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Working Party on the Transport of Dangerous Goods

Ad hoc Working Group on the Harmonization of RID/ADR/ADN
with the UN Recommendations on the Transport of Dangerous Goods

Geneva, 25-27 April 2017

Harmonization with the United Nations Model Regulations on the Transport of Dangerous Goods

Use of the terms *Hazard* and *Risk*

The following table contains proposed changes to the wording used in RID/ADR/ADN to align with the wording used in the United Nations Model Regulations on the Transport of Dangerous Goods either in the corresponding paragraphs or in paragraphs specific to RID/ADR/ADN where the same phrases are used. Changes are shown in Track Changes mode. Where appropriate the corresponding reference in the United Nations Model Regulations is shown in square brackets.

Reference	Text
1.6.1.40	Notwithstanding the requirements of ADR applicable as from 1 January 2017, articles of UN Nos. 0015, 0016 and 0303 containing smoke-producing substance(s) toxic by inhalation according to the criteria for Class 6.1 manufactured before 31 December 2016 may be carried until 31 December 2018 without a "TOXIC" subsidiary ~~risk~~ hazard label (model No. 6.1, see 5.2.2.2.2). [*Note: this transitional measure might be deleted in 2019 Editions*]
1.7.5 [= 1.5.5.1]	**Radioactive material possessing other dangerous properties** In addition to the radioactive and fissile properties, any subsidiary ~~risk~~ hazard of the contents of the package, such as explosiveness, flammability, pyrophoricity, chemical toxicity and corrosiveness, shall also be taken into account in the documentation, packing, labelling, marking, placarding, stowage, segregation and carriage, in order to be in compliance with all relevant provisions for dangerous goods of ADR.
1.10.2.2 [= 1.4.2.2]	Security awareness training shall address the nature of security risks, recognising security risks, methods to address and reduce such risks and actions to be taken in the event of a security breach. …

Reference	Text
1.10.3.1.5 [= 1.4.3.1.5]	When radioactive material possesses subsidiary ~~risks~~ hazards of other classes, the criteria of table 1.10.3.1.2 shall also be taken into account (see also 1.7.5).
1.10.3.2.2 (c)	(c) Review of current operations and assessment of security risks, including any stops necessary to the transport operation, the keeping of dangerous goods in the vehicle, tank or container before, during and after the journey and the intermediate temporary storage of dangerous goods during the course of intermodal transfer or transhipment between units as appropriate;
1.10.3.2.2 (d) [= 1.4.3.2.2.2]	Clear statement of measures that are to be taken to reduce security risks, commensurate with the responsibilities and duties of the participant, including:
	- equipment and resources that are to be used to reduce security risks;
2.1.2.1	The dangerous goods covered by the heading of a class are defined on the basis of their properties according to sub-section 2.2.x.1 of the relevant class. Assignment of dangerous goods to a class and a packing group is made according to the criteria mentioned in the same sub-section 2.2.x.1. Assignment of one or several subsidiary ~~risk~~hazard(s) to a dangerous substance or article is made according to the criteria of the class or classes corresponding to those ~~risks~~hazard, as mentioned in the appropriate subsection(s) 2.2.x.1.
2.1.2.5	Goods not mentioned by name, i.e. goods not listed as single entries in Table A of Chapter 3.2 and not listed or defined in one of the above-mentioned sub-sections 2.2.x.2 shall be assigned to the relevant class in accordance with the procedure of section 2.1.3. In addition, the subsidiary ~~risk~~ hazard (if any) and the packing group (if any) shall be determined. Once the class, subsidiary ~~risk~~ hazard (if any) and packing group (if any) have been established the relevant UN number shall be determined. The decision trees in subsections 2.2.x.3 (list of collective entries) at the end of each class indicate the relevant parameters for selecting the relevant collective entry (UN number). In all cases the most specific collective entry covering the properties of the substance or article shall be selected, according to the hierarchy indicated in 2.1.1.2 by the letters B, C and D respectively. If the substance or article cannot be classified under entries of type B or C according to 2.1.1.2, then, and only then shall it be classified under an entry of type D.
2.1.2.8 (second indent) [2.0.0.2]	– Under the same UN number and name but with additional hazard communication information as appropriate to reflect the additional subsidiary ~~risk~~hazard(s) (documentation, label, placard) provided that the class remains unchanged and that any other carriage conditions (e.g. limited quantity, packaging and tank provisions) that would normally apply to substances possessing such a combination of hazards are the same as those applicable to the substance listed.
2.1.3.3 Paragraph after (d)	In those other cases, except the one described in (a), the solution or mixture shall be classified as a substance not mentioned by name in the relevant class under a collective entry listed in sub-section 2.2.x.3 of that class taking account of the subsidiary ~~risks~~ hazards presented by that solution or mixture, if any, unless the solution or mixture does not meet the criteria of any class, in which case it is not subject to ADR.
2.1.3.7	Solutions and mixtures of oxidizing substances or substances with an oxidizing subsidiary ~~risk~~ hazard may have explosive properties. In such a case they are not to be accepted for carriage unless they meet the requirements for Class 1.

Reference	Text
2.2.1.1.5, Division 1.4 [2.1.1.4]	Substances and articles which present only a ~~slight risk of explosion~~small hazard in the event of ignition or initiation during carriage. The effects are largely confined to the package and no projection of fragments of appreciable size or range is to be expected. An external fire shall not cause virtually instantaneous explosion of almost the entire contents of the package. [*Note: The definition of Division 1.4 is different in RID/ADR/ADN and in the United Nations Model Regulations.*]
2.2.1.1.5, Division 1.6 [2.1.1.4]	***NOTE:*** *The ~~risk~~ hazard from articles of Division 1.6 is limited to the explosion of a single article.*
2.2.1.1.6 Compatibility group L [2.1.2.1.1]	Explosive substance or article containing an explosive substance and presenting a special ~~risk~~ hazard (e.g. due to water activation or the presence of hypergolic liquids, phosphides or a pyrophoric substance) necessitating isolation of each type.
2.2.1.1.8.2 Note 2 after paragraph (e) [2.1.3.6.4]	***NOTE 2:*** *The competent authority referred to in 2.2.1.1.8.1 may require testing in packaged form if it is determined that, as packaged for carriage, the article may pose a greater ~~risk~~hazard.*
2.2.2.1.5 [2.2.2.1 (c)]	***Toxic gases*** ***NOTE:*** *Gases meeting the criteria for toxicity in part or completely owing to their corrosivity are to be classified as toxic. See also the criteria under the heading "Corrosive gases" for a possible subsidiary corrosivity ~~risk~~hazard.*
	Corrosive gases Gases or gas mixtures meeting the criteria for toxicity completely owing to their corrosivity are to be classified as toxic with a subsidiary corrosivity ~~risk~~hazard. A gas mixture that is considered to be toxic due to the combined effects of corrosivity and toxicity has a subsidiary ~~risk~~ hazard of corrosivity when the mixture is known by human experience to be destructive to the skin, eyes or mucous membranes or when the LC_{50} value of the corrosive components of the mixture is equal to or less than 5 000 ml/m3 (ppm) when the LC_{50} is calculated by the formula:
2.2.3.1.2 (Subdivision F)	Flammable liquids, without subsidiary ~~risk~~ hazard and articles containing such substances:
2.2.3.1.3 [2.3.2.1.2]	For a liquid with (a) subsidiary ~~risk~~hazard(s), the packing group determined in accordance with the table above and the packing group based on the severity of the subsidiary ~~risk~~hazard(s) shall be considered; the classification and packing group shall then be determined in accordance with the table of precedence of hazards in 2.1.3.10.
2.2.3.1.6	If substances of Class 3, as a result of admixtures, come into categories of ~~risk~~ hazard different from those to which the substances mentioned by name in Table A of Chapter 3.2 belong, these mixtures or solutions shall be assigned to the entries to which they belong on the basis of their actual degree of danger.
2.2.3.3 List of collective entries	**Without subsidiary ~~risk~~hazard**
	NOTE: *The classification of a pesticide under an entry shall be effected on the basis of the active ingredient, of the physical state of the pesticide and any subsidiary ~~risks~~ hazards it may exhibit.*
	Pesticide (f.p.<23 °C) ***NOTE:*** *The classification of a pesticide under an entry shall be effected on the basis of the active ingredient, of the physical state of the pesticide and any subsidiary ~~risks~~ hazards it may exhibit.*
2.2.41.1.2	F Flammable solids, without subsidiary ~~risk~~hazard:
	D Solid desensitized explosives without subsidiary ~~risk~~hazard;

Reference	Text
2.2.41.1.7	If substances of Class 4.1, as a result of admixtures, come into different categories of ~~risk~~ hazard from those to which the substances mentioned by name in Table A of Chapter 3.2 belong, these mixtures shall be assigned to the entries to which they belong on the basis of their actual degree of danger.
2.2.41.1.12 [2.4.2.3.2.2]	Self-reactive substances which have already been classified and are already permitted for carriage in packagings are listed in 2.2.41.4, those already permitted for carriage in IBCs are listed in 4.1.4.2, packing instruction IBC520 and those already permitted for carriage in tanks according to Chapter 4.2 are listed in 4.2.5.2, portable tank instruction T23. Each permitted substance listed is assigned to a generic entry of Table A of Chapter 3.2 (UN Nos. 3221 to 3240), and appropriate subsidiary ~~risks~~ hazards and remarks providing relevant transport information are given.
2.2.41.3 List of collective entries	Without subsidiary ~~risk~~hazard
	without subsidiary ~~risk~~hazard
2.2.41.4 Remarks [2.4.2.3.2.3]	(2) "EXPLOSIVE" subsidiary ~~risk~~ hazard label required (Model No. 1, see 5.2.2.2.2).
2.2.42.1.2 Subdivision S	Substances liable to spontaneous combustion, without subsidiary ~~risk~~hazard:
2.2.42.1.5	***NOTE 3:*** *Since organometallic substances can be classified in Class 4.2 or 4.3 with additional subsidiary ~~risks~~hazard, depending on their properties, a specific classification flow chart for these substances is given in 2.3.5.*
2.2.42.1.6	If substances of Class 4.2, as a result of admixtures, come into different categories of ~~risk~~ hazard from those to which the substances mentioned by name in Table A of Chapter 3.2 belong, these mixtures shall be assigned to the entries to which they belong on the basis of their actual degree of danger.
2.2.42.3	Without subsidiary ~~risk~~hazard
2.2.43.1.2 Subdivision W	Substances which, in contact with water, emit flammable gases, without subsidiary ~~risk~~hazard, and articles containing such substances:
2.2.43.1.5	***NOTE:*** *Since organometallic substances can be classified in Class 4.2 or 4.3 with additional subsidiary ~~risks~~hazard, depending on their properties, a specific classification flow chart for these substances is given in 2.3.5.*
2.2.43.1.6	If substances of Class 4.3, as a result of admixtures, come into different categories of ~~risk~~ hazard from those to which the substances mentioned by name in Table A of Chapter 3.2 belong, these mixtures shall be assigned to the entries to which they belong on the basis of their actual degree of danger.
2.2.43.3	Without subsidiary ~~risk~~hazard
2.2.51.1.2 Subdivision O	Oxidizing substances without subsidiary ~~risk~~ hazard or articles containing such substances:
2.2.51.1.4	If substances of Class 5.1, as a result of admixtures, come into different categories of ~~risk~~ hazard from those to which the substances mentioned by name in Table A of Chapter 3.2 belong, these mixtures or solutions shall be assigned to the entries to which they belong on the basis of their actual degree of danger.
2.2.51.3	Without subsidiary ~~risk~~hazard
2.2.52.1.7 [2.5.3.2.3]	Organic peroxides which have already been classified and are already permitted for carriage in packagings are listed in 2.2.52.4, those already permitted for carriage in IBCs are listed in 4.1.4.2, packing instruction IBC520 and those already permitted for carriage in tanks in accordance with Chapters 4.2 and 4.3 are listed in 4.2.5.2, portable tank instruction T23. Each permitted substance listed is assigned to a generic entry of Table A of Chapter 3.2 (UN Nos. 3101 to 3120) and appropriate subsidiary ~~risks~~ hazards and remarks providing relevant transport information are given.

Reference	Text
2.2.52.4 List of currently assigned organic peroxides in packagings, Table heading row [2.5.3.2.4]	Subsidiary ~~risks~~ hazards and remarks
Remarks (refer to the last column of the Table in 2.2.52.4) [2.5.3.2.4]	*3) "EXPLOSIVE" subsidiary ~~risk~~ hazard label required (Model No.1, see 5.2.2.2.2).*
	13) "CORROSIVE" subsidiary hazard ~~risk~~ label required (Model No.8, see 5.2.2.2.2).
	18) No "CORROSIVE" subsidiary hazard ~~risk~~ label (Model No.8, see 5.2.2.2.2) required for concentrations below 80%.
	27) For concentrations more than 56%, "CORROSIVE" subsidiary hazard ~~risk~~ label required (ModelNo.8, see 5.2.2.2.2).
2.2.61.1.2 Subdivision T	Toxic substances without subsidiary ~~risk~~hazard
2.2.61.1.11 [2.6.2.4.1]	All active pesticide substances and their preparations for which the LC_{50} and/or LD_{50} values are known and which are classified in Class 6.1 shall be classified under appropriate packing groups in accordance with the criteria given in 2.2.61.1.6 to 2.2.61.1.9. Substances and preparations which are characterized by subsidiary ~~risks~~ hazards shall be classified according to the precedence of hazard Table in 2.1.3.10 with the assignment of appropriate packing groups.
2.2.61.1.11.2 [2.6.2.4.3]	The proper shipping name used in the carriage of the pesticide shall be selected on the basis of the active ingredient, of the physical state of the pesticide and any subsidiary ~~risks~~ hazards it may exhibit (see 3.1.2).
2.2.61.1.12	If substances of Class 6.1, as a result of admixtures, come into categories of ~~risk~~ hazard different from those to which the substances mentioned by name in Table A of Chapter 3.2 belong, these mixtures or solutions shall be assigned to the entries to which they belong on the basis of their actual degree of danger.
2.2.61.3 List of collective entries	Toxic substances without subsidiary ~~risk~~hazard(s)
	Toxic substances with subsidiary ~~risk~~hazard(s)
2.2.62.1.5.3 [2.6.3.2.3.3]	Substances in a form that any present pathogens have been neutralized or inactivated such that they no longer pose a health risk are not subject to ADR unless they meet the criteria for inclusion in another class.
3.1.2.8.1.2 [=]	When a mixture of dangerous goods is described by one of the "N.O.S." or "generic" entries to which special provision 274 has been allocated in Column (6) of Table A in Chapter 3.2, not more than the two constituents which most predominantly contribute to the hazard or hazards of a mixture need to be shown, excluding controlled substances when their disclosure is prohibited by national law or international convention. If a package containing a mixture is labelled with any subsidiary ~~risk~~ hazard label, one of the two technical names shown in parentheses shall be the name of the constituent which compels the use of the subsidiary ~~risk~~ hazard label.
3.3.1 Special provisions applicable to certain articles or substances [= except SP663]	**122** The subsidiary ~~risks~~hazards, 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, 4.1.4.2 packing instruction IBC520 and 4.2.5.2.6 portable tank instruction T23.

Reference	Text
	172 Where a radioactive material has (a) subsidiary ~~risk~~hazard(s): (a) The substance shall be allocated to packing group I, II or III, if appropriate, by application of the packing group criteria provided in Part 2 corresponding to the nature of the predominant subsidiary ~~risk~~hazard; (b) Packages shall be labelled with subsidiary risk labels corresponding to each subsidiary hazard ~~risk~~ exhibited by the material; corresponding placards shall be affixed to cargo transport units in accordance with the relevant provisions of 5.3.1; (c) For the purposes of documentation and package marking, the proper shipping name shall be supplemented with the name of the constituents which most predominantly contribute to this (these) subsidiary hazard~~risk~~(s) and which shall be enclosed in parenthesis; (d) The dangerous goods transport document shall indicate the label model number(s) corresponding to each subsidiary hazard ~~risk~~ in parenthesis after the Class number "7" and, where assigned the packing group as required by 5.4.1.1.1 (d).
	290 When this radioactive material meets the definitions and criteria of other classes as defined in Part 2, it shall be classified in accordance with the following: (a) Where the substance meets the criteria for dangerous goods in excepted quantities as set out in Chapter 3.5, the packagings shall be in accordance with 3.5.2 and meet the testing requirements of 3.5.3. All other requirements applicable to radioactive material, excepted packages as set out in 1.7.1.5 shall apply without reference to the other class; (b) Where the quantity exceeds the limits specified in 3.5.1.2 the substance shall be classified in accordance with the predominant subsidiary ~~risk~~hazard. The transport document shall describe the substance with the UN number and proper shipping name applicable to the other class supplemented with the name applicable to the radioactive excepted package according to Column (2) of Table A of Chapter 3.2, and the substance shall be carried in accordance with the provisions applicable to that UN number. An example of the information shown on the transport document is:
	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 carriage. Refrigerating machines and refrigerating-machine components are not subject to the requirements of ADR if they contain less than 12 kg of gas.
	369 In accordance with 2.1.3.5.3 (a), this radioactive material in an excepted package possessing toxic and corrosive properties is classified in Class 6.1 with radioactivity and corrosivity subsidiary ~~risks~~hazards. Uranium hexafluoride may be classified under this entry only if the conditions of 2.2.7.2.4.1.2, 2.2.7.2.4.1.5, 2.2.7.2.4.5.2 and, for fissile-excepted material, of 2.2.7.2.3.5 are met. In addition to the provisions applicable to the carriage of Class 6.1 substances with a corrosivity subsidiary ~~risk~~hazard, the provisions of 5.1.3.2, 5.1.5.2.2, 5.1.5.4.1 (b), 7.5.11 CV33 (3.1), (5.1) to (5.4) and (6) shall apply.
	663 **General provisions:** Packagings, discarded, empty, uncleaned with residues presenting a ~~risk~~ hazard or a subsidiary ~~risk~~ hazard of Class 5.1 shall not be packed together with other packagings, discarded, empty, uncleaned, or loaded together with other packagings, discarded, empty, uncleaned in the same container, vehicle or bulk container.

Reference	Text
4.1.4.1 P114 (b) [=]	**Special packing provisions:** **PP52** For UN Nos. 0160 and 0161, when metal drums (1A1, 1A2, 1B1, 1B2, 1N1 or 1N2) are used as outer packagings, metal packagings shall be so constructed that the risk of explosion, by reason of increased internal pressure from internal or external causes is prevented.
4.1.4.1 P143 [=]	**Special packing provision:** **PP76** For UN Nos. 0271, 0272, 0415 and 0491, when metal packagings are used, metal packagings shall be so constructed that the risk of explosion, by reason of increase in internal pressure from internal or external causes is prevented.
4.1.4.1 P520 [=]	**Additional requirements:** 4. The packaging of an organic peroxide or self-reactive substance required to bear an "EXPLOSIVE" subsidiary ~~risk~~ hazard label (model No.1, see 5.2.2.2.2) shall also comply with the provisions given in 4.1.5.10 and 4.1.5.11.
4.1.4.1 R001	***NOTE 2:*** *For Class 3, packing group II, these packagings may be used only for substances with no subsidiary ~~risk~~ hazard and a vapour pressure of not more than 110 kPa at 50 °C and for slightly toxic pesticides.*
4.1.5.2 [=]	(a) They will protect the explosives, prevent them escaping and cause no increase in the risk of unintended ignition or initiation when subjected to normal conditions of carriage including foreseeable changes in temperature, humidity and pressure;
	(c) The packages will withstand any loading imposed on them by foreseeable stacking to which they will be subject during carriage so that they do not add to the risk presented by the explosives, the containment function of the packagings is not harmed, and they are not distorted in a way or to an extent which will reduce their strength or cause instability of a stack.
4.1.6.4	A change of use of a refillable pressure receptacle shall include emptying, purging and evacuation operations to the extent necessary for safe operation (see also table of standards at the end of this section). In addition, a pressure receptacle that previously contained a Class 8 corrosive substance or a substance of another class with a corrosive subsidiary ~~risk~~ hazard shall not be authorized for the carriage of a Class 2 substance unless the necessary inspection and testing as specified in 6.2.1.6 and 6.2.3.5 respectively have been performed.
4.1.9.1.5 [=]	For radioactive material having other dangerous properties the package design shall take into account those properties. Radioactive material with a subsidiary ~~risk~~hazard, packaged in packages that do not require competent authority approval, shall be carried in packagings, IBCs, tanks or bulk containers fully complying with the requirements of the relevant chapters of Part 6 as appropriate, as well as applicable requirements of chapters 4.1, 4.2 or 4.3 for that subsidiary ~~risk~~hazard.
4.2.1.19.1 [=]	Solid substances carried or offered for carriage above their melting point which are not assigned a portable tank instruction in column (10) of the Table A of Chapter 3.2 or when the assigned portable tank instruction does not apply to carriage at temperatures above their melting point may be carried in portable tanks provided that the solid substances are classified in Classes 4.1, 4.2, 4.3, 5.1, 6.1, 8 or 9 and have no subsidiary ~~risk~~ hazard other than that of Class 6.1 or Class 8 and are in packing group II or III.
4.2.5.2.6 T23 Footnote (d)	d *Formulation derived from distillation of peroxyacetic acid originating from peroxyacetic acid in concentration of not more than 41% with water, total active oxygen (Peroxyacetic acid+H_2O_2) ≤ 9.5%, which fulfils the criteria of the Manual of Tests and Criteria, paragraph 20.4.3 (f). "CORROSIVE" subsidiary ~~risk~~ hazard placard required (Model No 8, see 5.2.2.2.2).*

Reference	Text
4.3.2.2.1	The following degrees of filling shall not be exceeded in tanks intended for the carriage of liquids at ambient temperatures: (a) for flammable substances, environmentally hazardous substances and flammable environmentally hazardous substances, without additional ~~risks~~ hazards (e.g. toxicity or corrosivity), in tanks with a breather device or with safety valves (even where preceded by a bursting disc):
5.2.2.2.1.2 [=]	Notwithstanding the provisions of 5.2.2.1.6, labels and the environmentally hazardous substance mark (see 5.2.1.8.3) may overlap to the extent provided for by ISO 7225:2005. However, in all cases, the primary ~~risk~~ hazard label and the figures appearing on any label shall remain fully visible and the symbols recognizable.
5.2.2.2.1.5 [=]	On labels other than those for material of Class 7, the optional insertion of any text (other than the class number) in the space below the symbol shall be confined to particulars indicating the nature of the ~~risk~~ hazard and precautions to be taken in handling.
5.3.1.1.3	For Class 7, the primary ~~risk~~ hazard placard shall conform to model No. 7D as specified in 5.3.1.7.2. This placard is not required for vehicles or containers carrying excepted packages and for small containers.
5.3.1.1.5 [5.3.1.1.3]	Containers, MEGCs, MEMUs, tank-containers, portable tanks or vehicles containing goods of more than one class need not bear a subsidiary ~~risk~~ hazard placard if the hazard represented by that placard is already indicated by a primary or subsidiary ~~risk~~ hazard placard.
5.3.2.3.2, hazard identification number 20	asphyxiant gas or gas with no subsidiary ~~risk~~hazard
5.4.1.1.1 (c)	***NOTE:*** *For radioactive material with a subsidiary ~~risk~~hazard, see also special provision 172 in Chapter 3.3.*
5.4.1.1.1 (d)	***NOTE:*** *For radioactive material of Class 7 with subsidiary ~~risks~~hazards, see special provision 172 (d) in Chapter 3.3.*
5.4.1.1.6.2.1	(b) If the dangerous goods last loaded are goods of Classes 3, 4.1, 4.2, 4.3, 5.1, 5.2, 6.1, 8 or 9, the information of the goods last loaded, as described in 5.4.1.1.1 (c) may be replaced by the words “WITH RESIDUES OF [...]” followed by the class(es) and subsidiary ~~risk~~hazard(s) corresponding to the different residues, in the class numbering order. Example: Empty packagings, uncleaned, having contained goods of Class 3 carried together with empty packagings, uncleaned, having contained goods of Class 8 with a Class 6.1 subsidiary ~~risk~~ hazard may be referred to in the transport document as:
5.4.1.1.19	For packagings, discarded, empty, uncleaned, the proper shipping name specified in 5.4.1.1.1 (b) shall be complemented with the words "(WITH RESIDUES OF [...])" followed by the class(es) and subsidiary ~~risk~~hazard(s) corresponding to the residues, in the class numbering order. Moreover, 5.4.1.1.1 (f) does not apply. Example: Packagings, discarded, empty, uncleaned having contained goods of Class 4.1 packed together with packagings, discarded, empty, uncleaned having contained goods of Class 3 with a Class 6.1 subsidiary ~~risk~~ hazard should be referred to in the transport document as:
5.4.1.2.5.1	(b) A description of the physical and chemical form of the material, or a notation that the material is special form radioactive material or low dispersible radioactive material. A generic chemical description is acceptable for chemical form. For radioactive material with a subsidiary ~~risk~~hazard, see sub-paragraph (c) of special provision 172 of Chapter 3.3;

Reference	Text
5.4.2 Footnote 8 [same wording as in 5.5.3]	*8 When substances presenting a risk of asphyxiation are used for cooling or conditioning purposes (such as dry ice (UN 1845) or nitrogen, refrigerated liquid (UN 1977) or argon, refrigerated liquid (UN 1951)), the container/vehicle is externally marked in accordance with 5.5.3.6 (of the IMDG Code); and*
5.5.3 [=]	Special provisions applicable to packages and vehicles and containers containing substances presenting a risk of asphyxiation when used for cooling or conditioning purposes (such as dry ice (UN 1845) or nitrogen, refrigerated liquid (UN 1977) or argon, refrigerated liquid (UN 1951))
5.5.3.1.5 [same wording as in 5.5.3]	Sub-sections 5.5.3.6 and 5.5.3.7 only apply when there is an actual risk of asphyxiation in the vehicle or container. It is for the participants concerned to assess this risk, taking into consideration the hazards presented by the substances being used for cooling or conditioning, the amount of substance to be carried, the duration of the journey, the types of containment to be used and the gas concentration limits given in the note to 5.5.3.3.3.
6.2.1.1.8.3 [=]	Closed cryogenic receptacles intended for the carriage of refrigerated liquefied gases having a boiling point below –182 °C at atmospheric pressure shall not include materials which may react with oxygen or oxygen enriched atmospheres in a dangerous manner, when located in parts of the thermal insulation where there is a risk of contact with oxygen or with oxygen enriched liquid.
6.2.2.7.4 [=]	(p) In the case of steel pressure receptacles and composite pressure receptacles with steel liner intended for the carriage of gases with a risk of hydrogen embrittlement, the letter "H" showing compatibility of the steel (see ISO 11114-1:2012);
6.7.2.2.1 [=]	… When the manufacturing process or the materials make it necessary, the shells shall be suitably heat-treated to guarantee adequate toughness in the weld and in the heat affected zones. In choosing the material, the design temperature range shall be taken into account with respect to risk of brittle fracture, to stress corrosion cracking and to resistance to impact. …
6.7.2.2.16 [=]	When required for certain substances by the applicable portable tank instruction indicated in Column (10) of Table A of Chapter 3.2 and described in 4.2.5.2.6 or by a portable tank special provision indicated in Column (11) of Table A of Chapter 3.2 and described in 4.2.5.3, portable tanks shall be provided with additional protection, which may take the form of additional shell thickness or a higher test pressure, the additional shell thickness or higher test pressure being determined in the light of the inherent risks associated with the carriage of the substances concerned.
6.7.2.5.1 [=]	Service equipment shall be so arranged as to be protected against the risk of being wrenched off or damaged during handling and carriage. When the connection between the frame and the shell allows relative movement between the sub-assemblies, the equipment shall be so fastened as to permit such movement without risk of damage to working parts. The external discharge fittings (pipe sockets, shut-off devices), the internal stop-valve and its seating shall be protected against the danger of being wrenched off by external forces (for example using shear sections). The filling and discharge devices (including flanges or threaded plugs) and any protective caps shall be capable of being secured against unintended opening.
6.7.2.5.8 [=]	Piping shall be designed, constructed and installed so as to avoid the risk of damage due to thermal expansion and contraction, mechanical shock and vibration. All piping shall be of a suitable metallic material. Welded pipe joints shall be used wherever possible.
6.7.3.2.1 [=]	…When the manufacturing process or the materials make it necessary, the shells shall be suitability heat-treated to guarantee adequate toughness in the weld and in the heat affected zones. In choosing the material the design temperature range shall be taken into account with respect to risk of brittle fracture, to stress corrosion cracking and to resistance to impact. …

Reference	Text
6.7.3.5.1 [=]	Service equipment shall be so arranged as to be protected against the risk of being wrenched off or damaged during handling and carriage. When the connection between the frame and the shell allows relative movement between the sub-assemblies, the equipment shall be so fastened as to permit such movement without risk of damage to working parts. …
6.7.3.5.10 [=]	Piping shall be designed, constructed and installed so as to avoid the risk of damage due to thermal expansion and contraction, mechanical shock and vibration. …
6.7.4.2.1 [=]	…In choosing the material, the minimum design temperature shall be taken into account with respect to risk of brittle fracture, to hydrogen embrittlement, to stress corrosion cracking and to resistance to impact. …
6.7.4.2.6 [=]	Portable tanks intended for the carriage of refrigerated liquefied gases having a boiling point below minus (-) 182 °C at atmospheric pressure shall not include materials which may react with oxygen or oxygen enriched atmospheres in a dangerous manner, when located in parts of the thermal insulation when there is a risk of contact with oxygen or with oxygen enriched fluid.
6.7.4.5.1 [=]	Service equipment shall be so arranged as to be protected against the risk of being wrenched off or damaged during handling and carriage. …
6.7.4.5.10 [=]	Piping shall be designed, constructed and installed so as to avoid the risk of damage due to thermal expansion and contraction, mechanical shock and vibration. All piping shall be of a suitable material….
6.11.3.2.1 [6.8.3.2.1]	Filling and discharge devices shall be so constructed and arranged as to be protected against the risk of being wrenched off or damaged during carriage and handling. …
7.5.2.2.2	♭ *Different types of articles of division 1.6, compatibility group N, may be carried together as articles of division 1.6, compatibility group N, only when it is proven by testing or analogy that there is no additional ~~risk~~ hazard of sympathetic detonation between the articles. Otherwise they should be treated as hazard division 1.1.*
8.5 Additional requirements relating to particular classes or substances	S6 The provisions of 8.3.4 shall not apply provided there is no subsidiary ~~risk~~hazard.
	S12 If the total number of packages containing radioactive material carried in the transport unit does not exceed 10, the sum of the transport indexes does not exceed 3 and there are no subsidiary ~~risks~~hazard, the requirements in 8.2.1 concerning the training of drivers need not be applied. However, drivers shall then receive appropriate training in the requirements governing the carriage of radioactive material, commensurate with their duties. This training shall provide them with an awareness of the radiation hazards involved in the carriage of radioactive material. Such awareness training shall be confirmed by a certificate provided by their employer. See also 8.2.3.

Modifications supplémentaires pour le texte français uniquement:

1.7.1.1 [1.5.1.1] Remplacer «des risques radiologiques, des risques de criticité et des risques thermiques» par «des dangers radiologiques, des dangers de criticité et des dangers thermiques».

1.7.1.2 [1.5.1.2] Dans le dernier paragraphe, remplacer «le risque que présente le contenu radioactif» par «le danger que présente le contenu radioactif».

2.1.2.8 [2.0.0.2] Au premier tiret, remplacer «les risques recensés» par «les dangers recensés».

2.2.1.1.5 [2.0.1.1] Remplacer «risque» par «danger» (9 fois).

2.2.1.1.7.5 [2.1.3.5.5] Dans le tableau, dans la première colonne, pour la rubrique «Petit artifice de divertissement grand public et artifice présentant un risque faible», remplacer «risque» par «danger».

2.2.1.4 [Appendice B] Dans la définition de «***CARTOUCHES À PROJECTILE INERTE POUR ARMES***», remplacer «risque principal» par «danger principal».

[*Nota: Dans la version française du Règlement type on a « danger prédominant ».*]

Dans la définition de «***MATIÈRES EXPLOSIVES TRÈS PEU SENSIBLES (MATIÈRES ETPS), N.S.A.***», remplacer «risque d'explosion en masse» par «danger d'explosion en masse».

2.2.9.1.2 [2.9.2] et 2.2.9.3 Modifier le titre de la subdivision M11 pour lire « Autres matières et objets présentant un danger au cours du transport, mais ne relevant pas de la définition d'une autre classe »).

2.2.9.1.14 Modifier le titre pour lire « Autres matières et objets présentant un danger au cours du transport, mais ne relevant pas de la définition d'une autre classe ».

3.3.1, Disposition spéciale 23 Remplacer «risque d'inflammabilité» par «danger d'inflammabilité».

Disposition spéciale 61 Remplacer «risque» par «danger» et ajouter «(The WHO recommended classification of pesticides by hazard and guidelines to classification)» avant «ou le nom de la matière».

Disposition spéciale 280 Remplacer «risque de projection» par «danger de projection».

Disposition spéciale 339 b) Remplacer « risques potentiels » par « dangers potentiels ».

Disposition spéciale 361 b) Remplacer «risque potentiel» par «danger potentiel».

4.1.1.11 À la fin, remplacer «risque» par «danger».

4.1.5.12 Remplacer « division de risque » par « division de danger ».

5.2.2.2.1.3 Dans le dernier paragraphe, remplacer « risque » par « danger ».

6.1.3 Nota 3 Remplacer «risque» par «danger».

7.5.2.2.2, note de bas de tableau b Remplacer « division de risque » par « division de danger ».