acetate		3	F1	III	31°	(c)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	
2244	Cyclopentanol		3	F1	III	31°	(c)	Acetic acid	
2245	Cyclopentanone		3	F1	III	31°	(c)	Mixture of hydrocarbons	
2247	n-Decane		3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to hydrocarbons; no test results; assignment seems to be reasonable
2251	Bicyclo-[2.2.1]hepta-2,5-diene	stabilized	3	F1	II	3°	(b)	Mixture of hydrocarbons	hydrocarbon: no test results; probably high swelling effect; entry should be cancelled
2252	1,2-Dimethoxyethane		3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to ethers; no experience by reason of high permeation; entry should be cancelled
2256	Cyclohexene		3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to hydrocarbons; no test results; assignment seems to be reasonable
2263	Dimethylcyclohexanes		3	F1	II	3°	(b)	Mixture of hydrocarbons	
2265	N,N-Dimethylformamide		3	F1	III	31°	(c)	Mixture of hydrocarbons	Proposed new assignment: n-Butyl acetate/ n-butyl acetate-saturated wetting solution
2271	Ethyl amyl ketone		3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to ketones; no experience by reason of high permeation; entry should be cancelled
2275	2-Ethylbutanol		3	F1	III	31°	(c)	Acetic acid	substance belongs to alcohols; no test results; proposed new assignment: n-Butyl acetate/ n-butyl acetate-saturated wetting solution
2277	Ethyl methacrylate	stabilized	3	F1	II	3°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	
2278	n-Heptene		3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to hydrocarbons; no test results; assignment seems to be reasonable
2282	Hexanols		3	F1	III	31°	(c)	Acetic acid	substance belongs to alcohols; no test results; proposed new assignment: n-Butyl acetate/ n-butyl acetate-saturated wetting solution
2283	Isobutyl methacrylate	stabilized	3	F1	III	31°	(c)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	

UN No.	Name	Description	Class	Classification-code	Packing Group	Item	Letter	Standard Liquid according to 6.1.6.2 of the RID/ADR	Comment/Proposal
2286	Pentamethylheptane		3	F1	III	31°	(c)	Mixture of hydrocarbons	
2287	Isoheptene		3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to hydrocarbons; no test results; assignment seems to be reasonable
2288	Isohexene		3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to hydrocarbons; no test results; assignment seems to be reasonable
2293	4-Methoxy-4-methylpentan-2-one		3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to ketones no test results; assignment seems to be reasonable
2296	Methylcyclohexane		3	F1	II	3°	(b)	Mixture of hydrocarbons	
2297	Methylcyclohexanone		3	F1	III	31°	(c)	Mixture of hydrocarbons	
2298	Methylcyclopentane		3	F1	II	3°	(b)	Mixture of hydrocarbons	
2301	2-Methylfuran		3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to ethers; no experience by reason of high permeation; entry should be cancelled
2302	5-Methylhexan-2-one		3	F1	III	31°	(c)	Mixture of hydrocarbons	
2303	Isopropenylbenzene		3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to hydrocarbons; no test results; probably high swelling effect; entry should be cancelled
2309	Octadiene		3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to hydrocarbons; no test results; assignment seems to be reasonable
2313	Picolines		3	F1	III	31°	(c)	Mixture of hydrocarbons	nitrogenous substance: no test results; assignment seems to be reasonable
2319	Terpene hydrocarbons	n.o.s., flashpoint between 23 °C and 61 °C	3	F1	III	31°	(c)	Mixture of hydrocarbons	specific n.o.s entry: probably has too much swelling effect; entry should be cancelled
2323	Triethyl phosphite		3	F1	III	31°	(c)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	no test results; may have other properties than "normal" esters; entry should be cancelled
2324	Triisobutylene		3	F1	III	31°	(c)	Mixture of hydrocarbons	
2325	1,3,5-Trimethylbenzene		3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to hydrocarbons; substance has a higher swelling effect than mixture of hydrocarbons; entry should be cancelled
2329	Trimethyl phosphite		3	F1	III	31°	(c)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	no test results; may have other properties than "normal" esters; entry should be cancelled
2330	Undecane		3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to hydrocarbons; no test results; assignment seems to be reasonable
2332	Acetaldehyd oxime		3	F1	III	31°	(c)	Mixture of hydrocarbons	nitrogenous substance: no test results; entry should be cancelled
2338	Benzotrifluoride		3	F1	II	3°	(b)	Mixture of hydrocarbons	halogenated substance: no test results; probably too high swelling effect; entry should be cancelled

UN No.	Name	Description	Class	Classification-code	Packing Group	Item	Letter	Standard Liquid according to 6.1.6.2 of the RID/ADR	Comment/Proposal
2339	2-Bromobutane		3	F1	II	3°	(b)	Mixture of hydrocarbons	halogenated substance: no experience by reason of high permeation; entry should be cancelled
2340	2-Bromoethyl ethyl ether		3	F1	II	3°	(b)	Mixture of hydrocarbons	halogenated substance: no experience by reason of high permeation; entry should be cancelled
2341	1-Bromo-3-methylbutane		3	F1	III	31°	(c)	Mixture of hydrocarbons	halogenated substance: no experience by reason of high permeation; entry should be cancelled
2342	Bromomethylpropanes		3	F1	II	3°	(b)	Mixture of hydrocarbons	halogenated substance: no experience by reason of high permeation; entry should be cancelled
2343	2-Bromopentane		3	F1	II	3°	(b)	Mixture of hydrocarbons	halogenated substance: no experience by reason of high permeation; entry should be cancelled
2344	Bromopropanes	flashpoint below 23 °C	3	F1	II	3°	(b)	Mixture of hydrocarbons	halogenated substance: no experience by reason of high permeation; entry should be cancelled
2344	Bromopropanes	flashpoint between 23 °C and 61 °C	3	F1	III	31°	(c)	Mixture of hydrocarbons	halogenated substance: no experience by reason of high permeation; entry should be cancelled
2345	3-Bromopropyne		3	F1	II	3°	(b)	Mixture of hydrocarbons	halogenated substance: no experience by reason of high permeation; entry should be cancelled
2346	Butandione		3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to ketones; no experience by reason of high permeation; entry should be cancelled
2348	Butyl acrylates	stabilized	3	F1	III	31°	(c)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	
2350	Butyl methyl ether		3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to ethers; no experience by reason of high permeation; entry should be cancelled
2351	Butyl nitrites		3	F1	III	31°	(c)	Mixture of hydrocarbons	nitrogenous substance: no test results; entry should be cancelled
2352	Butyl vinyl ether	stabilized	3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to ethers; no experience by reason of high permeation; entry should be cancelled
2358	Cyclooctatetraene		3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to hydrocarbons; no test results; entry should be cancelled
2362	1,1-Dichloroethane		3	F1	II	3°	(b)	Mixture of hydrocarbons	halogenated substance: no experience by reason of high permeation; entry should be cancelled
2364	n-Propylbenzene		3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to hydrocarbons; substance has a higher swelling effect than mixture of hydrocarbons; entry should be cancelled
2366	Diethyl carbonate		3	F1	III	31°	(c)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	substance belongs to esters; no test results; assignment seems to be reasonable
2367	alpha-Methylvaleraldehyde		3	F1	II	3°	(b)	Mixture of hydrocarbons	

UN No.	Name	Description	Class	Classification-code	Packing Group	Item	Letter	Standard Liquid according to 6.1.6.2 of the RID/ADR	Comment/Proposal
2368	alpha-Pinene		3	F1	III	3°	(c)	Mixture of hydrocarbons	substance belongs to hydrocarbons; no test results; probably too high swelling effect; entry should be cancelled
2370	1-Hexene		3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to hydrocarbons; no test results; assignment seems to be reasonable
2373	Diethoxymethane		3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to ethers; no experience by reason of high permeation; entry should be cancelled
2374	3,3-Diethoxypropene		3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to ethers; no experience by reason of high permeation; entry should be cancelled
2376	2,3-Dihydropyran		3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to ethers; no experience by reason of high permeation; entry should be cancelled
2377	1,1-Dimethoxyethane		3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to ethers; no experience by reason of high permeation; entry should be cancelled
2384	Di-n-propyl ether		3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to ethers; no experience by reason of high permeation; entry should be cancelled
2385	Ethyl isobutyrate		3	F1	II	3°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	
2387	Fluorobenzene		3	F1	II	3°	(b)	Mixture of hydrocarbons	halogenated substance: no test results; probably too high swelling effect; entry should be cancelled
2388	Fluorotoluenes		3	F1	II	3°	(b)	Mixture of hydrocarbons	halogenated substance: no test results; probably too high swelling effect; entry should be cancelled
2390	2-Iodobutane		3	F1	II	3°	(b)	Mixture of hydrocarbons	halogenated substance: no experience by reason of high permeation; entry should be cancelled
2391	2-Iodomethylpropanes		3	F1	II	3°	(b)	Mixture of hydrocarbons	halogenated substance: no experience by reason of high permeation; entry should be cancelled
2392	Iodopropanes		3	F1	III	31°	(c)	Mixture of hydrocarbons	halogenated substance: no experience by reason of high permeation; entry should be cancelled
2393	Isobutyl formate		3	F1	II	3°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	
2394	Isobutyl propionate	flashpoint between 23 °C and 61 °C	3	F1	III	3°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	
2397	3Methylbutan-2-one		3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to ketones no experience by reason of high permeation; entry should be cancelled
2398	Methyl tert-butyl ether		3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to ketones no experience by reason of high permeation; entry should be cancelled
2400	Methyl isovalerate		3	F1	II	3°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	
2403	Isopropenyl acetate		3	F1	II	3°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	

UN No.	Name	Description	Class	Classification-code	Packing Group	Item	Letter	Standard Liquid according to 6.1.6.2 of the RID/ADR	Comment/Proposal
2405	Isopropyl butyrate		3	F1	III	31°	(c)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	
2406	Isopropyl isobutyrate		3	F1	II	3°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	
2409	Isopropyl propionate		3	F1	II	3°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	
2413	Tetrapropyl orthotitanate		3	F!	II	3°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	no test results; may have other properties than normal esters; entry should be cancelled
2416	Trimethyl borate		3	F!	II	3°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	no test results; may have other properties than normal esters; entry should be cancelled
2427	Potassium chlorate	aqueous solution, oxidizing	5.1	O1	II	11°	(b)	Water	
2428	Sodium chlorate	aqueous solution, oxidizing	5.1	O1	II	11°	(b)	Water	
2429	Calcium chlorate	aqueous solution, oxidizing	5.1	O1	II	11°	(b)	Water	
2457	2,3-Dimethylbutane		3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to hydrocarbons; no test results; assignment seems to be reasonable
2458	Hexadiene		3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to hydrocarbons; no test results; assignment seems to be reasonable
2461	Methylpentadiene		3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to hydrocarbons; no test results; assignment seems to be reasonable
2498	1,2,3,6-Tetrahydrobenzaldehyde		3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to aldehydes; no experience by reason of high permeation and too high swelling effect; entry should be cancelled
2514	Bromobenzene		3	F1	III	31°	(c)	Mixture of hydrocarbons	halogenated substance: no experience by reason of high permeation and too high swelling effect; entry should be cancelled
2520	Cyclooctadienes		3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to hydrocarbons; no test results; assignment seems to be reasonable
2524	Ethyl orthoformate		3	F1	III	31°	(c)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	
2527	Isobutyl acrylate	stabilized	3	F1	III	31°	(c)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	
2528	Isobutyl isobutyrate		3	F1	III	31°	(c)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	
2531	Methacrylic acid	stabilized	8	C3	II	32°	(c)	Acetic acid	Proposed new assignment: n-Butyl acetate/ n-butyl acetate-saturated wetting solution
2536	Methyltetrahydrofuran		3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to ethers; no experience by reason of high permeation; entry should be cancelled
2541	Terpinolene		3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to hydrocarbons; substance probably has a too high swelling effect; entry should be cancelled

UN No.	Name	Description	Class	Classification-code	Packing Group	Item	Letter	Standard Liquid according to 6.1.6.2 of the RID/ADR	Comment/Proposal
2554	Methylallyl chloride		3	F1	II	3°	(b)	Mixture of hydrocarbons	halogenated substance: no experience by reason of high permeation; entry should be cancelled
2560	2-Methylpentan-2-ol		3	F1	III	31°	(c)	Acetic acid	Proposed new assignment: n-Butyl acetate/ n-butyl acetate-saturated wetting solution
2607	Acrolein dimer	stabilized	3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to aldehydes; no test results; entry should be cancelled
2608	Nitropropanes		3	F1	III	31°	(c)	Mixture of hydrocarbons	nitrogenous substance: no test results; entry should be cancelled
2614	Methylallyl alcohol		3	F1	III	31°	(c)	Acetic acid	
2615	Ethyl propyl ether		3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to ethers; no experience by reason of high permeation; entry should be cancelled
2616	Triisopropyl borate		3	F1	II	3°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	no test results; may have other properties than normal esters; entry should be cancelled
2617	Methylcyclohexanols	flashpoint between 23 °C and 61 °C	3	F1	III	31°	(c)	Acetic acid	
2618	Vinyltoluenes	stabilized	3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to hydrocarbons; no test results; probably too high swelling effect; entry should be cancelled
2620	Amyl butyrates		3	F1	III	31°	(c)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	
2621	Acetyl methyl carbinol		3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to ketones; no test results; may have other properties than normal ketones; entry should be cancelled
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	8	C5	III	43°	(c)	Water	
2707	Dimethyldioxane	flashpoint below 23 °C	3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to ethers; no test results; assignment seems to be reasonable
2707	Dimethyldioxane	flashpoint between 23 °C and 61 °C	3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to ethers; no test results; assignment seems to be reasonable
2709	Butylbenzenes		3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to hydrocarbons; no test results; probably too high swelling effect; entry should be cancelled
2710	Dipropyl ketone		3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to ketones; no experience by reason of high permeation; entry should be cancelled
2752	1,2-Epoxy-3-ethoxypropane		3	F1	III	31°	(c)	Mixture of hydrocarbons	substance belongs to ethers; no test results; entry should be cancelled
2789	Acetic acid	glacial or aqueous solution, more than 80% acid, by mass	8	CF1	II	32°	(b)	Acetic acid	
2790	Acetic acid	aqueous solution, not less than 50% but not more than 80% acid, by mass	8	C3	II	32°	(b)	Acetic acid	

UN No.	Name	Description	Class	Classification-code	Packing Group	Item	Letter	Standard Liquid according to 6.1.6.2 of the RID/ADR	Comment/Proposal
2790	Acetic acid	aqueous solution, more than 10% and less than 50% acid, by mass	8	C3	III	32°	(c)	Acetic acid	
2796	Sulphuric acid	with not more than 51% pure acid	8	C1	II	1°	(b)	Water	
2814	Infectious substance, affecting humans	risk group 2, liquid	6.2	I1		3°	(b)	Water	entry is now assigned to packing instruction P620; not applicable; entry should be cancelled
2821	Phenol	aqueous solution, slightly toxic, non alkaline	6.1	T1	III	14°	(c)	Acetic acid	
2838	Vinyl butyrate	stabilized	3	F1	II	3°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	
2840	Butyraldoxime		3	F1	III	31°	(c)	Mixture of hydrocarbons	nitrogenous substance: no test results; entry should be cancelled
2842	Nitroethane		3	F1	III	31°	(c)	Mixture of hydrocarbons	nitrogenous substance: no test results; entry should be cancelled
2850	Propylene tetramer	mixture of C12-mono-olefines, flashpoint between 23 °C and 61 °C	3	F1	III	31°	(c)	Mixture of hydrocarbons	
2874	Furfuryl alcohol		6.1	T1	III	14°	(c)	Acetic acid	
2900	Infectious substance, affecting animals only	risk group 2, liquid	6.2	I2		3°	(b)	Water	entry is now assigned to packing instruction P620; not applicable; entry should be cancelled
2933	Methyl 2-chloropropionate		3	F1	III	31°	(c)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	substance belongs to esters; no test results; assignment seems to be reasonable
2934	Isopropyl 2-chloropropionate		3	F1	III	31°	(c)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	substance belongs to esters; no test results; assignment seems to be reasonable
2935	Ethyl 2-chloropropionate		3	F1	III	31°	(c)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	substance belongs to esters; no test results; assignment seems to be reasonable
2943	Tetrahydrofurfurylamine		3	F1	III	31°	(c)	Mixture of hydrocarbons	
2947	Isopropyl chloroacetate		3	F1	III	31°	(c)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	
2984	Hydrogen peroxide	aqueous solution, with not less than 8% but less than 20% hydrogen peroxide, stabilized as necessary	5.1	O1	III	1°	(c)	Water	Proposed new assignment: Nitric acid (55%)
3022	1,2-Butylene oxide	stabilized	3	F1	II	3°	(b)	Mixture of hydrocarbons	substance belongs to ethers; no test results; entry should be cancelled
3056	n-Heptaldehyde		3	F1	III	31°	(c)	Mixture of hydrocarbons	
3065	Alcoholic beverages	with more than 70% alcohol by volume	3	F1	II	3°	(b)	Acetic acid	
3065	Alcoholic beverages	with more than 24% but not more than 70% alcohol by volume	3	F1	III	31°	(c)	Acetic acid	
3092	1-Methoxy-2-propanol		3	F1	III	31°	(c)	Acetic acid	substance belongs to alcohols; no test results; entry should be cancelled

UN No.	Name	Description	Class	Classification-code	Packing Group	Item	Letter	Standard Liquid according to 6.1.6.2 of the RID/ADR	Comment/Proposal
3101	Organic Peroxide Type B	liquid	5.2	P1		1°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution and mixture of hydrocarbons and nitric acid (55%)**	
3103	Organic Peroxide Type C	liquid	5.2	P1		3°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution and mixture of hydrocarbons and nitric acid (55%)**	
3105	Organic Peroxide Type D	liquid	5.2	P1		5°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution and mixture of hydrocarbons and nitric acid (55%)**	
3107	Organic Peroxide Type E	liquid	5.2	P1		7°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution and mixture of hydrocarbons and nitric acid (55%)**	
3109	Organic Peroxide Type F	liquid	5.2	P1		9°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution and mixture of hydrocarbons and nitric acid (55%)**	
3111	Organic Peroxide Type B	liquid, temperature controlled	5.2	P2		11°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution and mixture of hydrocarbons and nitric acid (55%)**	
3113	Organic Peroxide Type C	liquid, temperature controlled	5.2	P2		13°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution and mixture of hydrocarbons and nitric acid (55%)**	
3115	Organic Peroxide Type D	liquid, temperature controlled	5.2	P2		15°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution and mixture of hydrocarbons and nitric acid (55%)**	
3117	Organic Peroxide Type E	liquid, temperature controlled	5.2	P2		17°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution and mixture of hydrocarbons and nitric acid (55%)**	

UN No.	Name	Description	Class	Classification-code	Packing Group	Item	Letter	Standard Liquid according to 6.1.6.2 of the RID/ADR	Comment/Proposal
3119	Organic Peroxide Type F	liquid, temperature controlled	5.2	P2		19°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution and mixture of hydrocarbons and nitric acid (55%)**	
<p>**) For UN Nos. 3101, 3103, 3105, 3107, 3109, 3111, 3113, 3115, 3117, 3119 (tert-butyl hydroperoxide with more than 40 % peroxide content and peroxyacetic acids are excluded): All organic peroxides in a technically pure form or in solution in solvents which, as far as their compatibility is concerned, are covered by the standard liquid "mixture of hydrocarbons" in this list. Compatibility of vents and gaskets with organic peroxides may be verified, also independently of the design type test, by laboratory tests with nitric acid.</p>									
3145	Alkylphenols	liquid, n.o.s., including C2 to C12 homologues, slightly corrosive	8	C3	III	40°	(c)	Acetic acid	Proposed new assignment: n-Butyl acetate/ n-butyl acetate-saturated wetting solution
3271	Ethers	n.o.s., vapour pressure at 50°C not more than 110 kPa	3	F1	II	3°	(b)	Mixture of hydrocarbons	specific n.o.s entry: is not sufficiently specified; proposed assignment: rule for collective entries
3271	Ethers	n.o.s., flashpoint between 23 °C and 61 °C	3	F1	III	31°	(c)	Mixture of hydrocarbons	specific n.o.s entry: is not sufficiently specified; proposed assignment: rule for collective entries
3272	Esters	n.o.s., vapour pressure at 50°C not more than 110 kPa	3	F1	II	3°	(b)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	specific n.o.s entry: is not sufficiently specified; proposed assignment: rule for collective entries
3272	Esters	n.o.s., flashpoint between 23 °C and 61 °C	3	F1	III	31°	(c)	n-Butyl acetate/ n-butyl acetate-saturated wetting solution	specific n.o.s entry: is not sufficiently specified; proposed assignment: rule for collective entries
3291	Clinical waste	unspecified, n.o.s., liquid	6.2	I3	II	4°	(b)	Water	
3295	Hydrocarbons	n.o.s., vapour pressure at 50°C not more than 110 kPa	3	F1	II	3°	(b)	Mixture of hydrocarbons	specific n.o.s entry: is not sufficiently specified; proposed assignment: rule for collective entries
3295	Hydrocarbons	liquid, n.o.s., flashpoint between 23 °C and 61 °C	3	F1	III	31°	(c)	Mixture of hydrocarbons	specific n.o.s entry: is not sufficiently specified; proposed assignment: rule for collective entries