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INLAND TRANSPORT COMMITTEE

**Working Party on the Transport
of Dangerous Goods**

**REPORT OF THE WORKING PARTY ON ITS SIXTY-SEVENTH SESSION
(8-12 November 1999)**

Addendum 2

Restructuring of ADR

Chapter 3.3 - Special Provisions

The secretariat reproduces below the text of Chapter 3.3 of the restructured ADR which takes into account the decisions adopted during the RID/ADR/ADN joint meeting (Geneva, 14-24 September 1999).

CHAPTER 3.3

SPECIAL PROVISIONS APPLICABLE TO CERTAIN ARTICLES OR SUBSTANCES

3.3.1 When Column 6 of the Dangerous Goods List in Chapter 3.2 indicates that a special provision is relevant to a substance or article, the meaning and requirements of that special provision are as set forth below.

- 15 For small quantities of not more than 500 g per package, this substance, with not less than 10% water, by mass, may also be classified in Class 4.1, subject to Packing instruction P406
[For UN Nos. 0154, 0155, 0209, 0214, 0215, 0234, 0401, 2852].
- 16 Samples of new or existing explosive substances or articles may be transported as directed by the competent authorities (see 2.2.1.1.3) for purposes including: testing, classification, research and development, quality control, or as a commercial sample. Explosive samples which are not wetted or desensitized shall be limited to 10 kg in small packages as specified by the competent authorities. Explosive samples which are wetted or desensitized shall be limited to 25 kg.
[For UN No. 0190]
- 18 For quantities of not more than 11.5 kg per package, this substance, with not less than 10% water, by mass, may also be classified in Class 4.1, subject to Packing instruction P406.
[For UN No. 0220]
- 23 Even though this substance has a flammability hazard, it only exhibits such hazard under extreme fire conditions in confined areas.
[For UN Nos. 1005, 1062, 3318]
- 32 This substance is not subject to the requirements of ADR when in any other form.
[For UN No. 1346]
- 36 This substance is to be classified under UN No. 1373 if it contains more than 5% animal or vegetable oil.
[For UN No. 1386]
- 37 This substance is not subject to the requirements of ADR when coated.
[For UN No. 1398]

- 38 This substance is not subject to the requirements of ADR when it contains not more than 0.1% calcium carbide.
[For UN No. 1403]
- 39 This substance is not subject to the requirements of ADR when it contains less than 30% or not less than 90% silicon.
[For UN No. 1408]
- 43 When offered for carriage as pesticides, these substances shall be carried under the relevant pesticide entry and in accordance with the relevant pesticide provisions see 2.2.61.1.5, paras 5, 5.1, 5.2, 6, 6.1 and 6.2.
[For UN Nos. 1556, 1557, 1686, 2027, 2024, 2025, 1707, 1570, 1655, 1656, 3140, 3144, 1544, 3279, 1598, 3155, 1651, 1704, 3278, 2788, 3146, 1674, 2026, 1621]
- 45 Antimony sulphides and oxides which contain not more than 0.5% of arsenic calculated on the total mass are not subject to the requirements of ADR.
[For UN Nos. 1549, 3141]
- 47 Ferricyanides and ferrocyanides are not subject to the requirements of ADR
[For UN No. 1588]
- 48 The transport of this substance, when it contains more than 20% hydrocyanic acid, is prohibited.
[For UN No. 1613]
- 59 These substances are not subject to the requirements of ADR when they contain not more than 50% magnesium.
[For UN No. 1869]
- 60 If the concentration is more than 72%, the transport of this substance is prohibited.
[For UN No. 1873]
- 61 The technical name which shall supplement the proper shipping name shall be the ISO common name (see also ISO 1750:1981 "*Pesticides and other agrochemicals - common names*", as amended), other name listed in the WHO "*Recommended Classification of Pesticides by Hazard and Guidelines to Classification*" or the name of the active substance [see also 3.1.2.6.1.1].
[For UN Nos. 2588, 2757 - 2764, 2771, 2772, 2775-2787, 2902, 2903, 2991-2998, 3005, 3006, 3009-3021, 3024-3027, 3048, 3345-3352].
- 62 This substance is not subject to the requirements of ADR when it contains not more than 4% sodium hydroxide.
[For UN No. 1907]

- 65 Hydrogen peroxide aqueous solutions with less than 8% hydrogen peroxide are not subject to the requirements of ADR.
[For UN No. 2984]
- 103 The carriage of ammonium nitrites and mixtures of an inorganic nitrite with an ammonium salt is prohibited.
[For UN Nos. 2627 and 3219]
- 105 Nitrocellulose meeting the descriptions of UN No. 2556 or UN No. 2557 may be classified in Class 4.1.
[For UN Nos. 0342 and 0343]
- 107 The consignment is not subject to the requirements of ADR if the consignor declares that it has no self-heating properties.
[For UN No. 2793]
- 113 The carriage of chemically unstable mixtures is prohibited.
[For UN Nos. 1826, 1832 and 2015]
- 119 Refrigerating machines include machines or other appliances which have been designed for the specific purpose of keeping food or other items at a low temperature in an internal compartment, and air conditioning units. Refrigerating machines are considered not subject to the requirements of ADR if containing less than 12 kg of gas in Class 2, group A or O according to 2.2.2.1.3, or if containing less than 12 l ammonia solution (UN No. 2672).
[For UN No. 2857]
- 122 The subsidiary risks, control and emergency temperatures if any, and the UN number (generic entry) for each of the currently assigned organic peroxide formulations are given in 2.2.52.4
[For UN Nos. 3101-3120]
- 127 Other inert material or inert material mixture may be used, provided this inert material has identical phlegmatizing properties.
[For UN No. 2907]
- 131 The phlegmatized substance shall be significantly less sensitive than dry PETN.
[For UN No. 0411]
- 133 The label conforming to model No. 1 (Subsidiary risk) required by special provision 181 may be dispensed with for packagings meeting P409.
[For UN No. 2956]
- 135 The dihydrated sodium salt of dichloroisocyanuric acid is not subject to the requirements of ADR.
[For UN No. 2465]
- 138 p-Bromobenzyl cyanide is not subject to the requirements of ADR.

[For UN No. 1694]

- 141 Products which have undergone sufficient heat treatment so that they present no hazard during transport are not subject to the requirements of ADR.
[For UN No. 2969]
- 142 Solvent extracted soya bean meal containing not more than 1.5% oil and 11% moisture, which is substantially free of flammable solvent, is not subject to the requirements of ADR.
[For UN No. 2217]
- 144 An aqueous solution containing not more than 24% alcohol by volume is not subject to the requirements of ADR.
[For UN Nos. 1170 and 3065]
- 145 Alcoholic beverages of Packing Group III, when carried in receptacles of 250 litres or less, are not subject to the requirements of ADR.
[For UN No. 3065]
- 152 The classification of this substance will vary with particle size and packaging, but borderlines have not been experimentally determined. Appropriate classifications shall be made in accordance with 2.2.1.
[For UN Nos. 0402 and 1442]
- 153 This entry applies only if it is demonstrated, on the basis of tests, that the substances when in contact with water are not combustible nor show a tendency to auto-ignition and that the mixture of gases evolved is not flammable.
[For UN No. 3048]
- 162 Mixtures with a flash-point less than 61 °C shall bear a label conforming to model No. 3.
[For UN No. 1649]
- 163 A substance specifically listed by name in the list of dangerous goods in Chapter 3.2 shall not be transported under this entry. Materials transported under this entry may contain 20% or less nitrocellulose provided the nitrocellulose contains not more than 12.6% nitrogen (by dry mass).
[For UN Nos. 1210, 1263 and 3066]
- 168 Asbestos which is immersed or fixed in a natural or artificial binder (such as cement, plastics, asphalt, resins or mineral ore) in such a way that no escape of hazardous quantities of respirable asbestos fibres can occur during transport is not subject to the requirements of ADR. Manufactured articles containing asbestos and not meeting this provision are nevertheless not subject to the requirements of ADR when packed so that no escape of hazardous quantities of respirable asbestos fibres can occur during transport.
[For UN Nos. 2212 and 2590]

169 Phthalic anhydride in the solid state and tetrahydrophthalic anhydrides, with not more than 0.05% maleic anhydride, are not subject to the requirements of ADR. Phthalic anhydride molten at a temperature above its flash-point, with not more than 0.05% maleic anhydride, shall be classified under UN 3256.
[For UN Nos. 2214 and 2698]

172 Packages containing radioactive material with a subsidiary risk shall:

- (a) be labelled with a label corresponding to each subsidiary risk exhibited by the material; corresponding placards shall be affixed to transport units in accordance with the relevant provisions of [5.3.1];
- (b) be allocated to Packing Groups I, II or III, as and if appropriate, by application of the grouping criteria provided in Part 2 corresponding to the nature of the predominant subsidiary risk.

The description required in 5.4.1.2.5.1 (e) shall include a description of these subsidiary risks (e.g. "Subsidiary risk: 3, 6.1"), the name of the constituents which most predominantly contribute to this (these) subsidiary risk(s), and where applicable, the Packing Group."

[For UN Nos. 2912, 2913, 2915, 2916, 2917, 2919 and 3321-3333].

177 Barium sulphate is not subject to the requirements of ADR.
[For UN No. 1564]

178 This designation shall be used only when no other appropriate designation exists in the list, and only with the approval of the competent authority of the country of origin (see 2.2.1.1.3).
[For UN Nos. 0349-0359, 0382-0384, 0461-0482 and 0485]

181 Packages containing this type of substance shall bear a label conforming to Model No. 1 unless the competent authority of the country of origin has permitted this label to be dispensed with for the specific packaging employed because test data have proved that the substance in this packaging does not exhibit explosive behaviour (see 5.2.2.1.9).
[For UN Nos. 2956, 3101, 3102, 3221 and 3222]

182 The group of alkali metals includes lithium, sodium, potassium, rubidium and caesium.
[For UN Nos. 1389-1391, 1421 and 3206]

183 The group of alkaline earth metals includes magnesium, calcium, strontium and barium.
[For UN Nos. 1391-1393 and 3205]

- 186 In determining the ammonium nitrate content, all nitrate ions for which a molecular equivalent of ammonium ions is present in the mixture shall be calculated as ammonium nitrate.
[For UN Nos. 2067-2070].
- 188 Lithium cells and batteries offered for transport are not subject to the requirements of ADR if they meet the following provisions:
- (a) For a lithium metal or lithium alloy cell with a liquid cathode, the lithium content is not more than 0.5 g, for a lithium metal or lithium alloy cell with a solid cathode, the lithium content is not more than 1 g, and for a lithium-ion cell, the equivalent lithium content is not more than 1.5 g;
 - (b) For a lithium metal or lithium alloy battery with liquid cathodes, the aggregate lithium content is not more than 1 g, for a lithium metal or lithium alloy battery with solid cathodes, the aggregate lithium content is not more than 2 g, and for a lithium-ion battery, the aggregate equivalent lithium content is not more than 8 g;
 - (c) Each cell or battery containing a liquid cathode is hermetically sealed;
 - (d) Cells are separated so as to prevent short circuits;
 - (e) Batteries are separated so as to prevent short circuits and are packed in strong packagings, except when installed in electronic devices; and
 - (f) If, when fully charged, the aggregate lithium content of the anodes in a liquid cathode battery is more than 0.5 g, or of the aggregate lithium content of the anodes in a solid cathode battery is more than 1 g, it does not contain a liquid or gas which is considered dangerous unless the liquid or gas, if free, would be completely absorbed or neutralized by other materials in the battery.

Lithium cells and lithium batteries are also not subject to the requirements of ADR if they meet the following provisions:

- (g) The lithium content of the anode of each cell, when fully charged, is not more than 5 g;
- (h) The aggregate lithium content of the anodes of each battery, when fully charged, is not more than 25 g;
- (i) Each cell or battery is of the type proved to be non-dangerous by testing in accordance with tests in the *Manual of Tests and Criteria*, Part III, sub-section 38.3; such testing shall be carried out on each type prior to the initial transport of that type; and

- (j) Cells and batteries are designed or packed in such a way as to prevent short circuits under conditions normally encountered in transport.

As used above and elsewhere in ADR, "lithium content" means the mass of lithium in the anode of a lithium metal or lithium alloy cell, except in the case of a lithium-ion cell the "equivalent lithium content" in grams is calculated to be 0.3 times the rated capacity in ampere-hours.

[For UN Nos. 3090 and 3091]

- 190 Aerosol dispensers shall be provided with protection against inadvertent discharge. Aerosols with a capacity not exceeding 50 ml containing only non-toxic constituents are not subject to the requirements of ADR.
[For UN No. 1950]
- 191 Receptacles, small, with a capacity not exceeding 50 ml, containing only non-toxic constituents are not subject to the requirements of ADR.
[For UN No. 2037]
- 193 Ammonium nitrate fertilizers of this composition and within these limits are not subject to the requirements of ADR if shown by a trough test (see Manual of Tests and Criteria, Part III, sub-section 38.2) not to be liable to self-sustaining decomposition and provided that they do not contain an excess of nitrate greater than 10% by mass (calculated as potassium nitrate).
[For UN No. 2067-2070]
- 194 The control and emergency temperatures, if any, and the UN number (generic entry) for each of the currently assigned self-reactive substances are given in 2.2.41.4.
[For UN Nos. 3221-3230]
- 196 This formulation shall fulfill the criteria given in paragraph 20.4.2 (g) of Part II of the *Manual of Tests and Criteria*, except that a diluent of type A is not required for desensitization. Formulations not meeting these criteria shall be transported under the provisions of Class 5.2, (see 2.2.52.4).
[For UN No. 3149]
- 198 Nitrocellulose solutions containing not more than 20% nitrocellulose may be transported as paint or printing ink, as applicable. See UN Nos. 1210, 1263 and 3066.
[For UN No.2059]
- 199 Lead compounds which, when mixed in a ratio of 1:1000 with 0.07M hydrochloric acid and stirred for one hour at a temperature of $23\text{ }^{\circ}\text{C} \pm 2\text{ }^{\circ}\text{C}$, exhibit a solubility of 5% or less are considered insoluble. See ISO 3711:1990 "*Lead chromate pigments and lead chromate - molybdate pigments - Specifications and methods of test*".
[For UN No. 2291]
- 203 This entry shall not be used for polychlorinated biphenyls, UN No. 2315.
[For UN Nos. 3151 and 3152]

- 204 Articles containing smoke-producing substance(s) corrosive according to the criteria for Class 8 shall be labelled with a label conforming to Model No. 8.
[For UN Nos. 0015, 0016 and 0303]
- 205 This entry shall not be used for PENTACHLOROPHENOL, UN No. 3155.
[For UN No. 2020]
- 207 Polymeric beads and moulding compounds may be made from polystyrene, poly(methyl methacrylate) or other polymeric material.
[For UN Nos. 2211 and 3314]
- 208 The commercial grade of calcium nitrate fertilizer, when consisting mainly of a double salt (calcium nitrate and ammonium nitrate) containing not more than 10% ammonium nitrate and at least 12% water of crystallization, is not subject to the requirements of ADR.
[For UN No. 1454]
- 210 Toxins from plant, animal or bacterial sources which contain infectious substances, or toxins that are contained in infectious substances, shall be classified in Class 6.2.
[For UN No. 3172]
- 215 This entry only applies to the technically pure substance or to formulations derived from it having an SADT higher than 75 °C and therefore does not apply to formulations which are self-reactive substances. (For self-reactive substances, see 2.2.41.4)
[For UN No. 3242]
- 216 Mixtures of solids which are not subject to the requirements of ADR and flammable liquids may be transported under this entry without first applying the classification criteria of Class 4.1, provided there is no free liquid visible at the time the substance is loaded or at the time the packaging, vehicle or container is closed.
[For UN No. 3175]
- 217 Mixtures of solids which are not subject to the requirements of ADR and toxic liquids may be transported under this entry without first applying the classification criteria of Class 6.1, provided there is no free liquid visible at the time the substance is loaded or at the time the packaging, vehicle or container is closed. This entry shall not be used for solids containing a packing group I liquid.
[For UN No. 3243]
- 218 Mixtures of solids which are not subject to the requirements of ADR and corrosive liquids may be transported under this entry without first applying the classification criteria of Class 8, provided there is no free liquid visible at the time the substance is loaded or at the time the packaging, vehicle or container is closed.
[For UN No. 3244]

- 219 Genetically modified micro-organisms which are infectious shall be transported as UN Nos 2814 or 2900.
[For UN No. 3245]
- 220 Only the technical name of the flammable liquid component of this solution or mixture shall be shown in parentheses immediately following the proper shipping name.
[For UN No. 3248]
- 221 Substances included under this entry shall not be of Packing Group I.
[For UN Nos. 1851, 3248 and 3249]
- 222 Where the term "water-reactive" is used to describe a substance in ADR, it means a substance which in contact with water emits flammable gas.
[For UN Nos. 1409, 2813, 3129-3131, 3134, 3148, 3207-3209, 3123, 3125, 3094 and 3096]
- 223 If the chemical or physical properties of a substance covered by this description are such that when tested it does not meet the established defining criteria for the class listed in column [3a], or any other class, it is not subject to the requirements of ADR.
[For UN Nos. 1105, 1106, 1120, 1123, 1133, 1136, 1139, 1148, 1169, 1170, 1197, 1201, 1210, 1224, 1228, 1263, 1266, 1267, 1268, 1274, 1286, 1287, 1288, 1289, 1293, 1297, 1300, 1306, 1307, 1308, 1309, 1325, 1361, 1362, 1376, 1396, 1398, 1405, 1418, 1435, 1436, 1458, 1459, 1477, 1479, 1481, 1482, 1483, 1544, 1556, 1557, 1564, 1566, 1583, 1588, 1599, 1601, 1602, 1655, 1686, 1719, 1731, 1740, 1755, 1757, 1759, 1760, 1761, 1783, 1787, 1788, 1789, 1791, 1814, 1819, 1824, 1840, 1851, 1863, 1866, 1903, 1908, 1932, 1935, 1986, 1987, 1988, 1989, 1992, 1993, 1999, 2000, 2002, 2008, 2009, 2024, 2026, 2047, 2057, 2059, 2206, 2344, 2351, 2427, 2428, 2429, 2430, 2478, 2491, 2501, 2545, 2546, 2564, 2570, 2580, 2581, 2582, 2588, 2616, 2677, 2679, 2681, 2707, 2733, 2735, 2757, 2759, 2761, 2763, 2771, 2775, 2777, 2779, 2781, 2783, 2786, 2788, 2801, 2810, 2811, 2813, 2817, 2818, 2821, 2837, 2869, 2872, 2878, 2881, 2902, 2903, 2922, 2923, 2924, 2925, 2926, 2968, 2989, 2991, 2992, 2993, 2994, 2995, 2996, 2997, 2998, 3005, 3006, 3009, 3010, 3011, 3012, 3013, 3014, 3015, 3016, 3017, 3018, 3019, 3020, 3025, 3026, 3027, 3066, 3085, 3087, 3088, 3089, 3098, 3099, 3126, 3128, 3129, 3130, 3131, 3134, 3139, 3140, 3142, 3143, 3144, 3145, 3146, 3147, 3148, 3170, 3176, 3178, 3179, 3180, 3181, 3182, 3183, 3184, 3185, 3186, 3187, 3188, 3189, 3190, 3191, 3192, 3205, 3206, 3207, 3208, 3209, 3210, 3211, 3213, 3218, 3219, 3249, 3259, 3260, 3261, 3262, 3263, 3264, 3265, 3266, 3267, 3271, 3272, 3276, 3278, 3280, 3281, 3282, 3283, 3284, 3285, 3287, 3288, 3293, 3295, 3313, 3320, 3336, 3341, 3342, 3345, 3347, 3348, 3349, 3351, 3352]
- 224 Unless it can be demonstrated by testing that the sensitivity of the substance in its frozen state is no greater than in its liquid state, the substance shall remain liquid during normal transport conditions. It shall not freeze at temperatures above -15 °C.
[For UN Nos. 0495 and 0497]
- 225 Fire extinguishers under this entry may include installed actuating cartridges (cartridges, power device of Division 1.4, compatibility group C or S), without

changing the classification of Class 2, group A or O according to 2.2.2.1.3 provided the total quantity of deflagrating (propellant) explosives does not exceed 3.2 g per extinguishing unit.

[For UN No. 1044]

- 226 Formulations of this substance containing not less than 30% non-volatile, non-flammable phlegmatizer are not subject to the requirements of ADR.
[For UN No. 3251]
- 227 This substance may be carried under provisions other than those of Class 1 only if it is so packed that the percentage of water will not fall below that stated at any time during transport. When phlegmatized with water and inorganic inert material the content of urea nitrate may not exceed 75% by mass and the mixture shall not be capable of being detonated by the Series 1, type (a), test in the *Manual of Tests and Criteria*, Part 1.
[For UN No. 1357]
- 228 Mixtures not meeting the criteria for flammable gases (see 2.2.2.1.5) shall be transported under UN No. 3163.
[For UN No. 1912]
- 230 This entry applies to cells and batteries containing lithium in any form, including lithium polymer and lithium ion cells and batteries.

Lithium cells and batteries may be transported under this entry if they meet the following provisions:

- (a) Each cell or battery type has been determined to meet the criteria for assignment to Class 9 on the basis of tests carried out in accordance with the *Manual of Tests and Criteria*, Part III, sub-section 38.3;
- (b) Each cell and battery incorporates a safety venting device or is designed to preclude a violent rupture under conditions normally incident to transport;
- (c) Each cell and battery is equipped with an effective means of preventing external short circuits;
- (d) Each battery containing cells or series of cells connected in parallel is equipped with effective means as necessary to prevent dangerous reverse current flow (e.g. diodes, fuses, etc.).

[For UN Nos. 3090 and 3091]

- 235 This entry applies to articles which may be classified in Class 1 in accordance with 2.2.1.1 which are used as life-saving vehicle air bags or seat-belts, when transported as component parts and when these articles as presented for transport have been tested in accordance with Test series 6 (c) of Section 16 of Part I of the *Manual of Tests and Criteria*), with no explosion of the device, no fragmentation of device casings, and no projection hazard or thermal effect which would significantly hinder

fire-fighting or other emergency response efforts in the immediate vicinity. If the air bag inflator unit satisfactorily passes the series 6(c) test, it is not necessary to repeat the test on the air bag module itself.

[For UN No. 3268]

236 Polyester resin kits consist of two components: a base material (Class 3, Packing Group II or III) and an activator (organic peroxide). The organic peroxide shall be type D, E or F, not requiring temperature control. Packing Group shall be II or III, according to the criteria for Class 3, applied to the base material. The quantity limit referred to in Column 7 of the Dangerous Goods List applies to the base material. [For UN No. 3269]

237 The membrane filters, including paper separators, coating or backing materials, etc., that are present in transport, shall not be liable to propagate a detonation as tested by one of the tests described in the *Manual of Tests and Criteria*, Part I, Test series 1 (a).

In addition the competent authority may determine, on the basis of the results of suitable burning rate tests taking account of the standard tests in the *Manual of Tests and Criteria*, Part III, sub-section 33.2.1, that nitrocellulose membrane filters in the form in which they are to be transported are not subject to the requirements applicable to flammable solids in Class 4.1.

[For UN No. 3270]

238 (a) Batteries can be considered as non-spillable provided that they are capable of withstanding the vibration and pressure differential tests given below, without leakage of battery fluid.

Vibration test: The battery is rigidly clamped to the platform of a vibration machine and a simple harmonic motion having an amplitude of 0.8 mm (1.6 mm maximum total excursion) is applied. The frequency is varied at the rate of 1 Hz/min between the limits of 10 Hz and 55 Hz. The entire range of frequencies and return is traversed in 95 ± 5 minutes for each mounting position (direction of vibration) of the battery. The battery is tested in three mutually perpendicular positions (to include testing with fill openings and vents, if any, in an inverted position) for equal time periods.

Pressure differential test: Following the vibration test, the battery is stored for six hours at $24 \text{ }^\circ\text{C} \pm 4 \text{ }^\circ\text{C}$ while subjected to a pressure differential of at least 88 kPa. The battery is tested in three mutually perpendicular positions (to include testing with fill openings and vents, if any, in an inverted position) for at least six hours in each position.

(b) Non-spillable batteries are not subject to the requirements of ADR if, at a temperature of $55 \text{ }^\circ\text{C}$, the electrolyte will not flow from a ruptured or cracked case and there is no free liquid to flow and if, as packaged for transport, the terminals are protected from short circuit.

[For UN No. 2800]

239 Batteries or cells shall not contain dangerous goods other than sodium, sulphur and/or polysulphides. Batteries or cells shall not be offered for transport at a temperature such that liquid elemental sodium is present in the battery or cell unless approved and under the conditions established by the competent authority of the country of origin. If the country of origin is not an ADR contracting party, the approval and conditions of carriage shall be recognized by the competent authority of the first Contracting Party to ADR reached by the consignment.

Cells shall consist of hermetically sealed metal casings which fully enclose the dangerous goods and which are so constructed and closed as to prevent the release of the dangerous goods under normal conditions of transport.

Batteries shall consist of cells secured within and fully enclosed by a metal casing so constructed and closed as to prevent the release of the dangerous goods under normal conditions of transport.

[For UN No. 3292]

241 The formulation shall be prepared so that it remains homogeneous and does not separate during transport. Formulations with low nitrocellulose contents and not showing dangerous properties when tested for their liability to detonate, deflagrate or explode when heated under defined confinement by tests of Test series 1 (a), 2 (b) and 2 (c) respectively in the *Manual of Tests and Criteria*, Part I and not being a flammable solid when tested in accordance with test No. 1 in the *Manual of Tests and Criteria*, Part III, sub-section 33.2.1.4 (chips, if necessary, crushed and sieved to a particle size of less than 1.25 mm) are not subject to the requirements of ADR.

[For UN No. 2557]

242 Sulphur is not subject to the requirements of ADR when it is transported in quantities of less than 400 kg per package, or when it has been formed to a specific shape (e.g. prills, granules, pellets, pastilles or flakes).

[For UN No. 1350]

244 This entry includes e.g. aluminium dross, aluminium skimmings, spent cathodes, spent potliner, and aluminium salt slags.

[For UN No. 3170]

247 Alcoholic beverages containing more than 24% alcohol but not more than 70% by volume, when transported as part of the manufacturing process, may be transported in wooden casks with a capacity of not more than 500 litres deviating from the requirements of Chapter 6.1, on the following conditions:

(a) The casks shall be checked and tightened before filling;

(b) Sufficient ullage (not less than 3%) shall be left to allow for the expansion of the liquid;

- (c) The casks shall be transported with the bungholes pointing upwards;
- (d) The casks shall be transported in containers meeting the requirements of the CSC. Each cask shall be secured in custom-made cradles and be wedged by appropriate means to prevent it from being displaced in any way during transport.

[For UN No. 3065]

249 Ferrocium, stabilized against corrosion, with a minimum iron content of 10% is not subject to the requirements of ADR.

[For UN No. 1323]

250 This entry may only be used for samples of chemicals taken for analysis in connection with the implementation of the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction. The transport of substances under this entry shall be in accordance with the chain of custody and security procedures specified by the Organisation for the Prohibition of Chemical Weapons.

The chemical sample may only be transported providing prior approval has been granted by the competent authority or the Director General of the Organisation for the Prohibition of Chemical Weapons and providing the sample complies with the following provisions:

- (a) It shall be packed according to Packing instruction 623 in the International Civil Aviation Organization's Technical Instructions for the Safe Transport of Dangerous Goods by Air; and
- (b) During transport, a copy of the document of approval for transport, showing the quantity limitations and the packing provisions shall be attached to the transport document.

[For UN No. 3315]

251 The entry CHEMICAL KIT or FIRST AID KIT is intended to apply to boxes, cases etc. containing small quantities of various dangerous goods which are used for medical, analytical or testing purposes. Such kits may not contain dangerous goods for which the code "LQ0" has been indicated in Column 7 of the Dangerous Goods List of Chapter 3.2.

Components shall not react dangerously (see "dangerous reaction" in 1.2.1). The total quantity of dangerous goods in any one kit shall not exceed either 1 l or 1 kg. The packing group assigned to the kit as a whole shall be the most stringent packing group assigned to any individual substance in the kit.

Kits which are carried on board vehicles for first-aid or operating purposes are not subject to the requirements of ADR.

[For UN No. 3316]

- 252 Provided the ammonium nitrate remains in solution under all conditions of transport, aqueous solutions of ammonium nitrate, with not more than 0.2% combustible material, in a concentration not exceeding 80%, are not subject to the requirements of ADR.
[For UN No. 2426]
- 266 This substance, when containing less alcohol, water or phlegmatizer than specified, shall not be transported unless specifically authorized by the competent authority (see 2.2.1.1).
[For UN Nos. 0072, 0075, 0133, 0143, 0150, 0159, 0226, 0391 and 0433].
- 267 Any explosives, blasting, type C containing chlorates shall be segregated from explosives containing ammonium nitrate or other ammonium salts.
[For UN No. 0083]
- 268 The word "AGENT" may be used instead of "EXPLOSIVE" when approved by the competent authority (see 2.2.1.1).
[For UN Nos. 0331 and 0332]
- 270 Aqueous solutions of Class 5.1 inorganic solid nitrate substances are considered as not meeting the criteria of Class 5.1 if the concentration of the substances in solution at the minimum temperature encountered in transport is not greater than 80% of the saturation limit.
[For UN No. 3218]
- 271 Lactose or glucose or similar materials, may be used as a phlegmatizer provided that the substance contains not less than 90%, by mass, of phlegmatizer. The competent authority may authorize these mixtures to be classified in Class 4.1 on the basis of a test Series 6(c) of Section 16 of Part I of the *Manual of Tests and Criteria* on at least three packages as prepared for transport. Mixtures containing at least 98%, by mass, of phlegmatizer are not subject to the requirements of ADR. Packages containing mixtures with not less than 90%, by mass, of phlegmatizer need not bear a label conforming to Model No. 6.1.
[For UN No. 0143]
- 272 This substance shall not be transported under the provisions of Class 4.1 unless specifically authorized by the competent authority (see UN No. 0143).
[For UN No. 3344]
- 273 Maneb and maneb preparations stabilized against self-heating need not be classified in Class 4.2 when it can be demonstrated by testing that a cubic volume of 1 m³ of substance does not self-ignite and that the temperature at the centre of the sample does

not exceed 200 °C, when the sample is maintained at a temperature of not less than 75 °C ± 2 °C for a period of 24 hours.

[For UN No. 2210]

- 274 The provisions of 3.1.2.6.1 apply.
[For UN Nos : 0132, 0349-0359, 0382-0384, 0461-0482, 0485, 1078, 1224, 1228,1268, 1325, 1353, 1373, 1378, 1383, 1389-1393, 1409, 1421, 1450, 1461, 1462, 1477, 1479, 1481-1483, 1544, 1549, 1556, 1557, 1564, 1566, 1583, 1588, 1601, 1602, 1655, 1693, 1707, 1719, 1740, 1759, 1760, 1851, 1903, 1935, 1953-1956, 1964, 1965, 1967, 1968, 1986,-1989, 1992, 1993, 2003, 2006, 2024-2026, 2072, 2206, 2291, 2319, 2430, 2445, 2478, 2570, 2583-2586, 2627, 2630, 2693, 2733-2735, 2742, 2788, 2801, 2810, 2811, 2813, [2814], 2837, 2845, 2846, 2856, 2881, [2900], 2920-2930, 2985-2988, 3049-3053, 3073, 3076, 3080,3082, 3084-3089, 3093-3100, 3121-3135, 3137, 3139-3148, 3156-3163, 3167-3169, 3172, 3175, 3176, 3178-3192, 3194, 3200, 3203, 3205-3216, 3218, 3219, 3243, 3244, 3248, 3249, 3256-3267, 3271-3291, 3295, 3301, 3303-3312, 3334-3336, 3343, 3344, 3354, 3355, 3357]
- 278 These substances shall not be classified and transported unless authorized by the competent authority on the basis of results from Series 2 tests and a Series 6(c) test of Part I of the *Manual of Tests and Criteria* on packages as prepared for transport (see 2.2.1.1). The competent authority shall assign the packing group on the basis of 2.2.3 criteria and the package type used for the Series 6(c) test.
[For UN No. 3343]
- 279 The substance is assigned to this classification or packing group based on human experience rather than the strict application of classification criteria set out in ADR.
[For UN Nos. 1230, 1547, 1577, 1578, 1590, 1591, 1661-1663, 1671, 1673, 1708, 2023, 2078, 2311, 2432, 2474, 2512, 2730].
- 280 This entry applies to articles which are used as life saving vehicle air bag inflators or air bag modules or seat-belt pretensioners, containing a gas or a mixture of compressed gases classified under Class 2, group A or O according to 2.2.2.1.3, and with or without small quantities of pyrotechnic material. For units with pyrotechnic material, initiated explosive effects shall be contained within the pressure vessel such that the unit may be excluded from Class 1 in accordance with the NOTE under 2.2.1.1.1 (b) of this Annex, in conjunction with 16.6.1.4.7(a)(ii) of the *Manual of Tests and Criteria*, Part I. In addition, units shall be designed or packaged for transport so that when engulfed in a fire there will be no fragmentation of the pressure vessel or projection hazard. This shall be determined by analysis.
[For UN No. 3353]
- 282 Suspensions with a flash-point of not more than 61 °C, shall bear a label conforming to model No. 3.
[For UN No. 1391]

- 283 Articles, containing gas, intended to function as shock absorbers, including impact energy-absorbing devices, or pneumatic springs are not subject to the requirements of ADR provided each article:
- (a) Has a gas space capacity not exceeding 1.6 litres and a charge pressure not exceeding 280 bar where the product of the capacity (litres) and charge pressure (bars) does not exceed 80 (i.e. 0.5 litre gas space and 160 bar charge pressure, 1 litre gas space and 80 bar charge pressure, 1.6 litre gas space and 50 bar charge pressure, 0.28 litre gas space and 280 bar charge pressure);
 - (b) Has a minimum burst pressure of 4 times the charge pressure at 20 °C for products not exceeding 0.5 litre gas space capacity and 5 times charge pressure for products greater than 0.5 litre gas space capacity;
 - (c) Is manufactured from material which will not fragment upon rupture;
 - (d) Is manufactured in accordance with a quality assurance standard acceptable to the competent authority; and
 - (e) The design type has been subjected to a fire test demonstrating that the article relieves its pressure by means of a fire degradable seal or other pressure relief device, such that the article will not fragment and that the article does not rocket.
- [For UN No. 3164]
- See also 1.1.3.2 (d) for equipment used for the operation of the vehicle.
- 284 An oxygen generator, chemical, containing oxidizing substances shall meet the following conditions:
- (a) The generator when containing an explosive actuating device shall only be transported under this entry when excluded from Class 1 in accordance with the NOTE under paragraph 2.2.1.1.1 (b);
 - (b) The generator, without its packaging, shall be capable of withstanding a 1.8 m drop test onto a rigid, non-resilient, flat and horizontal surface, in the position most likely to cause damage, without loss of its contents and without actuation;
 - (c) When a generator is equipped with an actuating device, it shall have at least two positive means of preventing unintentional actuation.
- [For UN No. 3356]
- 286 Nitrocellulose membrane filters covered by this entry, each with a mass not exceeding 0.5 g, are not subject to the requirements of ADR when contained individually in an article or a sealed packet.
- [For UN No. 3270]

- 287 New, uncycled and uncharged lithium ion cells and batteries are not subject to the requirements of ADR if:
- (a) The electrolyte does not meet the definition of any class in ADR; or
 - (b) If the electrolyte meets the definition of a hazard class in ADR, the electrolyte will not flow from a ruptured or cracked case and there is no free liquid to flow.
[For UN No. 3090]
- 288 These substances shall not be classified and transported unless authorized by the competent authority on the basis of results from Series 2 tests and a Series 6(c) test of Part I of the *Manual of tests and Criteria* on packages as prepared for transport (see 2.2.1.1).
[For UN No. 3357]
- 289 Air bags or seat-belts installed in vehicles or in completed vehicle components such as steering columns, door panels, seats, etc. are not subject to the requirements of ADR.
[For UN Nos. 0503, 3268 and 3353]
- 290 When this material meets the definitions and criteria of other classes as defined in Part 2, it shall be classified in accordance with the predominant subsidiary risk. Such material shall be declared under the proper shipping name and UN number appropriate for the material in that predominant Class, with the addition of the name applicable to this material according to column (2) in the list of dangerous goods in Table A in Chapter 3.2, and shall be transported in accordance with the provisions applicable to that UN number. In addition, all other requirements specified in [2.2.7.9.1] shall apply, except 5.2.1.7.2 and 5.4.1.2.5.1 (a).
[For UN Nos. 2908, 2909, 2910 and 2911]
- 291 Flammable liquefied gases shall be contained within refrigerating machine components. These components shall be designed and tested to at least three times the working pressure of the machinery. The refrigerating machines shall be designed and constructed to contain the liquefied gas and preclude the risk of bursting or cracking of the pressure retaining components during normal conditions of transport. Refrigerating machines are considered not subject to the requirements of ADR if containing less than 12 kg of gas.
[For UN No. 3358]
- 292 Only mixtures with not more than 23.5% oxygen may be transported under this entry. A label conforming to Model No. 5.1 is not required for any concentrations within this limit.
[For UN No. 1002]
- 293 The following definitions apply to matches:

- (a) Fusee matches are matches the heads of which are prepared with a friction-sensitive igniter composition and a pyrotechnic composition which burns with little or no flame, but with intense heat;
[For UN No. 2254]
 - (b) Safety matches are matches which are combined with or attached to the box, book or card that can be ignited by friction only on a prepared surface;
[For UN No. 1944]
 - (c) Strike anywhere matches are matches that can be ignited by friction on a solid surface;
[For UN No. 1331]
 - (d) Wax Vesta matches are matches that can be ignited by friction either on a prepared surface or on a solid surface.
[For UN No. 1945]
- 295 Batteries need not be individually marked and labelled if the pallet bears the appropriate mark and label.
[For UN Nos. 2794, 2795, 2800, 3028 and 3292]
- 296 These articles may contain:
- (a) Class 2, group A or O, according to 2.2.2.1.3, compressed gases, non-flammable and non-toxic;
 - (b) Signal devices (Class 1) which may include smoke and illumination signal flares;
 - (c) Electric storage batteries;
 - (d) First aid kits;
 - (e) Strike anywhere matches.
[For UN Nos. 2990 and 3072]
- 500 3064 nitroglycerin, solution in alcohol with more than 1% but not more than 5% nitroglycerin, packed in accordance with packing instruction P300, is a substance of Class 3.
[For UN No. 0144]
- 501 For naphthalene, molten, see UN No. 2304.
[For UN No. 1334]
- 502 2006 plastics, nitrocellulose-based, self-heating, n.o.s., and 2002 celluloid scrap are substances of Class 4.2.
[For UN Nos. 1353 and 2000]

- 503 For phosphorus, white or yellow, molten, see UN No. 2447.
[For UN No. 1381]
- 504 1847 Potassium sulphide, hydrated with not less than 30% water of crystallization, 1849 sodium sulphide, hydrated with not less than 30% water of crystallization and 2949 sodium hydrosulphide with not less than 25% water of crystallization are substances of Class 8.
[For UN Nos. 1382, 1385 and 2318]
- 505 2004 Magnesium diamide is a substance of Class 4.2.
[For UN No. 1390]
- 506 Alkaline earth metals and alkaline earth metal alloys in pyrophoric form are substances of Class 4.2.
1869 Magnesium or magnesium alloys containing more than 50% magnesium as pellets, turnings or ribbons, are substances of Class 4.1.
[For UN Nos. 1391, 1392 and 1393]
- 507 3048 Aluminium phosphide pesticides, with additives inhibiting the emission of toxic flammable gases are substances of Class 6.1.
[For UN No. 1397]
- 508 1871 Titanium hydride and 1437 zirconium hydride are substances of Class 4.1. 2870 Aluminium borohydride is a substance of Class 4.2.
[For UN No. 1409]
- 509 1908 Chlorite solution is a substance of Class 8.
[For UN No. 1462]
- 510 1755 Chromic acid solution is a substance of Class 8.
[For UN No. 1463]
- 511 1625 Mercuric nitrate, 1627 mercurous nitrate and 2727 thallium nitrate are substances of Class 6.1. Thorium nitrate, solid, uranyl nitrate hexahydrate solution and uranyl nitrate, solid are substances of Class 7.
[For UN Nos. 1477 and 3218]
- 512 1730 Antimony pentachloride, liquid, 1731 antimony pentachloride solution, 1732 antimony pentafluoride and 1733 antimony trichloride are substances of Class 8.
[For UN Nos. 1549 and 3141]
- 513 1571 Barium azide, wetted, is a substance of Class 4.1. 1445 Barium chlorate, 1446 barium nitrate, 1447 barium perchlorate, 1448 barium permanganate and 1449 barium peroxide are substances of Class 5.1.
[For UN No. 1564]
- 514 2464 Beryllium nitrate is a substance of Class 5.1.

[For UN No. 1566]

- 515 [1581 Chloropicrin and methyl bromide mixture and 1582 chloropicrin and methyl chloride mixture are substances of Class 2.
[For UN No. 1583]
- 516 1912 Methyl chloride and methylene chloride mixture is a substance of Class 2.
[For UN No. 1593]
- 517 1690 Sodium fluoride, 1812 potassium fluoride, 2505 ammonium fluoride, 2674 sodium fluorosilicate and 2856 fluorosilicates, n.o.s. are substances of Class 6.1.
[For UN No. 1740]
- 518 1463 Chromium trioxide, anhydrous (chromic acid, solid) is a substance of Class 5.1.
[For UN No. 1755]
- 519 1048 hydrogen bromide, anhydrous, is a substance of Class 2.
[For UN No. 1788]
- 520 1050 hydrogen chloride, anhydrous, is a substance of Class 2.
[For UN No. 1789]
- 521 Solid chlorites and hypochlorites are substances of Class 5.1.
[For UN Nos. 1791 and 1908]
- 522 1873 perchloric acid aqueous solution with more than 50% but not more than 72% pure acid, by mass are substances of Class 5.1. Perchloric acid solutions containing more than 72% (mass) acid, or mixtures of perchloric acid with any liquid other than water, are not to be accepted for carriage.
[For UN No. 1802]
- 523 1382 anhydrous potassium sulphide and 1385 anhydrous sodium sulphide and their hydrates with less than 30% water of crystallization, and 2318 sodium hydrosulphide with less than 25% water of crystallization are substances of Class 4.2.
[For UN Nos. 1847, 1849 and 2949]
- 524 2858 Finished zirconium products of a thickness of 18 : m or more are substances of Class 4.1.
[For UN Nos. 1932 and 2009]
- 525 Solutions of inorganic cyanides with a total cyanide ion content of more than 30% shall be classified in Packing Group I, solutions with a total cyanide ion content of more than 3% and not more than 30% in Packing Group II and solutions with a cyanide ion content of more than 0.3% and not more than 3% in Packing Group III.
[For UN No. 1935]
- 526 Celluloid is an article of Class 4.1. (UN No. 2000).

[For UN No. 2002]

- 527 Organometallic compounds and their solutions, not spontaneously flammable, but which, in contact with water, emit flammable gases, are substances of Class 4.3, UN No. 3207. Flammable solutions containing organometallic compounds which are not spontaneously flammable and which, in contact with water, do not emit flammable gases, are substances of Class 3.
[For UN Nos. 2003, 3049 and 3060]
- 528 1353 fibres or fabrics impregnated with weakly nitrated cellulose, non-self heating are articles of Class 4.1.
[For UN No. 2006]
- 529 0135 Mercury fulminate, wetted with not less than 20% water, or mixture of alcohol and water, by mass, is a substance of Class 1. Mercurous chloride (calomel) is a substance of Class 9 (UN No. 3077).
[For UN No. 2025]
- 530 3293 hydrazine, aqueous solution with not more than 37% hydrazine, by mass, is a substance of Class 6.1.
[For UN No. 2030]
- 531 Mixtures having a flash-point below 23 °C and containing more than 55% nitrocellulose, whatever its nitrogen content or containing not more than 55% nitrocellulose with a nitrogen content above 12.6% (by dry mass), are substances of Class 1 (see UN Nos. 0340 or 0342) or of Class 4.1.
[For UN No. 2059]
- 532 2672 Ammonia solution containing not less than 10% but not more than 35% ammonia is a substance of Class 8.
[For UN No. 2073]
- 533 1198 Formaldehyde solutions, flammable are substances of Class 3. Formaldehyde solutions, non-flammable, with less than 25% formaldehyde are not subject to the requirements of ADR.
[For UN No. 2209]
- 534 While in some climatic conditions, petrol (gasoline) may have a vapour pressure at 50 °C of more than 110 kPa (1.10 bar) but not more than 150 kPa (1.50 bar) it is to continue to be classified under this entry.
[For UN No. 1203]
- 535 1469 lead nitrate and 1470 lead perchlorate are substances of Class 5.1.
[For UN No. 2291]
- 536 For naphthalene, solid, see UN No. 1334.
[For UN No. 2304]

- 537 2869 Titanium trichloride or titanium chloride mixture, not pyrophoric, is a substance of Class 8.
[For UN No. 2441]
- 538 For sulphur (in the solid state), see UN No. 1350.
[For UN No. 2448]
- 539 Solutions of isocyanates having a flash-point of not less than 23 °C are substances of Class 6.1.
[For UN No. 2478]
- 540 1326 Hafnium powders, 1352 titanium powders or 1358 zirconium powders, wetted, with not less than 25% water, are substances of Class 4.1.
[For UN Nos. 2545, 2546 and 2008]
- 541 Nitrocellulose mixtures with a water content, alcohol content or plasticizer content lower than the stated limits are substances of Class 1.
[For UN Nos. 2555, 2556 and 2557]
- 542 Talc containing tremolite and/or actinolite is covered by this entry (UN No. 2590).
[For UN No. 2590]
- 543 1005 Ammonia, anhydrous, 3318 ammonia solution with more than 50% ammonia and 2073 ammonia solution, with more than 35% but not more than 50% ammonia, are substances of Class 2. Ammonia solutions with not more than 10% ammonia are not subject to the requirements of ADR.
[For UN No. 2672]
- 544 1032 Dimethylamine, 1036 ethylamine, 1061 methylamine, anhydrous and 1083 trimethylamine, anhydrous, are substances of Class 2.
[For UN No. 2733]
- 545 0401 Dipicryl sulphide, wetted with less than 10% (mass) water is a substance of Class 1.
[For UN No. 2852]
- 546 2009 Zirconium, dry, finished sheets, strip or coiled wire, in thicknesses of less than 18 : m, is a substance of Class 4.2. Zirconium, dry, finished sheets, strip or coiled wire, in thicknesses of 254 : m or more, is not subject to the requirements of ADR.
[For UN No. 2858]
- 547 2210 Maneb or 2210 maneb preparations in self-heating form are substances of Class 4.2.
[For UN No. 2968]
- 548 Chlorosilanes which, in contact with water, emit flammable gases, are substances of Class 4.3.

[For UN No. 2985]

- 549 Chlorosilanes having a flash-point of less than 23 °C and which, in contact with water, do not emit flammable gases are substances of Class 3. Chlorosilanes having a flash-point equal to or greater than 23 °C and which, in contact with water, do not emit flammable gases are substances of Class 8.
[For UN No. 2988]
- 550 1333 Cerium in slabs, rods or ingots is a substance of Class 4.1.
[For UN No. 3078]
- 551 Solutions of these isocyanates having a flash-point below 23 °C are substances of Class 3.
[For UN Nos. 2206 and 3080]
- 552 Metals and metal alloys in powdered or other flammable form, liable to spontaneous combustion, are substances of Class 4.2. Metals and metal alloys in powdered or other flammable form which, in contact with water, emit flammable gases are substances of Class 4.3.
[For UN No. 3089]
- 553 This mixture of hydrogen peroxide and peroxyacetic acid shall, in laboratory testing (see *Manual of Tests and Criteria*, Part II, section 20), neither detonate in the cavitated state nor deflagrate at all and shall show no effect when heated under confinement nor any explosive power. The formulation shall be thermally stable (self-accelerating decomposition temperature 60 °C or higher for a 50kg package), and a liquid compatible with peroxyacetic acid shall be used for desensitization. Formulations not meeting these criteria are to be regarded as substances of Class 5.2 (see *Manual of Tests and Criteria*, Part II, paragraph 20.4.3(g)).
[For UN No. 3149]
- 554 Metal hydrides which, in contact with water, emit flammable gases are substances of Class 4.3. 2870 Aluminium borohydride or 2870 aluminium borohydride in devices is a substance of Class 4.2.
[For UN No. 3182]
- 555 Dust and powder of metals in non-spontaneously combustible form, non-toxic which nevertheless, in contact with water, emit flammable gases, are substances of Class 4.3.
[For UN No. 3189]
- 556 Organometallic compounds and their solutions which ignite spontaneously are substances of Class 4.2. Flammable solutions with organometallic compounds in concentrations which, in contact with water, neither emit flammable gases in dangerous quantities nor ignite spontaneously are substances of Class 3.
[For UN No. 3207]
- 557 Dust and powder of metals in pyrophoric form are substances of Class 4.2.

[For UN No. 3208]

- 558 Metals and metal alloys in pyrophoric form are substances of Class 4.2. Metals and metal alloys which, in contact with water, do not emit flammable gases and are not pyrophoric or self-heating, but which are easily ignited, are substances of Class 4.1.
[For UN No. 3209]
- 559 Mixtures of a hypochlorite with an ammonium salt are not to be accepted for carriage. 1791 hypochlorite solution is a substance of Class 8.
[For UN No. 3212]
- 560 Elevated temperature liquid, n.o.s., at or above 100 °C and, for a substance with a flash-point, below its flash-point (including molten metals and molten salts) is a substance of Class 9 (UN No. 3257).
[For UN No. 3256]
- 561 Chloroformates having predominantly corrosive properties are substances of Class 8.
[For UN Nos. 3277 and 2742]
- 562 Spontaneously combustible organometallic compounds are substances of Class 4.2. Water-reactive organometallic compounds, flammable, are substances of Class 4.3.
[For UN Nos. 3281 and 3282]
- 563 1905 Selenic acid is a substance of Class 8.
[For UN No. 3283]
- 564 2443 Vanadium oxytrichloride, 2444 vanadium tetrachloride and 2475 vanadium trichloride are substances of Class 8.
[For UN No. 3285]
- 565 Unspecified wastes resulting from medical/veterinary treatment of humans/animals or from biological research, and which are unlikely to contain substances of Class 6.2 shall be assigned to this UN No (3291). Decontaminated clinical wastes or wastes resulting from biological research which previously contained infectious substances are not subject to the requirements of Class 6.2.
[For UN No. 3291]
- 566 2030 hydrazine hydrate and 2030 hydrazine aqueous solution, with not less than 37% and not more than 64% hydrazine, by mass, are substances of Class 8.
[For UN No. 3293]
- 567 Mixtures containing more than 21% oxygen by volume shall be classified as oxidizing.
[For UN Nos. 1956 and 1980]
- 568 0224 Barium azide with a water content lower than the stated limit is a substance of Class 1.
[For UN No. 1571]

- 569-583 Reserved.
- 584 This gas in the gaseous state containing not more than 0.5% air in metal capsules (sodors, sparklets) of Packing instruction P200 (l), special requirement n with not more than 25 g carbon dioxide or 25 g nitrous oxide and, per cm³ of capacity, not more than 0.75 g carbon dioxide or nitrous oxide, is not subject to the requirements of ADR.
[For UN Nos. 1013 and 1070]
- 585 Cinnabar is not subject to the requirements of ADR.
[For UN No. 2025]
- 586 Hafnium, titanium and zirconium powders shall contain a visible excess of water. Hafnium, titanium and zirconium powders, wetted, mechanically produced, of a particle size of 53 : m and over, or chemically produced, of a particle size of 840 : m and over, are not subject to the requirements of ADR.
[For UN Nos. 1326, 1352 and 1358]
- 587 Barium stearate and barium titanate are not subject to the requirements of ADR.
[For UN No. 1564]
- 588 Solid hydrated forms of aluminium bromide and aluminium chloride are not subject to the requirements of ADR.
[For UN Nos. 1725 and 1726]
- 589 Calcium hypochlorite mixtures, dry, containing not more than 10% available chlorine are not subject to the requirements of ADR.
[For UN No. 1748]
- 590 Ferric chloride hexahydrate is not subject to the requirements of ADR.
[For UN No. 1773]
- 591 Lead sulphate with not more than 3% free acid is not subject to the requirements of ADR.
[For UN No. 1794]
- 592 Uncleaned empty packagings (including empty IBCs and large packagings), empty tank-vehicles, empty demountable tanks, empty portable tanks, empty tank-containers and empty small containers which have contained this substance are not subject to the requirements of ADR.
[For UN Nos. 1376, 1932, 2002, 2009 and 2793]
- 593 This gas, intended for the cooling of e.g. medical or biological specimens, if contained in double wall receptacles which comply with the provisions of Packing instruction P203 (k) is not subject to the requirements of ADR.
[For UN Nos. 1913, 1951, 1963, 1970, 1977, 2187, 2591, 3136 and 3158]

- 594 The following articles, manufactured and filled according to the regulations of the manufacturing State and packaged in strong outer packagings, are not subject to the requirements of ADR:
- (1) 1044 Fire extinguishers provided with protection against inadvertent discharge;
 - (2) 3164 Articles, pressurized pneumatic or hydraulic, designed to withstand stresses greater than the internal gas pressure by virtue of transmission of force, intrinsic strength or construction.
[For UN Nos. 1044 and 3164]
- 595 Mixtures with a PCB or PCT content of not more than 50 mg/kg are not subject to the requirements of ADR.
[For UN Nos. 2315, 3151 and 3152]
- 596 Cadmium pigments, such as cadmium sulphides, cadmium sulphoselenides and cadmium salts of higher fatty acids (e.g. cadmium stearate), are not subject to the requirements of ADR.
[For UN No. 2570]
- 597 Acetic acid solutions with not more than 10% pure acid by mass, are not subject to the requirements of ADR.
[For UN No. 2790]
- 598 The following are not subject to the requirements of ADR:
- (1) New storage batteries when:
 - they are secured in such a way that they cannot slip, fall or be damaged;
 - they are provided with carrying devices, unless they are suitably stacked, e.g. on pallets;
 - there are no dangerous traces of alkalis or acids on the outside;
 - they are protected against short circuits.
 - (2) Used storage batteries when:
 - their cases are undamaged;
 - they are secured in such a way that they cannot leak, slip, fall or be damaged, e.g. by stacking on pallets;
 - there are no dangerous traces of alkalis or acids on the outside of the articles;
 - they are protected against short circuits.
- “Used storage batteries” means storage batteries transported for recycling at the end of their normal service life.
[For UN Nos. 2794, 2795 and 3028]

- 599 Manufactured articles or instruments containing not more than 1kg of UN No 2809 mercury are not subject to the requirements of ADR.
[For UN No. 2809]
- 600 Vanadium pentoxide, fused and solidified, is not subject to the requirements of ADR.
[For UN No. 2862]
- 601 Pharmaceutical products ready for use, e.g. cosmetics, drugs and medicines, which are substances manufactured and packed in packagings of a type intended for retail sale or distribution for personal or household consumption are not subject to the requirements of ADR.
[For UN Nos. 1851, 3248 and 3249]
- 602 Phosphorus sulphides which are not free from yellow and white phosphorus are not to be accepted for carriage.
[For UN Nos. 1339, 1340, 1341 and 1343]
- 603 Anhydrous hydrogen cyanide not meeting the description for UN No. 1051 or UN No. 1614 is not to be accepted for carriage. Hydrogen cyanide (hydrocyanic acid) containing less than 3% water is stable, if the pH-value is 2.5 ± 0.5 and the liquid is clear and colourless.
[For UN Nos. 1051 and 1614]
- 604 Ammonium bromate and its aqueous solutions and mixtures of a bromate with an ammonium salt are not to be accepted for carriage.
[For UN No. 1450 and 3213]
- 605 Ammonium chlorate and its aqueous solutions and mixtures of a chlorate with an ammonium salt are not to be accepted for carriage.
[For UN No. 1461 and 3210]
- 606 Ammonium chlorite and its aqueous solutions and mixtures of a chlorite with an ammonium salt are not to be accepted for carriage.
[For UN No. 1642]
- 607 Mixtures of nitrates or nitrites with an ammonium salt are not to be accepted for carriage.
[For UN No. 1487]
- 608 Ammonium permanganate and its aqueous solutions and mixtures of a permanganate with an ammonium salt are not to be accepted for carriage.
[For UN Nos. 1482 and 3214]
- 609 Tetranitromethane not free from combustible impurities is not to be accepted for carriage.
[For UN No. 1510]

- 610 Reserved.
- 611 Ammonium nitrate containing more than 0.2% combustible substances (including any organic substance calculated as carbon) is not to be accepted for carriage unless it is a constituent of a substance or article of Class 1.
[For UN No. 1942]
- 612 Reserved.
- 613 Chloric acid solution containing more than 10% chloric acid and mixtures of chloric acid with any liquid other than water is not to be accepted for carriage.
[For UN No. 2626]
- 614 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) in concentrations considered highly toxic according to the criteria in 2.2.61.1 is not to be accepted for carriage.
[For UN Nos. 2810 and 2811]
- 615 2249 Dichloromethyl ether, symmetrical is not to be accepted for carriage.
[For UN No. 2929]
- 616 Substances containing more than 40% liquid nitric esters shall satisfy the exudation test specified in 2.3.1.
[For UN No. 0081]
- 617 In addition to the type of explosive, the commercial name of the particular explosive shall be marked on the package and shall be specified in the transport document.
[For UN Nos. 0081, 0082, 0083, 0084, 0241, 0331 and 0332]
- 618 In receptacles containing 1,2-butadiene, the oxygen concentration in the gaseous phase shall not exceed 50 ml/m³.
[For UN No. 1010]
- 619-622 Reserved.
- 623 1829 sulphur trioxide shall be inhibited. Sulphur trioxide, 99.95% pure or above, may be transported without inhibitor in tanks by road provided that its temperature is maintained at or above 32.5 °C. For the transport of this substance without inhibitor in tanks at a minimum temperature of 32.5 °C, the specification “**Transport under minimum temperature of the product of 32.5 °C**” shall appear in the transport document.
[For UN No. 1829]
- 624 Fertilizers having an ammonium nitrate content or a content in combustible substances exceeding the values shown are not to be accepted for carriage except under the conditions applicable to Class 1. Fertilizers having an ammonium nitrate content below the limit values indicated are not subject to the requirements of ADR. Ammonium nitrate fertilizers, uniform non-segregating mixtures of nitrogen

phosphate or nitrogen potash types or complete fertilizers of nitrogen phosphate potash type whose molecular excess of nitrate ions over ammonium ions (calculated as potassium nitrate) is less than 10% are not subject to the requirements of ADR provided that: their ammonium nitrate content is not more than 70% and their total content of combustible material is not more than 0.4%, or their ammonium nitrate content is not more than 45% irrespective of their content of combustible material. [For UN Nos 1942, 2067, 2068, 2069 and 2070]

625 Packages containing these articles shall be clearly marked as follows:

“UN 1950 AEROSOLS”

[For UN No. 1950]

626-627 Reserved.

628 Uniform non-segregating mixtures of ammonium nitrate with added matter which is inorganic and chemically inert towards ammonium nitrate, with not less than 90% ammonium nitrate and not more than 0.2% combustible material (including organic material calculated as carbon), or with more than 70% but less than 90% ammonium nitrate and not more than 0.4% total combustible material. [For UN No. 2067]

629 Uniform non-segregating mixtures of ammonium nitrate with calcium carbonate and/or dolomite, with more than 80% but less than 90% ammonium nitrate and not more than 0.4% total combustible material. [For UN No. 2068]

630 Uniform non-segregating mixtures of ammonium nitrate and ammonium sulphate, with more than 45% but not more than 70% ammonium nitrate and not more than 0.4% total combustible material. [For UN No. 2069]

631 Uniform non-segregating mixtures of nitrogen phosphate or nitrogen potash types or complete fertilizers of nitrogen phosphate potash type, with more than 70% but less than 90% ammonium nitrate and not more than 0.4% total combustible material. [For UN No. 2070]

632 Considered to be spontaneously flammable (pyrophoric). [For UN No 2203, 2192 and 2199]

633 Packagings containing this substance shall bear the following marking: “**Keep away from any source of ignition**”. This marking shall be in an official language of the forwarding country, and also, if that language is not English, French or German, in English, French or German, unless any agreements concluded between the countries concerned in the transport operation provide otherwise. [For UN Nos. 2211 and 3314]

- 634 Packages containing substances carried in deeply refrigerated liquid nitrogen shall, in addition, bear a label conforming to Model No. 2.2.
[For UN Nos. 2814, 2900, 3291 and 3245]
- 635 Packages containing these articles shall not bear a label conforming to Model No. 9 unless the article is fully enclosed by packaging, crates or other means that prevent the ready identification of the article.
[For UN Nos. 2990 and 3072]
- 636 (a) With the approval of the competent authority of the country of origin, the quantity of lithium or lithium alloy in each cell may be raised to 60 g and a package may contain up to 2500 g of lithium or lithium alloy; the competent authority shall determine the conditions of carriage as well as the type and duration of the test. If the country of origin is not party to ADR, the approval shall be recognized by the competent authority of the first ADR country reached by the consignment. In such a case, a copy of the approval with the conditions of carriage shall be attached to the transport document. This approval shall be drawn up in an official language of the forwarding country and also, if that language is not English, French or German, in English, French or German, unless any agreements concluded between the countries concerned in the transport operation provide otherwise.
- (b) Cells contained in equipment shall not be capable of being discharged during carriage to the extent that the open circuit voltage falls below 2 volts or two thirds of the voltage of the undischarged cell, whichever is the lower.
- (c) Packages containing used cells or batteries in unmarked packagings shall bear the inscription: **“Used lithium cells”**.
- (d) Articles which do not meet the requirements of this special provision and/or special provisions 188, 230, 287 as appropriate are not to be accepted for carriage.
[For UN Nos. 3090 and 3091]
- 637 Genetically modified micro-organisms are those which are not dangerous for humans and animals, but which could alter animals, plants, microbiological substances and ecosystems in such a way as cannot occur naturally. Genetically modified micro-organisms which have received a consent for deliberate release into the environment ^{*/} are not subject to the requirements of Class 9. Live vertebrate or invertebrate animals shall not be used to carry these substances classified under this UN number unless the substance can be carried no other way. For the carriage of easily perishable substances under this UN number appropriate information shall be given, e.g.: **“Cool at +2 °/+4 °C”** or **“Carry in frozen state”** or **“Do not freeze”**.

^{*/} See in particular Part C of Directive 90/220/EEC (Official Journal of the European Communities, No. L 117 of 8 May 1990, pp. 18-20), which sets out the authorization procedures for the European Community.

[For UN No. 3245]

