

PART 3

**RELATIONSHIP OF HAZARDOUS PRODUCTS,
SPECIAL PROVISIONS, TRANSPORT IN QUANTITIES
LIMITED AND EMPTY AND NOT CLEAN PACKAGING**

CHAPTER 3.1**GENERAL PROVISIONS****3.1.1 Scope and general provisions**

3.1.1.1 The Dangerous Goods List in Chapter 3.2 lists the products Most commonly transported, but it is not exhaustive. It is intended that the Relation As far as possible, all dangerous substances of commercial importance.

3.1.1.2 When an article, or substance, is specifically listed by name Hazardous Substance, the product shall be transported in accordance with the Appropriate provisions for such article or substance. The entry "generic" or "Not otherwise specified - (NE)" may be used to Substances or articles not specifically named in the Dangerous products. Such substance or article may only be transported after its Hazardous properties have been determined. The substance or article must then be Classified according to the definitions and the test criteria of the class, and to be Designation which most appropriately describes the substance, among those included in List of Hazardous Products. The classification of the article or substance must be Manufacturer or consignor, guided by the manufacturer, or

Competent authority, where applicable. Once the substance or article class is established, All the conditions for shipping and transportation provided for in this Regulation should be Fulfilled. Any substance or article which it submits, or suspects Explosive characteristics must first be considered for inclusion in the Class 1. Some collective designations may be of the "generic" or "unspecified" type (NE) ", provided that the Regulation contains provisions guaranteeing the Safety, both excluding extremely dangerous products from normal transport, Covering all the subsidiary risks inherent in certain products.

3.1.1.3 The Dangerous Goods List does not include such dangerous products as Of his transport, except with special authorization, be prohibited. These products were not Listed because the transport of some products may be prohibited in some modes And allowed in others, and also because it would be Exhaustive relationship. Moreover, such a relationship would, in the short term, be The frequent introduction of new substances; And the absence of such a substance Could give the erroneous impression that such a substance could be transported without

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Restrictions. The inherent instability of a product can take many forms (For example, explosion, polymerization with intense heat Emission of toxic gases). For most substances, these trends can be Controlled with correct packaging, dilution, stabilization, addition of inhibitor, refrigeration Or other precautions.

3.1.1.4 When the List of Hazardous Products establishes precautionary For a particular substance or article (such as, for example, that it should be "stabilized" Or contain "x% water or desensitizer"), such substance, or article, shall not be Normally transported if such measures are not taken, unless the product Is listed elsewhere (eg Class 1) without Precautions, or with different precautionary measures.

3.1.2 Proper shipping name

Note 1: *For appropriate shipping name to be used for the transportation of Samples, see item 2.0.4.*

3.1.2.1 The appropriate shipping name is that part of the designation that describes The product in the Hazardous Materials It is indicated in letters Capital letters (accompanied by numbers, Greek letters, prefixes "sec" or "s", "tert" or "t", And the lower case letters m, n, o, p, which are an integral part of the name). An appropriate name Alternative shipment may be indicated in parentheses after the appropriate name for Shipment (eg, ETHANOL (ETHYL ALCOHOL)). Parts of a designation That are in lowercase letters need not be considered as part of the name Proper Shipping, although they can be **used**.

3.1.2.2 When a combination of several appropriate names for shipment Are listed in a single UN number and separated by "and" or "or" in letters Lowercase letters, or are punctuated by commas, only the appropriate name for More appropriate shipment should be indicated in the Tax Document for transportation or Packing marking. Examples that illustrate the proper selection of the appropriate name For shipment to such designations are:

a) UN number 1057 or LIGHTER LOADS FOR LIGHTER

Containing flammable gas - The appropriate shipping name shall be the One of the following possible combinations:

- LIGHTERS
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- LOADS FOR LIGHTERS;

b) UN number 2793 FERROUS METAL, swarf, CHIPS,

CAVACS or STICKS, in a self-heating form - O

Proper shipping name will be the most appropriate for one of the Following possible combinations:

- FERROUS METAL FABRICS
- FERROUS METAL LASKS

- FERROUS METAL CAVACES
- FERRY METAL FITTINGS

3.1.2.3 Proper shipping names may appear in the singular or plural As appropriate. In addition, when qualifiers are used as part of a Name for boarding, its sequence in the documentation or in the marking of the Volumes is optional. For example, DIMETHYLAMINE SOLUTION AQUOSA or AQUOSA SOLUTION OF DIMETHYLAMINE. For Class 1 products, the following may be used: Commercial or military names bearing the appropriate shipping name Supplemented by additional descriptive text.

3.1.2.4 Many substances have both solid state and To the liquid state (see definitions of liquid and solid in item 1.2.1), or to the state Solution. These substances are assigned separate UN Necessarily consecutive. The alphabetical index provides details such as:

| | | |
|-----------------------|-----|------|
| NITROXYLENES, LIQUIDS | 6.1 | 1665 |
| NITROXYLENES, SOLIDS | 6.1 | 3447 |

3.1.2.5 Except if it already appears in the appropriate shipping name, in letters Indicated in the List of Hazardous Products, the qualifying term "FUNDIDO" Should be added to the appropriate shipping name when a solid, In accordance with the definition contained in item 1.2.1, is presented for transportation in the state (ALKYPHENOLS, SOLID, NE, FUNDED).

3.1.2.6 Except for self-reactive substances and organic peroxides and

Unless it already appears in capital letters in the name indicated in the Product List Dangerous, the word STABILIZED should be added as an integral part of the name Appropriate for the shipment of a substance which, without stabilization, would be prohibited Transport, in accordance with the provisions of item 1.1.1.8, because it is liable to react dangerously Under normal conditions of carriage (for example: "TOXIC LIQUID, ORGANIC, NE, STABILIZED ").

Whenever there is a need for temperature control to stabilize These substances, preventing a dangerous excess of pressure, must be observed:

A) for liquids: with SADT less than or equal to 50°C, apply the Item 7.1.6;

(B) for gases: the conditions of transport must be approved by the Competent authority.

3.1.2.7 Hydrates can be transported under the appropriate name to Applicable to the anhydrous substance.

3.1.2.8 Names "*generic*" or "*non-specified otherwise* - (NS)"

3.1.2.8.1 The terms "*generic*" or "*non-specified otherwise* - (NS)"

For which Special Provisions 274 or 318, indicated in Column 7, apply.

List of Hazardous Products shall be supplemented by technical or group name

Of the substance, unless a national law or international convention prohibits its use.

Identification, in the case of a controlled substance. For Class 1 explosives, the

Description of dangerous products may be supplemented by a

Indicative of trade or military names. Technical and group names

Should be enclosed in parentheses immediately after the appropriate name for

Shipment. Expressions of the type "contains" or "containing", "mixture", "solution", etc., as well

As the percentage of the technical component can also be used. For example:

"UN number 1993 FLAMMABLE LIQUID, NE (contains xylene and benzene), 3, II".

3.1.2.8.1.1 The technical name must be a recognized chemical or biological name or

Other name commonly used in manuals, periodicals or technical com-

Scientists. Commercial names should not be used for this purpose. In case of

Pesticides, only common name (s) of the active ISO principle (s) should be used,

other (s) name (s) constant (s) in the *Recommended Classification of Pesticides by Hazard and*

Guidelines to Classification of the World Health Organization (WHO) or the name (s) (s) (s) Active substance (s).

3.1.2.8.1.2 When a mixture of hazardous products is described in Hazardous Products by an "NE" or "generic" designation to which the Special 274, it is only necessary to indicate the two components that contribute Predominantly for the risk, excluding controlled substances whose identification is Prohibited by national law or international convention. If a package containing Mixture is required to bear a subsidiary risk label, one of the two technical names In parentheses must be the name of the component that requires the use of the label Subsidiary risk.

3.1.2.8.1.3 Examples of appropriate names for shipment of products under the NE designation complemented by technical names:

- UN Number 2902 PESTICIDE, LIQUID, TOXIC, NE (drazoxolon);
- UN number 3394 ORGANOMETALLY SUBSTANCE, PYROPHOPHIC, WHICH REAGENTS WITH WATER, LIQUID (Trimethylgallium).

3.1.3 Mixes or solutions

Notice: *When a substance is specifically listed by its name on the List of Hazardous Products, it must be identified for transport by name Appropriate for boarding taken from that relationship. Such substances may contain Technical impurities (eg those derived from the production process) or additives for Stabilization or other purposes that do not affect the classification of the substance. Yet, A substance listed by name containing technical impurities or additives for Stability or other purposes that affect its classification should be considered As a mixture or a solution (see items 2.0.2.2 and 2.0.2.5).*

3.1.3.1 A mixture or solution is not subject to the provisions of this Regulation If their characteristics, properties, shape or physical condition are such that they do not meet

To criteria, including criteria of human experience, for allocation to any class of risk.

3.1.3.2 A mixture or solution meeting the classification criteria of this Regulation, consisting of a predominant dangerous substance identified by its name in the List of Hazardous Products and one or more substances not subject to this

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Regulation and / or traces of one or more substances identified by the name of the Relation Hazardous Products, must be assigned to the UN number and the appropriate name for Shipment of the predominant substance listed in the Relation, unless:

- (A) the mixture or solution itself is identified by its name in Relation Of Hazardous Products;
- B) the name and description presented for the substance in the Hazardous Products indicate specifically that they apply only to the Pure substance;
- (C) the risk class or subclass, the subsidiary risk, the physical condition or the Packaging group of the mixture or solution is different from that of the Substances listed in the Hazardous Products or
- (D) the risk characteristics and properties of the mixture or solution Require different emergency response measures.
Those required by the substance listed in Of Hazardous Products.

3.1.3.2.1 Expressions or qualifying words like "MIX" or "SOLUTION", Appropriate, must be added before or after the appropriate name for For example: "ACETONE SOLUTION". In addition, one can also indicate the Concentration of the solution or mixture after its description, for example: "ACETONE SOLUTION 75%".

3.1.3.3. A mixture or solution meeting the classification criteria of this Regulation, which is not identified by the name of the List of Hazardous Products and which

Is composed of two or more dangerous products, it shall be allocated to the designation in which
The appropriate name for shipment, description, risk class or subclass, risks
Subsidiaries and packaging group more accurately describe the blend or solution.

CHAPTER 3.2

RELATIONSHIP OF HAZARDOUS PRODUCTS

3.2.1 Structure of the List of Hazardous Products

The List of Hazardous Products, item 3.2.4, is divided into thirteen Columns

Following:

Column 1 "UN number" - this column contains the serial number assigned to the article
Or substance, according to the United Nations system.

Column 2 "Name and description" - this column contains the appropriate names for
Shipment in capital letters, which may be accompanied by
Additional descriptive texts in lowercase letters (see item 3.1.2). Some
Of the terms used are explained in Appendix B. Suitable names
Can appear in the plural when there are isomers of
Rating. Hydrates may be included in the appropriate name

For shipment of the anhydrous substance, as the case may be.

Unless otherwise indicated on an input of the

Products, the word "solution" in an appropriate

Shipment shall mean one or more listed dangerous products dissolved in

A liquid not subject to this Regulation.

- Column 3 "Risk Class or Subclass" - this column contains the class or subclass
And, in the case of Class 1, the compatibility group allocated to the
Article or substance in accordance with the classification system described in
Chapter 2.1.
- Column 4 "Subsidiary risk" - this column contains the class or subclass number
Of any significant subsidiary risks that have been identified
Application of the classification system described in Part 2 of this
Regulation.
- Column 5 "Risk number" - this column contains a number of two or three
Preceded in certain cases by the letter "X" for substances and
Articles of Classes 2 to 9. The meaning of the risk number is
In item 3.2.3. The manufacturer of the product is responsible for

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Number of risk when it is not included in the Product List

Dangerous.

- Column 6 "Packing Group" - this column contains the
United Nations packaging (ie, I, II or III), allocated to the article or
substance. If there is indication of more than one Packing Group for
The designation, the packing group of the substance or formulation to be
Transported must be determined on the basis of its properties,
By applying the classification criteria contained in Part 2 of this
Regulation.
- Column 7 "Special provisions" - this column contains a number referring to

Any Special Provisions indicated in item 3.3.1 pertaining to article Or substance. The Special Provisions apply to all

Acceptable for a particular substance or article, unless otherwise

Otherwise.

Column 8

"Quantity limited by vehicle" - this column gives the quantity

Maximum permissible value of the packed dangerous product in gross total weight (

Weight of the package and product), per vehicle, so that the shipment

May enjoy the exemptions provided in item 3.4.3.4. The word "zero"

Indicates that such exemptions do not apply to the carriage of the product

dangerous. The word "unlimited" indicates that such waivers apply

Any quantity transported.

Column 9

"Limited quantity per inner packaging" - this column provides the

Maximum permitted quantity of dangerous product per inner packaging

Or by article so that the shipment can benefit from the exemptions provided for in

Item 3.4.2.6. The word "zero" indicates that such exemptions do not apply to the

Transportation of the dangerous product.

Column 10 "Packaging instructions" - this column contains alphanumeric codes

Which refer to the relevant instructions, specified in item 4.1.4. At

Packing instructions indicate the packaging (including IBCs and

Packaging) which may be used for the carriage of the substance or

Article.

A code that includes the letter "P" refers to the packaging instructions

Relating to the use of packaging described in Chapters 6.1, 6.2 or 6.3.

A code that includes the letters "IBC" refers to the instructions for

Related to the use of IBCs described in Chapter 6.5.

A code that contains the letters "LP" refers to the instructions for

Packaging relating to the use of large packagings described in Chapter

6.6.

Failure to provide a code means that placement is not permitted.
Substance in the type of packaging covered by the instruction for
Packaging that carries such a code.

Where N / A appears in the column it means that the substance or article does not
Need to be packaged.

The packing instructions are arranged in numerical order in item
4.1.4, as follows:

Item 4.1.4.1: Instructions for packaging (except IBCs and packaging
Large) (P);

Item 4.1.4.2: Instructions for packaging regarding the use of IBCs
(IBC);

Item 4.1.4.3: Instructions for packaging relating to the use of
Packagings (LP).

Column 11

"Special packaging provisions" - this column contains codes
Alphanumeric references referring to the relevant Special Provisions,
Specified in item 4.1.4. Special packing instructions
Special Provisions for packaging (including IBCs and
Large packagings).

A Special Provision for packaging that contains the letters "PP"
Refers to the Special Provision for packaging applicable to the use of
Instructions for packaging with the code "P" in item 4.1.4.1.

A special provision for packaging that contains the letter "B" refers to
To the Special Packaging Provision applicable to the use of instructions for
Packaging with the code "IBC", in item 4.1.4.2.

A special provision for packaging containing the letter "L" refers to
To the Special Provision applicable to instructions for
"LP" in item 4.1.4.3.

Column 12 "Instructions for portable tanks and bulk containers" - this column
 Contains a number preceded by the letter "T" for instructions
 Related to item 4.2.5, which specify the type (s) of tank (s)
 Required for the transport of the substance in portable tanks.

A code containing the letters "BK" refers to the types of containers for
 Described in Chapter 6.8, used for the carriage of
 Bulk.

The gases allowed for transport in MEGCs are indicated in column
 "MEGC" in Tables 1 and 2 of packing instruction P200 in item
 4.1.4.1.

Column 13 "Special Provisions for portable tanks and bulk containers" -
 This column contains a number preceded by the letters "TP", referring to
 Any Special Provisions indicated in item 4.2.5.3 applicable to the
 Transport of the substance into portable tanks.

3.2.2 Abbreviations and symbols

The abbreviations and symbols below are used in the Product List

Dangerous and mean:

| Abbreviations | Columns | Meaning |
|---------------|---------|---|
| HUH | 2 | D o E especificado otherwise |
| + | 2 | Input for which there is an explanation in Appendix B |
| PFg | 2 | P oint ul F g or |
| PE | 2 | E P onto buliçãõ |
| AT | 10 | D o The plicável |

3.2.3 Risk Number

3.2.3.1 The risk number consists of two or three figures. The figures indicate the following hazards:

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- 2 Release of gas due to pressure or chemical reaction;
- 3 Flammability of liquids (vapors) and gases or liquids subject to Self-heating;
- 4 Flammability of solids or solids subject to self-heating;
- 5 Oxidizing effect (intensifies fire);
- 6 Toxicity or risk of infection;
- 7 Radioactivity;
- 8 Corrosivity;
- 9 Risk of violent spontaneous reaction.

Note: The risk of violent spontaneous reaction, represented by the numeral 9, includes the possibility, due to the nature of the substance, of a risk of Explosion, disintegration or polymerization reaction, followed by the Release of considerable amounts of heat or gases Flammable and / or toxic.

Repeated numbers indicate intensification of the specific risk.

Where the risk associated with the substance can be adequately

By a single digit, such digit must be followed by zero.

The following combinations of figures have, however, a meaning

Special: 22, 323, 333, 362, 382, 423, 44, 446, 462, 482, 539, 606, 623, 642, 823, 842, 90 and 99. (see item 3.2.3.2.)

When the risk number is preceded by the letter "X", it means that such

Substance reacts dangerously with water. In such cases, water

Should be used if approved by specialists.

3.2.3.2 List of Risk Numbers and their meanings

20 Stifling gas or gas without subsidiary risk.

22 Refrigerated, suffocating liquefied gas.

223 Refrigerated liquefied gas, flammable.

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225 Refrigerated liquefied gas, oxidizing (intensifies fire).

23 Flammable gas.

238 Flammable, corrosive gas.

239 Flammable gas, which may lead spontaneously to violent reaction.

25 Oxidizing gas (intensifies fire).

26 Toxic gas.

263 Toxic gas, flammable.

265 Toxic gas, oxidizing (intensifies fire).

268 Toxic gas, corrosive.

28 Corrosive gas.

30 Flammable liquid ($\leq 23^\circ\text{C}$ Flash point $\leq 60^\circ\text{C}$) or flammable liquid or solid in melt with $\Phi\lambda\alpha\sigma\eta\pi\omicron\iota\nu\tau > 60^\circ\text{C}$ heated to a temperature equal to or Higher than its PFG, or liquid subject to self-heating.

323 Flammable liquid, which reacts with water, releasing flammable gases.

X323 Flammable liquid, which reacts dangerously with water, releasing gases

Flammable. (*)

33 Highly flammable liquid (flash point $<23^{\circ}\text{C}$).

333 Pyrophoric liquid.

X333 Pyrophoric liquid, which reacts dangerously with water. (*)

336 Highly flammable liquid, toxic.

338 Highly flammable, corrosive liquid.

X338 Highly flammable liquid, corrosive, which reacts dangerously with water. (*)

(*) Do not use water except with the approval of specialist.

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339 Highly flammable liquid, which may lead spontaneously to violent reaction.

36 Flammable liquid ($\leq 23^{\circ}\text{C}$ Flash Bridge $\leq 60^{\circ}\text{C}$), slightly toxic or liquid subject
To self-heating, toxic.

362 Flammable liquid, toxic, which reacts with water, releasing flammable gases.

X362 Flammable liquid, toxic, which reacts dangerously with water, releasing gases
flammable. (*)

368 Flammable liquid, toxic, corrosive.

38 Flammable liquid ($\leq 23^{\circ}\text{C}$ Flash Bridge $\leq 60^{\circ}\text{C}$), slightly corrosive or liquid
Subject to self-heating, corrosive.

382 Flammable, corrosive liquid, which reacts with water, releasing flammable gases.

X382 Flammable, corrosive liquid, which reacts dangerously with water,

Flammable gases. (*)

39 Flammable liquid that can spontaneously lead to violent reaction.

40 Flammable solid, self-reactive substance, or substance subject to
Self-heating.

423 Solid that reacts with water releasing flammable gases, or flammable solid that
Reacts with water releasing flammable gases, or solid subject to self-heating
Which reacts with water releasing flammable gases.

X423 Solid that reacts dangerously with water releasing flammable gases, or solid
Which reacts dangerously with water giving off flammable gases, or
Self-heating that reacts dangerously with water
Flammable gases. (*)

43 Solid spontaneously flammable (pyrophoric).

X432 Spontaneously flammable (pyrophoric) solid that reacts dangerously with water
Releasing flammable gases. (*)

44 Flammable solid, melted at elevated temperature.

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446 Flammable, toxic, molten solid at elevated temperature.

45 Flammable solid, oxidizing or solid, subject to self-heating.

452 Oxidizing solid, which reacts with water or solid that reacts with water, oxidizing agent.

453 Oxidizing, flammable solid.

46 Flammable or self-heating solid, toxic.

462 Toxic solid, which reacts with water, releasing flammable gases.

X462 Solid that reacts dangerously with water, releasing toxic gases. (*)

48 Flammable or self-heating, corrosive solid.

482 Corrosive solid that reacts with water, releasing flammable gases.

X482 Solid that reacts dangerously with water, releasing corrosive gases. (*)

50 Oxidizing substance (intensifies fire).

539 Flammable organic peroxide.

55 Highly oxidising substance (intensifies fire).

554 Oxidising solid, subject to self-heating.

556 Substance strongly oxidizing (intensifies fire), toxic.

558 Substance strongly oxidizing (intensifying fire), corrosive.

559 Highly oxidising substance (intensifies fire), which may
Spontaneously to the violent reaction.

56 Oxidizing (intensifies fire), toxic.

568 Oxidising (intensifies fire), toxic, corrosive.

58 Oxidizing (intensifies fire), corrosive.

(*) Do not use water except with the approval of specialist.

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59 Oxidizing substance (intensifies fire), which may lead spontaneously to

- Violent reaction.
- 60 Toxic or slightly toxic substance.
- 606 Infectious substance.
- 623 Toxic liquid that reacts with water, releasing flammable gases.
- 63 Toxic, flammable, ($23\text{ }^{\circ}\text{C} \leq \text{Flash point} \leq 60\text{ }^{\circ}\text{C}$).
- 638 toxic, flammable substance ($23\text{ }^{\circ}\text{C} \leq \text{Flash Point} \leq 60\text{ }^{\circ}\text{C}$), corrosive.
- 639 toxic, flammable substance (flash point $\leq 60\text{ }^{\circ}\text{C}$), which can lead
Spontaneously the violent reaction.
- 64 Solid toxic, flammable or self-heating.
- 642 Toxic solid which reacts with water, releasing flammable gases.
- 65 Toxic substance, oxidising (intensifies fire).
- 66 Highly toxic substance.
- 663 highly toxic, flammable substance (flash point $\leq 60\text{ }^{\circ}\text{C}$).
- 664 Solid highly toxic, flammable or self-heating.
- 665 Highly toxic, oxidizing (intensifying fire) substance.
- 668 Highly toxic, corrosive substance.
- X668 Highly toxic, corrosive substance that reacts dangerously with water. (*)
- 669 Highly toxic substance that can spontaneously lead to violent reaction.
- 68 Toxic, corrosive substance.
- 687 Toxic, corrosive, radioactive substance.
- 69 Toxic or slightly toxic substance that can lead spontaneously to violent

(*) Do not use water except with the approval of specialist.

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reaction.

70 Radioactive material.

768 Radioactive, toxic, corrosive materials.

78 Radioactive, corrosive material.

80 Corrosive or slightly corrosive substance.

X80 corrosive or slightly corrosive substance, which reacts dangerously with water (*).

823 Corrosive liquid that reacts with water, releasing flammable gases.

83 Corrosive substance or slightly corrosive, flammable, (23 ° C Flash Point \leq 60 ° C).

X83 corrosive or slightly corrosive substance, flammable, (23 ° C Flash Point \leq 60 ° C), which reacts dangerously with water. (*)

839 corrosive or slightly corrosive substance, flammable, (23 ° C Flash Point \leq 60 ° C), which can spontaneously lead to violent reaction.

X839 corrosive or slightly corrosive substance, flammable, (23 ° C Flash Point \leq 60 ° C), which can lead spontaneously to violent reaction and which reacts
With water. (*)

84 Corrosive, flammable or self-heating solid.

842 Corrosive solid, which reacts with water, releasing flammable gases.

85 Corrosive or slightly corrosive, oxidizing (intensifies fire).

856 Corrosive or slightly corrosive substance, oxidizing (intensifies fire), toxic.

86 Corrosive or slightly corrosive, toxic.

88 Highly corrosive substance.

X88 Highly corrosive substance, which reacts dangerously with water. (*)

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883 highly corrosive substance, flammable, ($23\text{ }^{\circ}\text{C} \leq \text{Flash point} \leq 60\text{ }^{\circ}\text{C}$).

884 Solid highly corrosive, flammable or self-heating.

885 Highly corrosive, oxidizing (intensifies fire) substance.

886 Highly corrosive, toxic substance.

X886 Highly corrosive, toxic substance, which reacts dangerously with water. (*)

89 Corrosive or slightly corrosive substance which may lead to spontaneous
Violent reaction.

90 Substances presenting a risk to the environment; harmful substances
Several.

99 Miscellaneous dangerous substances transported at elevated temperature.

(*) Do not use water except with the approval of specialist.

CHAPTER 3.3**SPECIAL PROVISIONS APPLICABLE TO CERTAIN ARTICLES OR SUBSTANCES**

3.3.1 Where column 7 of the Hazardous Products List indicates that a Special Provision is relevant to a substance or article, the meaning and requirements Special Provisions are as follows:

- 16 - Samples of new or existing explosive articles or substances may be
Transported as indicated by the Ministry of Defense - Army Command, for purposes
Testing, classification, research and development, quality control, or
Sample. Samples of non-wetted or non-desensitized explosives do not
Exceed 10 kg in small volumes in accordance with the specifications of the
Ministry of Defense - Army Command. Samples of wet or
Must not exceed 25 kg.
- 23 - Although the substance presents a risk of flammability, it only manifests itself in
Extreme conditions of fire in confined places.
- 26 - Transport of this substance in portable tanks and containers is prohibited.

Intermediates for bulk material with a capacity of more than 450 L, due to the Initiation of explosion when transported in large volumes.

- 28 - This substance can be transported under the conditions of Class 4.1 if packaged such that the diluent content does not fall below the stipulated at any time during transport (see section 2.4.2.4).
- 29 - The volumes of this substance are exempt from carrying risk label, but should be marked with the appropriate class or subclass .
- 32 - This substance is not subject to these Regulations when present in any other way.
- 37 - This substance is not subject to these Regulations when coated.
- 38 - This substance is not subject to these Regulations if the calcium carbide content not is greater than 0.1%.
- 39 - This substance is not subject to these Regulations if the silicon content is less than 30% or greater than 90%.

- 43 - When offered for carriage as pesticides, these substances should be transported under the designation pesticidal applicable and in accordance with the provisions related to pesticides (see items 2.6.2.3 and 2.6.2.4).
- 45 - The sulphides and antimony oxides whose arsenic content, calculated on the total mass, does not exceed 0.5%, are not subject to these Regulations.
- 47 - Ferricyanides and ferrocyanides are not subject to these Regulations.
- 48 - When the hydrocyanic acid content exceeds 20%, the carriage of this substance is prohibited except with special permission from the competent authority.
- 59 - These substances are not subject to these Regulations when they contain up to 50% magnesium.

- 60 - This substance may not be transported if the concentration exceeds 72%, except with a special permit from the competent authority.
- 61 - The technical name which supplements the proper shipping name should be the name common ISO, another name listed in the document Recommended Classification of Pesticides by Harzard and Guidelines to Classification WHO or substance name active (see also item 3.1.2.8.1.1).
- 62 - This substance is not subject to these Regulations when the sodium hydroxide content is equal to or less than 4%.
- 63 - The division of Class 2 in subclasses and the subsidiary risks depend on the nature of of the aerosol container contents. the following provisions shall apply:
- a) Division 2.1 applies when the contents include 85% or more by weight of flammable components and the chemical heat of combustion is greater than or equal to 30 kJ / g;
 - b) Division 2.2 applies when the content contains at most 1% by mass of flammable components and the heat of combustion is less 20 kJ / g;
 - c) in other cases the product should be classified according to the tests described in section 31, Part III of the Manual of Tests and Criteria. Flammable aerosols and extremely flammable should be classified in Division 2.1 and non-flammable in Division 2.2;

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- d) of Class 2.3 gases should not be used as propellants in an aerosol container;
- e) when other contents to be expelled, in addition to the propellant aerosol container is placed in subclass 6.1, Groups Package II and III, or Class 8, packing groups II or III, the aerosol

should have a subsidiary risk relating to Class 6.1 or Class 8;

f) aerosols with contents that meet the group's criteria

Package I for toxicity or corrosivity are prohibited for transport.

are flammable liquids, solids or gases and gas mixtures as defined in Notes 1 to 3 of Subsection 31.1.3 of Part III, of Tests and Criteria Manual. This designation does not cover substances pyrophoric, those subject to self-heating and not those that react with Water. The chemical heat of combustion must be determined by methods ASTM D 240, ISO / FDIS 13943: 1999 (E / F) 86.1 to 86.3 and NFPA 30B.

65 - Aqueous solutions of hydrogen peroxide with less than 8% peroxide hydrogen are not subject to these Regulations.

66 - Cinnabar is not subject to this Regulation.

88 - The cylinders and LPG cylinders are exempt from the marking (proper name for No boarding and UN) and labeling (exposition risk label).

103 - The transport of ammonium nitrite and mixtures with inorganic nitrite ammonium salt it's forbidden.

105 - Nitrocellulose framed in the descriptions of UN 2556 or 2557 numbers can be classified in Class 4.1.

113 - transport of chemically unstable mixtures is prohibited.

119 - cooled machines include machines and other devices specifically for the maintenance of food or other products at low temperature, an internal compartment, and air conditioning units. machinery refrigeration and its components are not subject to these Regulations if they contain less than 12 kg gas of Division 2.2 or less 12 L of ammonia solution (ONU 2672 number).

- 122 - Subsidiary risks and, if applicable, the control and emergency temperatures and the number UN of the generic name of each of the formulations currently classified organic peroxides are set out in item 2.5.3.2.4, in Instruction for IBC520 Packing item 4.1.4.2 and Instruction Tanks T23 portable, item 4.2.5.2.6.
- 127 - Other inert material or mixture of inert materials can be used, provided that such material has identical insensibilizantes properties.
- 131 - phlegmatized The substance should be significantly less sensitive than PETN (Pentaerythritol tetranitrate) dry.
- 132 - During the entire transport operation, this substance should be protected from action direct sunshine and stored (or kept) in a cool, well-ventilated place, away from any heat source.
- 133 - In extreme confinement conditions, this substance may have a behavior explosive. Packaging allowed by Instruction to P409 Packaging have order to prevent this.
- 135 - The sodium dihydrate salt of dichloroisocyanuric acid does not meet criteria for classification of Class 5.1 and is not subject to these Regulations unless meets the classification criteria for inclusion in another class or subclass risk.
- 138 - Cyanide p-bromobenzila is not subject to these Regulations.
- 141 - Products that have been subjected to appropriate heat treatment, so that present no danger during carriage are not subject to these Regulations.
- 142 - Pie oleaginous resulting soybean a process of solvent extraction, up to 1.5% oil and 11% moisture, which is substantially free of solvent flammable, is not subject to these Regulations.
- 144 - Aqueous solutions of up to 24% alcohol by volume are not subject to this Regulation.
- 145 - Alcoholic beverages of packing group III, when carried in containers up to 250 L, they are not subject to these Regulations.
- 146 - Alcoholic beverages of Packing Group II, when transported in containers

up to 5 L, they are not subject to these Regulations.

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- 152 - classification of this product varies with the particle size and the type of packaging, but limits have not been determined experimentally. to classify it properly, it should proceed as required in section 2.1.3.
- 153 - This designation is applicable only if it is shown, based on tests that, when in contact with water, the substances are not combustible nor show tendency to autoignition and the disengaged gas mixture non-flammable.
- 163 - A substance specifically listed by name in the Dangerous Goods It should not be carried in accordance with the designation. transported substances under such designation may contain 20% nitrocellulose, nitrocellulose since no contains more than 12.6% nitrogen (by dry mass).
- 168 - Asbestos immersed or fixed in a natural or artificial binder (such as cement, plastics, asphalt, resins or mineral), so that there is no possibility of leakage of hazardous quantities of respirable asbestos fibers during transport, is not subject to this Regulation. manufactured articles containing asbestos, even do not meet this requirement will not be subject to these Regulations if packed so that there is no possibility of leakage of hazardous quantities of inhaled asbestos fibers during transport.
- 169 - Phthalic anhydride in the solid state and tetrahydrophthalic anhydrides with up to 0.05% anhydride Maleic are not subject to these Regulations. Phthalic anhydride melt temperature above his Flashpoint, with up to 0.05% maleic anhydride, must be classified under UN 3256 number.
- 172 - When radioactive material possess subsidiary risk:
- a) shall be allocated to Packing Group I, II or III, when appropriate, the application of packing group criteria arranged in Part 2 corresponding to the nature of the subsidiary risk

predominant.

b) packaging must be identified with the risk label

corresponding to each subsidiary risk exhibited by the material; vehicles and transport equipment must also carry the risk labels

corresponding subsidiaries, as provided in Chapter 5.3.

c) for documentation and identification of packages, the name

Proper Shipping should be supplemented with the name of

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components that contribute predominantly to such hazards

subsidiary which may be enclosed in parentheses.

d) the tax document for the transport of dangerous goods must

indicate the subsidiary risk class or subclass and, where applicable,

packing group, as required in items "d" and "e" of item

5.4.1.3.1.

For packages, see also item 4.1.9.

Product information on the tax document for transport should be

plus description of the corresponding subsidiary risk (eg,

"Subsidiary risk: 3, 6.1"), the names of components which predominantly

contribute to such subsidiary risks and, where applicable, the group of

packing.

177 - Barium sulphate is not subject to these Regulations.

178 - This term should only be used if no other suitable in Relationship

Hazardous products and only with approval of the Ministry of Defense - Army Command.

181 - Volumes containing this type of substance shall bear subsidiary risk label

on "EXPLOSIVE" (Model No.. 1, see Section 5.2.2.2.2) unless the Ministry of

Defense - Army Command has allowed a waiver for specific packaging

used, depending on results of tests have proven that the substance,

the packaging does not show explosive behavior (see section 5.4.1.6.5.1). At requirements contained in item 7.1.3.1 must also be taken into account.

182 - The group of alkali metals include: lithium, sodium, potassium, rubidium and cesium.

183 - The group of alkaline earth metals include magnesium, calcium, strontium and barium.

186 - To determine the ammonium nitrate content, all Nitrate ions that there is in the mixture a molecular equivalent of ammonium ions should be calculated as ammonium nitrate.

188 - Batteries offered for transport are not subject to other requirements of this Regulation if they fall under the following conditions:

a) for a stack of metallic lithium or lithium alloy, lithium content does not is greater than 1 g, and for a lithium-ion battery, the capacity is not greater than 20 Wh;

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b) for a battery of lithium metal or lithium alloy, the content aggregated of Lithium is not greater than 2 g, and a lithium ion, the capacity is no greater than 100 Wh. Lithium ion batteries subject to this provision must submit their capacity in outer wrapper, except manufactured before January 1, 2009.

c) each cell or battery meets the provisions set out in item 2.9.4 a) and and);

d) batteries, except when installed in equipment shall be packed in inner packagings containing altogether. They They must be protected to prevent short-circuiting. this includes protection against contact with conductive materials within the same packaging which may lead to a short circuit. Inner packagings shall be packed in strong outer packaging that meet the established in items 4.1.1.1, 4.1.1.2 and 4.1.1.5.

e) batteries installed in equipment must be protected damage and short circuits and equipment must be provided with an effective means prevention of accidental activation. This requirement does not apply to devices that intentionally remain activated during the transport (radio frequency identification, RFID transmitters, watches, sensors, etc.) which are not capable of generating loosening dangerous heat. When batteries are installed in equipment, equipment must be packed in strong outer packaging built with appropriate materials and resistance and projects appropriate, with respect to their ability and the use to which it is intended, the unless the battery is properly protected by the equipment It contains it;

f) Except for packages containing batteries button batteries, installed in equipment (including circuit boards), or no more than four batteries installed in equipment or no more than two batteries installed in equipment, each package must present following information:

i) an indication that the volume contains batteries or battery "lithium metal" or "lithium ion" as appropriate;

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ii) an indication that the volume should be handled with care and there flammability risk if the volume is damaged;

iii) an indication that special procedures must be adopted, if the volume is damaged, including inspection and repacking, necessary case; and

iv) telephone number for additional information.

g) each consignment of one or more volumes that contain the information required in letter f) must be accompanied by a document containing the

following:

- i) an indication that the volume contains batteries or battery "lithium metal" or "lithium ion" as appropriate;
 - ii) an indication that the volume should be handled with care and there flammability risk if the volume is damaged;
 - iii) an indication that special procedures must be adopted, if the volume is damaged, including inspection and repacking, necessary case; and
 - iv) telephone number for additional information.
- h) Except when batteries are installed in equipment, each package must be able to withstand a 1.2 m drop test, in any guidance without giving damage to cells or batteries, without displacement content that can generate contact between batteries or batteries, and without loss of content; and
- i) Except when batteries are installed in equipment or packed with equipment, the gross mass of the packages must not be greater than 30 kg.

In this context and elsewhere in this Regulation, the "content lithium" means the mass of lithium in the anode of a lithium or lithium alloy .

190 - aerosol containers must be provided with protection against inadvertent discharge.

Aerosols with a capacity not exceeding 50 ml, containing only non-components toxic, they are not subject to these Regulations.

191 - Small containers containing gas, are not provided with discharge devices. The containers with a maximum capacity not exceeding 50 ml, containing only

non-toxic constituents are not subject to these Regulations.

- 194 - control temperatures and emergency, when applicable, and the UN number generic name - E of each of the substances currently autorreagentes classified, are listed in section 2.4.2.3.2.3.
- 195 - For certain organic peroxides types B or C, packaging should be used lower than those allowed by OP5 or OP6 packaging methods, respectively (see items 2.5.3.2.4 and 4.1.7).
- 196 - can be transported under this designation formulations in testing laboratory, not detonate in the cavitated state not deflagrem, show no effect some when heated under confinement do not have explosive power. Must also be thermally stable, i.e. the SADT should be at or above 60 ° C, to 50 kg package. Formulations that do not meet these criteria should be transported as requirements of Class 5.2 (see section 2.5.3.2.4).
- 198 - nitrocellulose solutions containing up to 20% nitrocellulose may be transported as paint, perfumery products or printing ink as applicable (see UN 1210.1263 numbers 1266, 3066, 3469 and 3470.).
- 199 - Lead compounds which, when mixed with 0.07M hydrochloric acid, the a ratio of 1: 1000, stirred for an hour at a temperature of 23 ° C ± 2 ° C, present solubility of 5% or less (see ISO 3711: 1990 - "*Lead pigments and cromate lead cromate-molybdate pigments - Specifications and methods of test* ") are considered insoluble and are not subject to these Regulations unless fit the criteria for inclusion in another class or subclass.
- 201 - Lighters and charges for lighters should be provided with discharge protection accidental. Net gas fraction shall not exceed 85% of the container capacity 15 ° C. The containers, including their closures must be capable of withstanding pressure twice the internal pressure of the liquified petroleum gas at 55 ° C. valves and Ignition devices must be securely sealed, secured by duct tape or prisoners, and designed so as to prevent operation or leakage of contents during transport. Lighters must contain no more than 10 g of liquefied gas oil, and charges a maximum of 65 g of liquefied petroleum gas.

- 203 - This name may not be used for polychlorinated biphenyls,
LIQUID, UN 2315 number.
- 204 - Articles containing the substance (s) smoke-producing substance (s) corrosive (s) according to the criteria of Class 8 shall bear a subsidiary risk label on "Corrosive" (Model No. 8, see Section 5.2.2.2.2).
- 205 - This designation MAY not be used to PENTACHLOROPHENOL, UN number 3155.
- 206 - This term does not include ammonium permanganate, the transport of which is prohibited.
- 207 - Polymer beads and plastic molding compounds may be comprised of polystyrene, poly (methyl methacrylate) or other polymeric material.
- 208 - Fertilizer commercial grade calcium nitrate, consisting mainly of a double salt (calcium nitrate and ammonium nitrate) with a content of up to 10% nitrate ammonium and at least 12% water of crystallization, is not subject to this Regulation.
- 209 - The gas should be at a pressure corresponding to ambient atmospheric pressure, when the containment system is closed and the pressure should not exceed 105 kPa absolute.
- 210 - toxins of plant, animal or bacterial substances containing infective, or toxins contained in infectious substances, should be framed in Division 6.2.
- 215 - This designation is applicable only to the technically pure substance or its formulations with SADT higher than 75 ° C, does not apply, however, formulations which are autorreagentes substances. (For autorreagentes substances, see section 2.4.2.3.2.3). Homogeneous mixtures containing not more than 35% of mass azodicarbonamide and at least 65% of inert substance are not subject to this Regulation, unless meeting the criteria of other classes or subclasses risk.
- 216 - The mixture of solids not subject to this Regulation may be flammable liquids

transported under this entry without prior application of the criteria Sub-rating of 4.1., since there is no free liquid visible when the substance is potted or when packaging the vehicle or equipment transportation are closed. The transport equipment must be tight when

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intended for bulk cargo. sealed packages or articles containing up to 10 ml of flammable liquids of packing groups II or III, absorbed material solid, are not subject to this regulation, once proven the absence of free liquid in the package.

217 - The mixture of solids not subject to this Regulation can be toxic liquids transported under this entry without prior application of the criteria rating of Class 6.1, since there is no free liquid visible when the substance is potted or when packaging the vehicle or equipment transportation are closed. The transport equipment must be tight when intended for bulk cargo. This designation can not be adopted for solids containing liquids of packing group I.

218 - The mixture of solids not subject to this Regulation corrosive liquids can be transported under this entry without prior application of the criteria classification of class 8, since there is no free liquid visible at the time the substance is potted or when packaging the vehicle or equipment transportation are closed. The transport equipment must be tight when intended for bulk cargo.

219 - Genetically modified organisms (MOGMs) and bodies genetically modified organisms (GMOs) packed and marked in accordance with Instruction for P904 packaging are not subject to other requirements of this Regulation. For MOGMs and GMOs that meet the definition of section 2.6 of substances toxic or hazardous and the criteria for inclusion in subclasses 6.1 or 6.2, are apply the requirements of this Regulation for the transport of toxic or

infectious.

220 - Only the technical name of the flammable liquid component of this solution or mixture should

It is shown in parentheses immediately following the proper shipping name.

221 - Substances included under this designation can not be classified in Group

Package I.

223 - If the physical or chemical properties of a substance covered by this description

are such that, when tested, this does not fit the definition of criteria

class or subclass indicated in column 3 of the Dangerous Goods, or

any other class or subclass, such substance is not subject to these Regulations.

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In such cases, the fiscal document for transport must contain or be accompanied a shipper's declaration that such substance was tested according to the criteria the willing class or subclass this Regulation and not considered dangerous to the transport.

224 - The substance shall remain liquid under normal conditions of carriage, unless

can be demonstrated through testing that its sensitivity when frozen,

It is not greater than it has in a liquid state. should not freeze at temperatures

higher than -15 ° C.

225 - Fire extinguishers under this entry may contain installed cartridges

drive of Division 1.4C or 1.4S, without changing its classification in

Subclass 2.2, provided that the total amount of deflagrating explosive (propellant)

does not exceed 3.2 g per extinguishing unit. Fire extinguishers should be made,

tested, approved and marked in accordance with the country's manufacturing provisions.

Fire extinguishers allocated to this designation include:

(The) portable fire extinguishers for handling and operation;

(B) fire extinguishers for installation in aircraft;

(w) mounted fire extinguishers on wheels for manual handling;

(D) equipment or machinery fire extinguishing mounted on wheels or platforms on wheeled units or transported similarly to (Small) trailers; and

(and) compounds fire extinguishers of a non-scrollable pressurized drum and equipment, and moved, for example by forklift or crane when loaded or unloaded.

226 - Formulations of these substances with at least 30% non-volatile phlegmatizer and nonflammable are not subject to these Regulations.

227 - urea nitrate content contained in this substance, when phlegmatized with water and inert inorganic material, shall not exceed 75% by weight, and the mixture can not be capable of being detonated by the test type (a), Series 1, Part I, Manual of Tests and Criteria.

228 - Mixtures that do not fit the criteria for flammable gases (Subclass 2.1) must be transported under UN 3163 number.

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230 - Batteries and lithium batteries may be carried under this entry if the observed provisions of item 2.9.4.

232 - This designation may only be used when the substance does not fit in criteria of any other class. Transport in cargo units, except tanks Multimodal, must be conducted in accordance with standards established by the authority competent.

235 - This designation applies to articles containing explosive substances of Class 1 and which may also contain dangerous goods of other classes. These items are used to enhance safety in vehicles, ships or aircraft - for example: inflators for air bags (air bags) for vehicles, air bags modules (air bags), tensioner seat belts and piromecânicos devices.

- 236 - polyester resin complexes consist of two components: a material based Class 3, Packing Group II or III, and an organic peroxide as an activator. Such organic peroxide should be of types D, E or F, which does not require control temperature. The packing group must be II or III, according to the criteria for Class 3, applied to the base material. The limited amount indicated in column 9, the Dangerous Goods List applies to the base material.
- 237 - membrane filters, including paper separators, coatings or materials training, etc., present in the transport, must not be capable of propagating a Detonation when subjected to the tests described in Test Series 1 (a) of Part I of the Manual of Tests and Criteria.
- Furthermore, based on results of suitable burning rate tests, considered the standard tests in subsection 33.2.1, Part III of the Manual of Tests and Criteria, the competent authority may stipulate that the membrane filter nitrocellulose in the form in which they are transported, are not subject to the provisions applicable to flammable solids of Class 4.1 of this Regulation.
- 238 - a) batteries may be considered spill-proof, is capable of withstand the vibration test pressure differential and described below, without the fluid may leak from batteries.
- Vibration test** : It must be applied a simple harmonic motion with amplitude of 0.8mm (maximum total distance of 1.6 mm), battery, which should be firmly secured to the platform of a vibrator. The frequency should vary the rate of 1Hz / min in the range of 10Hz and 55Hz. The entire range of frequencies and return

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They must be traversed in 95 ± 5 minutes for each mounting position (direction vibration) of the battery. The battery should be tested in three perpendicular positions together (to include testing with fill openings and vents, if there, in an inverted position) for equal periods of time.

Pressure differential test : Following the vibration test, the battery should be

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

***Notice:** Batteries leakproof, which are an integral part of mechanical or electronic equipment and necessary for its operation should be securely attached to the equipment battery holder and protected in the form prevent damage and short circuits.*

b) leakproof batteries are not subject to these Regulations if a temperature 55°C , the electrolyte does not flow from a ruptured or cracked housing and not there is free liquid to flow and still, when packaged for transport, the terminals are protected against short circuits.

239 - Batteries or cells shall not contain other dangerous goods as well as sodium, sulfur or sodium compounds (e.g., sodium polysulfides and the tetrachloroaluminate sodium). Batteries or batteries should not be offered for transport in a temperature such that the elemental sodium battery, or the battery, if present liquefied.

Batteries shall consist of hermetically sealed metal containers fully involving dangerous goods and are constructed and closed so as to prevent the release of such toxic products in normal transport.

Batteries should be composed of fully involved batteries and arrested by a metallic frame constructed and closed so as to prevent the release products dangerous in normal conditions of transport.

Batteries installed in vehicles (ONU 3171) are not subject to these Regulations.

240 - This designation only applies to vehicles powered by wet batteries, battery sodium, lithium metal batteries or lithium ion batteries and equipment powered by wet batteries or sodium batteries transported with these batteries installed.

For purposes of this Special Provision, vehicles are self-propelled units designed to charge one or more persons or goods. Examples of such vehicles are: electric cars, motorcycles, scooters, cars and motorcycles of three or four wheels, electric bicycles, wheelchairs, lawn tractor, vessel or aircraft.

Examples of equipment are lawn mower, cleaning machines or model ships and aircraft. powered equipment to lithium metal batteries or lithium ion They shall be transported under UN 3091 designations - LITHIUM BATTERIES METALLIC, CONTAINED IN EQUIPMENT or UN 3091 - LITHIUM BATTERIES METALLIC PACKED WITH EQUIPMENT or UN 3481 - ION BATTERIES LITHIUM CONTAINED IN EQUIPMENT or UN 3481 - LITHIUM ION BATTERY PACKED WITH EQUIPMENT, as appropriate.

241- The formulation should be prepared so that it remains homogenous and does not separate during transport. They are not subject to this Regulation formulations with low nitrocellulose contents that do not have dangerous properties when tested to determine their propensity to detonate, ignite or explode when heated under confinement, as defined by test series 1 (a), 2 (b) and 2 (c), respectively, of Part I of the Manual of Tests and Criteria, and are not solid combustible when tested in accordance with paragraph 1 trial of subsection 33.2.1.4, Part III of Tests and Criteria Manual (chips, if necessary, ground and sieved to obtaining a particle size below 1.25 mm).

242 - Sulphur is not subject to these Regulations when in a particular form (E.g., nuggets, granules, pellets, pastilles or flakes).

243 - Gasoline, motor fuels and oil for use in internal combustion engines by spark (e.g., automobiles, stationary engines and other engines) must be allocated to this description regardless of the variation in volatility.

244 - This term includes, for example, aluminum dross, aluminum skimmings cathodes spent, worn tub liners and salt slag aluminum.

246 - This substance should be packed in accordance with packing method OP6 (see

instruction to apply packaging). Throughout the transport operation, this

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substance should be protected from direct action of the sun and stored (or kept) in place cool, well-ventilated area away from any heat source.

247 - Alcoholic beverages containing more than 24% and not more than 70% alcohol by volume when transported as part of a manufacturing process, may be transported in wooden barrels with a capacity of 250 L and less than 500 L, according to the item 4.1.1 requirements, as appropriate, taking into account following conditions:

- (A) The wooden barrels must be checked and adjusted before being packaged;
- (B) a non-filled space (not less than 3%) should be provided for expansion of the liquid;
- (C) wooden barrels must be transported with the facing nozzles for above;
- (D) wooden barrels should be transported in containers that meet the requirements of the International Convention for Safe Containers (CSC), 1972, in its amended form. Each barrel must be safe in a crib sized and be footwear in order to avoid any shifting during transport;

249 - Ferro stabilized against corrosion, with a minimum 10% iron content is not subject to this Regulation.

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

The chemical sample may only be transported with the prior approval of the authority competent or the Organization for the Prohibition of Chemical Weapons and since sample to be accompanied, during transport, copy of the approval document transport, indicating quantity limitations and requirements for packaging.

251- The designation CHEMICAL KIT or FIRST AID KIT is applicable the boxes, cases, etc., with small amounts of various toxic products

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used for example for medical, analytical, testing or repair. Those kits may not contain products in column 9 of Product Relationship Dangerous, Chapter 3.2, bearing the word "zero".

The components can not react dangerously (see section 4.1.1.6). The total amount of dangerous goods by case should not exceed 1 L or 1 kg. The kit as a whole, It should be allocated to the most restrictive packing group among those applicable to any of the substances contained in it.

When the kit contains dangerous products that are not designated Packaging groups, no packing group must be indicated in tax document for the transport of dangerous goods.

Cases that are loaded on board vehicles for first-aid purposes or operations are not subject to these Regulations.

Chemical kits and first aid kits containing dangerous goods in inner packages, not exceeding the limited quantities limits applicable to individual substances as specified in Column 9 ratio Dangerous Goods can be transported in accordance with Chapter 3.4.

252 - Aqueous solutions of ammonium nitrate at concentrations of up to 80%, up to 0.2% combustible material, are not subject to this Regulation, provided the nitrate ammonia remains in solution in any transport condition.

266 - When this substance contains less alcohol, water or the phlegmatizer

specified, it can only be transported with the authorization of the Ministry of Defense - Command of the Army.

267 - Any explosive demolition type C containing chlorates shall be

secreted explosives containing ammonium nitrate or other ammonium salts.

270 - is considered to aqueous solutions of inorganic solid nitrates of Class 5.1

do not meet the criteria of this subclass, the concentration of substances in solution, exposed to the minimum temperature attained during transport, is not more than 80% of the saturation limit.

271 - lactose, glucose, or similar materials can be used as insensibilizantes from

that the substance contains at least 90% of phlegmatizer by mass. The Ministry of Defense - Army Command may authorize the classification of such mixtures in Class 4.1 on the basis of a Series 6 test (c) of Section 16 of Part I,

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Manual of Tests and Criteria on at least three volumes prepared as if they were for transport. Mixtures with at least 98% of phlegmatizer, by mass, not They are subject to these Regulations. Packages containing mixtures with 90% or more of phlegmatizer by weight are exempt from relative subsidiary risk label the "TOXIC" (model. 6.1, item 5.2.2.2.2).

272 - This substance shall not be transported under the provisions of Class 4.1, the

Unless specifically authorized by the competent authority. Without that authorization must be transported under the provisions of Class 1.1D (see number UN 0143 or UN 0150, as appropriate).

273 - Maneb and maneb preparations stabilized against self-heating need not be

classified in Class 4.2 when it is shown by tests, a volume

1 m³ substance is not subject to autoignition and the temperature at the center of sample does not exceed 200 ° C when the sample is maintained at a minimum temperature of 75 ° C ± 2 ° C for a period of 24 hours.

274 - For the purposes of documentation and marking of packages, the proper shipping name It should be supplemented with the technical name (see section 3.1.2.8).

277 - For aerosols or receptacles containing toxic substances, the amount of value bounded by inner package is 120 ml. For all other aerosols or containers, the limited quantity per inner package is 1000 ml.

Aerosol containers or that only contain corrosive substances or corrosive and toxic, or flammable, corrosive or toxic, or toxic and flammable or toxic, corrosive or toxic, oxidizing or toxic and flammable, corrosive or toxic and corrosive and oxidizing the value of the vehicle is limited by the amount of 20 kg.

For aerosols or receptacles containing only flammable substances, the value limited by the amount the vehicle and 333 kg.

For any other aerosol compositions or containers, the quantity value vehicle is limited by 1000 kg.

278 - These substances should not be classified and carried unless authorized by the competent authority, based on the results of the tests of the series 2:06 (c) Part I of the Manual of Tests and Criteria in volumes as prepared for transport (see section 2.1.3.1). The competent authority shall determine the packing group

based on the criteria of Chapter 2.3 and the type of packaging used in the assay Series 6 c).

279 - the substance falls into this classification or packing group based, preferably in human experience and not the strict application of the criteria classification established in this Regulation.

280 - This designation applies to safety devices for vehicles, ships or aircraft, for example, used items as air bags inflators (*air bags*) to vehicles such as air bag module (*air bag*), and tensioning belts

security and piromecânicos devices containing dangerous goods of Class 1 or other classes and when carried as component parts, since

It has previously been tested in the way that will be transported in accordance with the test series 6 (c) Part I of the Manual of Tests and Criteria, showing no explosion of the article, fragmentation of its container or pressure vessel, or thermal effects that might significantly hinder fire fighting or other response efforts an emergency in the immediate vicinity. This designation does not apply to devices Lifeguards described in Special Provision 296 (ONU 2990 and 3072 numbers).

281- The transport hay or straw, wet, damp or contaminated with oil is only allowed by special permit from the competent authority.

Hay or straw, if not wet, damp or contaminated with oil is not subject to this Regulation.

283 - Articles containing gas, intended to function as shock absorbers, including impact energy absorbing devices or Pneumatic springs, not They are subject to these Regulations provided each article:

- a) has gas space of up to 1.6 L and load pressure up to 280 bar, when the product of the capacity (liters) and pressure Load (psi) is not more than 80 (i.e., 0.5L gas space and 160 load pressure bar, or 1 liter of gas space and 80 bar pressure load, or 1.6 L of gas space and 50 bar pressure load, or 0.28 U gas space charge pressure and 280 bar);
- b) has a minimum burst pressure of four times the charge pressure 20 ° C, for products with up to 0.5 U gas space and five times the loading pressure for products with gas space capacity more than 0.5 L;

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- c) is manufactured from material which does not fragment at break;
- d) are manufactured according to quality assurance standard acceptable by the competent authority; and

- e) The design type has been subjected to fire assay demonstrating the pressure in the article is relieved through a seal degradable by fire or other pressure relief device, such that the article does not shred or ejects.

284 - A chemical oxygen generator containing oxidizing substances shall comply with the following conditions:

- a) if the generator contains drive explosive device should only be if transported in this description according to item 2.1.1.1 (b) this Regulation, is excluded from Class 1;
- b) generating unpackaged must be able to withstand the drop test 1.8m on rigid, non-resilient, flat and horizontal in most likely orientation of damage, without loss of content and without drive; and
- c) if the generator is equipped with drive means, there should be at least two secure means to prevent unintentional activation.

286 - nitrocellulose membrane filters with mass to 0.5 g per unit covered by this designation are not subject to this Regulation, is contained individually or in an article in a sealed volume.

288 - These substances should not be classified and carried unless authorized by the competent authority, based on the results of tests of Series 2:06 (c) of Tests and Criteria Manual, applied to volumes as prepared for transport (See section 2.1.3.1).

289 - Safety devices, electrically driven and safety devices, pyrotechnics installed in vehicles, ships and aircraft or in completed components vehicles, such as steering columns, door panels, seats, etc. are not subject to this Regulation.

290 - When this radioactive material falls under the definitions and criteria of other classes or subclasses, as set out in Part 2 of this Regulation shall It is classified in accordance with the predominant subsidiary risk. This material must be

declared under the proper shipping name and UN number appropriate for the Material that class or subclass predominantly with the addition of the name applicable to Material contained in Column 2, the Dangerous Goods, and should be transported in accordance with the provisions applicable to that UN number. Besides that, apply transport rules of the National Nuclear Energy Commission - CNEN.

When the substance is subject to a special provision that all the exempt requirements set for the other classes to be classified according to applicable UN number of Class 7, serving also to transport standards National Nuclear Energy Commission - CNEN

291 - Flammable liquefied gases shall be contained in the components of machine cooling. These components shall be designed and tested to withstand at least three times the working pressure of the machine. The cooling machine They must be designed and constructed to contain the liquefied gas and avoid risk disruption or breakage of the pressure retaining components, conditions normal transport. refrigerating machines and components machine cooling containing less than 12 kg of gas are not subject to this Regulation.

293 - The following definitions apply to matches:

- a) matches which are kept lit in the wind are those whose heads
They are prepared with a ignífera composition sensitive to friction and pyrotechnic composition which burns with little or no flame, but with intense heat;
- b) Safety matches are those that have integrated the
boxes, wallets or bingo cards that have prepared surface, in which these can be access by friction;
- c) matches "risque anywhere" are those that can be ignited by

friction against a solid surface;

- d) beeswax matches are those that can be ignited by friction either prepared against a surface or against a solid surface.

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294 - Matches security and beeswax in outer packages with net mass

not exceeding 25 kg, packed in accordance with the Instruction for Packaging P407, They are not subject to any other requirement of these Regulations except marking, as established in Chapter 6, and proof of their suitability for the program conformity assessment of the competent authority.

295 - Batteries need not be individually marked and labeled if the pallet display marking and appropriate labeling.

296 - These designations apply to life-saving equipment such as boats, devices Personal flotation and self-inflating slides. The UN number 2990 applies to self-inflating equipment and the UN number 3072 to life-saving devices that are not self-inflating. The life-saving equipment may include:

- a) signaling (Class 1) which may include signaling devices smoke or illuminating. The flags must be placed in packaging preventing your drive inadvertently;
- b) only for the 2990 UN number, cartridges, pyrotechnic cartridges Division 1.4, Compatibility Group S, can be incorporated mechanisms as self-inflating, since the amount of explosive does not exceed 3.2 g per device;
- c) compressed gases of Class 2.2;
- d) electric batteries (Class 8) and lithium batteries (Class 9);
- e) First aid kits or repair kits containing small quantities of dangerous goods (eg: Class 3 substances, Division 4.1, Division 5.2, Class 8 or Class 9); or

f) matches of the "risque anywhere" packaged in that prevent them from being inadvertently lit.

The life-saving devices, packaged in rigid outer packaging and resistant with total gross mass of 40 kg and which do not contain dangerous goods other than compressed or liquefied gas of Division 2.2 without subsidiary risk and containers with a capacity of 120 ml, fitted solely for the purpose of activation of the equipment, are not subject to these Regulations.

299 - COTTON Remittances, SECO with a density less than 360 kg / m³, of according to ISO 8115: 1986 "Cotton bales - dimension and density" are not

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subject to these Regulations when transported in vehicles or equipment
Closed transport.

300 - fish meal and fish remains where the temperature at the time of loading, exceeds 35 ° C, or 5 ° C is above ambient temperature, can not be transported.

301 - This designation applies only to machinery or apparatus containing substances hazardous waste or as its integral part. It should not be used to machinery or apparatus for which there is already proper shipping name specific in the Dangerous Goods. Machinery or transport equipment under this designation should only contain dangerous goods that can be transported in accordance with the provisions on limited quantities Inner packing Chapter 3.4. The amount of each type of hazardous material contained in machinery or apparatus shall not exceed the amount specified in Column 9 of the Dangerous Goods. If the machinery or apparatus contains More than one type of hazardous product, they may not be able to react dangerously (see section 4.1.1.6). To ensure that leakage does not occur liquid dangerous goods, should be set appropriate handling symbols, ISO standard 780: 1997, at least two vertical opposite sides, with arrows

pointing in the right direction.

Machinery or equipment may be exempted from compliance with this Regulation by the competent authority. The transport of dangerous goods in machinery or apparatus, when the quantity of the product exceeds the amount limited by

Inner packing specified in column 9 of the Dangerous Goods must

It is authorized by the competent authority, except when applying special provision 363.

302 - Vehicles and transport equipment under fumigation not containing other dangerous goods are only subject to the provisions set out in item 5.5.2.

303 - The classification of these containers must be made according to the subclass and the subsidiary risk, if any, of the gas or gas mixture contained therein, in accordance with the requirements of Chapter 2.2.

304 - This term should only be used for the transport of non-activated batteries containing dry potassium hydroxide and which must be activated before use by adding an appropriate amount of water in each cell.

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305 - These substances are not subject to these Regulations when in concentrations less than 50 mg / kg.

306 - This designation shall be used only for substances which are very insensitive for inclusion in Class 1 when tested in accordance with the Series Test 2, Class 1, Part I of Tests and Criteria Manual.

307 - This designation may only be used for uniform mixtures containing nitrate ammonium as a main component within one of the following composition limits:

- a) not less than 90% ammonium nitrate with not more than 0.2% combustible material / total organic, calculated as carbon, and materials added, if any, which is inorganic and inert to the nitrate ammonium;

- b) more than 70% and less than 90% of ammonium nitrate with other materials
Inorganic or more than 80% and less than 90% of ammonium nitrate
mixed with calcium carbonate and / or dolomite and / or calcium sulfate
mineral and not more than 0.4% combustible material / total organic
calculated as carbon; or
- c) nitrogenous fertilizers Ammonium nitrate containing mixtures
nitrate and ammonium sulphate with more than 45% and less than 70% of
ammonium nitrate and not more than 0.4% of fuel / organic material
Total calculated as carbon, so that the sum of the percentages
compositions of nitrate and ammonium sulphate exceeds 70%.

308 - fish and fish waste meal should contain at least 100 ppm of antioxidant
(Etoxiquinino) at the time of shipment.

309 - This designation applies to non-sensitized emulsions, suspensions and gels,
consisting essentially of a mixture of ammonium nitrate and fuel,
for the production of a detonating explosive type and only after the last stage of
processing and before use.

The typical mixture has the following composition: 60-85% ammonium nitrate; 5-30% of
Water; 2-8% of fuel; 0.5 to 4% of emulsifying agent; 0-10% of
soluble flame suppressants and trace additives. Other inorganic nitrate salts
can replace part of the ammonium nitrate.

The typical mixture for suspensions and gels has the following composition: 60-85% of

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ammonium nitrate; To 0 - 5% sodium or potassium perchlorate; 0-17% nitrate
hexamine nitrate or monomethylamine; 5-30% water; 2-15% fuel; 0.5
- 4% thickening agent and 0 - 10% soluble flame arrestor and traces of
additions. Other inorganic nitrate salts may replace part of the ammonium nitrate.

These substances must pass the tests 8 (a), 8 (b) and 8 (c) of Test Series 8,
Section 18, Part I, Manual of Tests and Criteria, and be approved by the authority

competent.

310 - The tests required in Chapter 38.3 of the Manual of Tests and Criteria do not apply the production series with a maximum of 100 cells and lithium batteries or the prototype pre-production batteries and lithium batteries when these prototypes are transported for testing if:

- a) the cells and batteries are carried in a package
external such as a metal drum, plastic or plywood or box
metal, plastic or wood that meets the criteria for packaging
packing group I; and
- b) the cells and batteries, each surrounded by cushioning material
non-combustible and non-conductive are individually packaged
on an inner package within an outer package.

311- Substances shall not be carried under this entry unless approved by the competent authority based on the results of appropriate tests, pursuant to Part I of the Manual of Tests and Criteria. The packaging must ensure that, at any time during transport, the percentage of diluent is below the percentage authorized by the competent authority.

- 314 - a) These substances are liable to exothermic decomposition when exposed to elevated temperatures. The decomposition may be caused by heat or impurities (eg powdered metals (iron, manganese, cobalt, and magnesium) and its compounds);
- b) during transport, these substances should be protected from direct radiation sun and from any heat source and should be placed in areas properly ventilated.

315 - This name may not be applied to substances of Class 6.1 that meet the criteria for inhalation toxicity of Packing Group I described in item 2.6.2.2.4.3.

- 316 - This designation is only applied to the dry calcium hypochlorite, when carried in the form of non-friable tablets.
- 317 - The term "Fissile excepted" applies only to those volumes in accordance to provisions of the transport regulations of the National Nuclear Energy Commission - CNEN.
- 318 - For the purposes of documentation, the proper shipping name must be accompanied the technical name (see section 3.1.2.8). It is not necessary to display the technical names in volume. When the infectious substances to be transported are not known but it is suspected that they meet the criteria for inclusion in Category The UN and the 2814 or 2900 numbers, the indication "infectious substance suspected belong to Category A "must be enclosed in parentheses after the appropriate name for boarding the tax document for transport but must not appear on packaging external.
- 319 - The packed and labeled compounds according to the instructions for packing P650 are not subject to any other requirement of this Resolution or Regulations for the Transport of Dangerous Goods.
- 321 - is considered, in all cases, these storage systems contain hydrogen.
- 322 - When transported in the form of non-friable tablets, these products are allocated to Packing Group III.
- 324 - This substance should be stabilized in concentrations less than or equal to 99%.
- 325 - In the case of uranium hexafluoride non-fissile or fissile excepted, the material must be classified under UN 2978 number.
- 326 - In the case of fissile uranium hexafluoride, the material shall be classified under number UN 2977.
- 327 - containers of discarded aerosols consigned in accordance with paragraph 5.4.1.5 (b) They may be carried under this designation for recycling or disposal purposes. They need not be protected against accidental discharges, provided that taken measures to prevent pressure increases and hazardous atmospheres. these containers aerosols, except those with leakage problems or deformed, should be packaged in accordance with the Instruction for P207 Packaging and Special Provision PP87 to packing, or the instruction for LP02 Packing and Provision Special Packaging for L2. Aerosols leaking or deformed should be

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transported in rescue packages, adopting appropriate measures to ensure that there is no dangerous build up of pressure. The aerosol containers discarded must not be transported in sealed cargo containers.

328 - This designation applies to cartridges for fuel cells, including contained in equipment or packed with equipment. The battery cartridges installed fuels or are part of a cell System fuel are regarded as contained in equipment. A cartridge battery fuel means a fuel storage product used for supply equipment powered by such batteries by means of one or more valves controlling the unloading of the fuel in the fuel cell. cartridges Fuel cells, including those contained in equipment must be designed and manufactured to prevent leakage of fuel during normal transport.

The project type cartridges for fuel cells using liquid fuel They must pass an internal pressure test at a pressure of 100 kPa (Gauge pressure) without showing leakage.

Except for cartridges for fuel cells containing hydrogen in the form of metal hydride, which must meet special provision 339, each project type fuel cells for cartridges must be approved in a 1.2 drop test m onto a rigid orientation in which most likely would result in damage to the containment system, without loss of contents.

When lithium metal batteries or lithium ion batteries are contained in systems fuel shipments must meet this designation and names corresponding to the numbers UN 3091 LITHIUM BATTERY METALLIC, CONTAINED IN EQUIPMENT or UN 3481 LITHIUM ION BATTERIES, CONTAINED IN EQUIPMENTS.

331 - Dangerous substances to the environment that meet the criteria

established in item 2.9.3 should receive an additional mark as specified in items 5.2.3.1 and 5.3.3.2.

332 - Nitrate Magnesium hexahydrate is not subject to the requirements of this Regulation.

333 - mixtures of ethanol and gasoline or motor fuel for use in of ignition spark, for example, automobiles, stationary engines or other engines should be allocated to this designation regardless of variation

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its volatility.

334 - Fuel cell cartridges may contain an activator provided it has two independent means of accidental interaction of prevention with the fuel during transport.

335 - solid mixtures which are not subject to this Regulation and liquid or solid dangerous presenting risk to the environment should be allocated to the number UN 3077 and may be carried under this designation since, at the time of Filling or closing of the packaging, vehicle or equipment transportation, any free liquid is not observed. Each vehicle or equipment transport shall be leakproof when used with container for bulk cargo. Case there is free liquid during filling or closing of package vehicle or transport equipment, the mixture should be classified as UN 3082. The sealed pallets and articles containing less than 10 ml of a liquid present risk to the environment, absorbed into a solid, but no free liquid, or containing less than 10 g of a solid that presents risk to the environment, not They are subject to these Regulations.

338 - Each cartridge for fuel cell transported under this entry and designed to contain a liquefied flammable gas must:

a) be able to withstand, without leakage or rupture, a pressure of at least twice the equilibrium pressure of the contents at 55 ° C;

b) contain no more than 200 mL of liquefied flammable gas having a vapor pressure

should not exceed 1000 kPa at 55 ° C; and

c) support the hot water bath test set forth in item 6.2.4.1.1.

339 - cartridge for fuel cells containing hydrogen in the form of metal hydride transported under this entry shall have a water capacity less or equal to 120 ml.

The pressure in the cartridge shall not exceed 5 MPa at 55 ° C. The design type must withstand, without rupture or leak, the pressure of twice the design pressure cartridge at 55 ° C or 200 kPa higher than the cartridge design pressure at 55 ° C, the whichever is greater. The pressure at which the test is performed is referred to in the drop test and when testing hydrogen cycle as "minimum pressure burst."

The fuel cell cartridges must be filled in accordance with the

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procedures established by the manufacturer, which shall provide the following information for each cartridge:

- a) inspection procedures to be followed before initial filling and before new cartridge filling;
- b) safety precautions and potential risks that must be known;
- c) method of determining the scope of the rated capacity;
- d) minimum and maximum pressure range;
- e) minimum and maximum temperature range; and
- f) any other requirements that must be met for initial filling and new filler including type of equipment being used for such operations.

The fuel cell cartridges shall be designed and constructed so that prevent any leakage of fuel under normal conditions of transport.

Each cartridge type design for fuel cells, including those that are part member of a fuel cell, is subject to approval in the following tests:

drop test

A drop test of 1.8 m on a surface not flexible in four directions many different:

- a) vertically at the end containing the shut-off valve;
- b) vertically, at the other end to containing the shut-off valve;
- c) horizontally on a steel spigot directed upwards 38 mm diameter; and
- d) at an angle of 45 ° in the extreme that contains a shutoff valve.

There should be no leakage, determined by using a soap solution or other equivalent method in all possible leak locations, when the cartridge is loaded at its rated load pressure. The cartridge for fuel cells

It should then be subjected to hydrostatic pressure until its destruction. The pressure registered disruption should exceed 85% of its minimum pressure burst.

Fire Test

A cartridge for fuel cells filled with hydrogen to capacity

Nominal must be subjected to a fire test. It is considered that the project

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cartridge, which can include as an integral feature a relief system pressure overcame the fire test if:

- a) the internal pressure is reduced to zero gauge pressure without rupture of the cartridge; or
- b) the cartridge support the fire for at least 20 minutes without break.

Test hydrogen cycle

This essay aims to ensure that the cartridge battery voltage limits fuel are not exceeded during use.

The cartridge for fuel cells must be subjected to a filling cycle

hydrogen from no more than 5% of its nominal capacity to not less 95% of its nominal capacity and emptied again until no more than 5% of its rated capacity. To load the load nominal pressure must be used and temperatures should be maintained within the operating temperature range. O process should continue for at least 100 cycles.

After the test cycles, the cartridge for fuel cells must be loaded and measured the volume of water displaced. It is considered that the cartridge design surpassed test if the water volume displaced by the cartridge subjected to cycles does not exceed the volume of water displaced by a cartridge not subjected to such a test, loaded 95% of its rated capacity and pressurized to 75% of its minimum pressure disruption.

Leak test during manufacturing

Each cartridge for fuel cells must be subjected to a test leakage at $15^{\circ}\text{C} \pm 5^{\circ}\text{C}$ while kept pressurized to its load pressure nominal. There should be no leakage, determined by using a soap solution or an equivalent method in all possible sites of leakage.

Each cartridge for fuel cells must show clearly and indelibly the following information:

- a) the load nominal pressure megapascals (MPa);
- b) the cartridge manufacturer's serial number or unique identification number; and
- c) the expiration date based on the use of time-out (the four-digit year, the month two digits).

341 - Bulk transport of infectious substances in containers BK1 bulk and

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BK2 is only permitted for those substances of animal material as defined in item 1.2.1 (see section 4.3.2.4.1).

343 - This designation applies to crude oil containing hydrogen sulphide in

concentration such that the gases of oil give off to show risk to inhalation. The allocation to the packing group shall be determined by the risk Flammability risk of inhalation, according to the degree of danger presented.

344 - shall be met the requirements set out in item 6.2.4.

345 - This gas contained in open cryogenic container with a maximum capacity of 1 L, built with double walls of glass and having a vacuum between the outer walls and internal, it is not subject to this Regulation provided that each container is carried in a suitable external packaging or cushioning materials absorbers to protect it from damage due to impact.

346 - Open cryogenic containers which meet the provisions of Instruction for packaging P203 and containing no dangerous goods except UN number 1977 refrigerated liquid nitrogen fully absorbed in porous material are not subject to any other provision of this Regulation.

347 - This designation should be used only if the results of Test Series 6 (d), Part I of Tests and Criteria Manual, have shown any effect dangerous resulting from the operation be confined within the volume.

348 - Batteries manufactured after 180 days of the entry into force of this Regulation should present the information in its rated capacity on the outside.

349 - hypochlorite mixtures with an ammonium salt are not accepted for transportation.

350 - ammonium bromate and its aqueous solutions and mixtures of a bromate with a salt Ammonium are not accepted for transportation.

351 - ammonium chlorate and its aqueous solutions and mixtures of a chlorate salt with a Ammonium are not accepted for transportation.

352 - ammonium chlorite and aqueous solutions thereof and mixtures of a chlorite salt with a Ammonium are not accepted for transportation.

353 - ammonium permanganate and aqueous solutions thereof and mixtures of a permanganate with an ammonium salt are not accepted for transportation.

354 - This substance is toxic by inhalation.

- 355 - Oxygen cylinders for emergency use transported under this designation may have installed cartridges to ensure its operation (Cartridges, mechanical device of Division 1.4, Compatibility Group C or S) with no change in their classification in Division 2.2, provided that the amount total explosive deflagrating (propellant) does not exceed 3.2 g per oxygen cylinder. The cylinder with cartridges that ensure your installed runs and prepared for transportation must have an effective means of preventing activation Inadvertent.
- 356 - metal hydride storage systems installed in vehicles, ships or aircraft or in completed components or intended for installation on vehicles, ships or aircraft, shall be approved by the competent authority before to be accepted for transport. The tax document for transportation should include a indication that the volume has been approved by the competent authority, or be accompanied by a copy of such approval.
- 357 - Crude oil containing hydrogen sulphide in sufficient quantity so that the vapors released by oil-hazardous inhalation, should be allocated to UN 3494 number, RAW PETROLEUM ACID, FLAMMABLE, TOXIC.
- 358 - alcoholic solution of nitroglycerin more than 1% and less than 5% nitroglycerin may be classified in Class 3 and allocated to UN 3064 number from all Instruction requirements for packaging P300 are met.
- 359 - alcoholic solution of nitroglycerin more than 1% and less than 5% nitroglycerin shall be classified in Class 1 and allocated to UN 0144 if not are met all the requirements for packaging Instruction P300.
- 361 - This designation applies to electric double layer capacitors with a energy storage capacity greater than 0.3 Wh. capacitors with energy storage capacity of 0.3 Wh or less are not subject to this Regulation. Energy storage capacity means the energy stored by the capacitor, calculated using the voltage and the capacitance nominal. All capacitors that are allocated to this designation, including capacitors containing an electrolyte that does not meet the classification criteria for any

class or subclass of dangerous goods, must meet the following conditions:

- a) Capacitors not installed in equipment must be transported discharged. Capacitors installed in equipment must be transported

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downloaded or protected against short circuit;

- b) each capacitor must be protected against short-circuit potential risk during the transport of the following ways:

- (I) when the capacitor energy storage capacity is less than or equal to 10 Wh or when the storage capacity of energy of each capacitor in a module is less than or equal to 10 Wh, the capacitor or module must be protected against short circuit or provided with a metal strip connecting the terminals; and
- (Ii) when the power storage capacity of a capacitor or a capacitor in a module is greater than 10 Wh, the capacitor or module must be provided with a metallic strip connecting terminals;

- c) capacitors containing dangerous goods shall be designed to withstand a differential of 95 kPa;

- d) capacitors must be designed and constructed to release safely pressure which may be accumulated during use, by means of a device ventilation or relief on its external envelope. Any liquid that is released in ventilation function must remain inside the packaging or equipment in which capacitor is installed; and

- e) capacitors must submit their energy storage capacity Wh.

Capacitors containing electrolyte that does not meet the classification criteria any class or subclass of dangerous products, even when installed in equipment, are not subject to other provisions of this Regulation.

Capacitors containing an electrolyte that meets the classification criteria of any class or subclass of dangerous goods, with a storage capacity of Power 10 Wh or less are not subject to other provisions of this Regulation when they are able to withstand a 1.2 m drop test unpackaged on a non-flexible surface without presenting loss of contents.

Capacitors containing an electrolyte that meets the classification criteria of any class or subclass of dangerous goods that are not installed in equipment and a power storage capacity higher than 10 Wh They are subject to these Regulations.

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Capacitors installed in equipment and containing an electrolyte that meets the classification criteria of any class or subclass of dangerous products not They are subject to other provisions of this Regulation, provided that the equipment is packaged in a sturdy outer package constructed of a suitable material and strength and suitable for use design that is intended to prevent the accidental functioning of capacitors during transport. The equipment large and robust containing capacitors may be offered for transport without being packaged on pallets or in which the capacitors are protected equivalent way by the equipment in which they are installed.

Note: Capacitors which by design maintain a terminal voltage (eg, asymmetric capacitors) can not be assigned to this designation.

362 - This designation applies to liquids, pastes or powders, pressurized with a propellant that meets the definition of a gas established in items 2.2.1.1 and 2.2.1.2 (a) or (b).

Note: A chemical in a pressurized aerosol container must be transported under the UN number 1950.

The following provisions shall apply:

(A) the chemical under pressure shall be classified based on the characteristics of risk of the components in the different states:

- The propellant;
- The liquid; or
- The solid.

If one of the components, which may be a pure substance or a mixture, needs to be classified as flammable, the chemical under pressure must be classified as flammable in Division 2.1. Flammable components are flammable liquids and mixtures of liquids and solids flammable mixtures of solids or flammable gases and gas mixtures that meet the following criteria:

- (I) flammable liquid is a liquid having a flash point up to 93 ° C;
 - (Ii) flammable solid is a solid which meets the criteria of item 2.4.2.2;
 - (Iii) flammable gas is a gas which meets the criteria Item 2.2.2.1.
- (B) gases of Division 2.3 and gases of Division 5.1 subsidiary risk can not
It is used as a propellant in a chemical product under pressure;

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- (C) when the liquid or solid components are classified as dangerous goods of Class 6.1, packing groups II or III or Class 8, Groups Packaging II or III, the pressurized chemical must be assigned risk subsidiary of Class 6.1 or Class 8 and the appropriate UN number. components classified in Class 6.1, Packing Group I, or Class 8, Group Packaging I, they can not be transported allocated to appropriate name for this boarding;
- (D) Also, chemical product under pressure can not be transported allocated to this proper shipping name if they have components that meet
Properties: Class 1, explosives; Class 3 desensitized liquid explosives;
Class 4.1 autorreagentes substances and desensitized solid explosives;
Division 4.2, substances subject to spontaneous combustion; Subclass 4.3, substances which, in contact with water, emit flammable gases; Class 5.1,

oxidizing substances; Division 5.2, organic peroxides; Division 6.2, infectious substances or Class 7, radioactive material;

(E) substance with the PP86 or TP7 information in Columns 9 and 11, the Dangerous Goods and therefore require air to be eliminated from the vapor space, they can not be transported allocated to that UN number, but they must be transported allocated to their respective UN numbers as provisions of the Dangerous Goods.

363 - (a) This designation applies to engines or machinery, powered fuel classified as hazardous products through combustion systems or battery Fuel (for example, internal combustion engines, generators, compressors, turbines, heating units, etc.), except those that are allocated to UN numbers 3166 or 3363.

(B) engines or machinery that are empty of liquid or gaseous fuels, and containing no other dangerous goods are not subject to the requirements of this Regulation.

Note 1: A motor or machinery are considered as free or empty fuel liquid when the liquid has been drained fuel tank and the engine, or machinery can not be operated due to the lack of fuel. components engine or machinery, such as fuel lines, filters and injectors not They need to be cleaned or drained to be considered as free of

liquid fuel. In addition, the liquid propellant tank does not need to be cleaned.

Note 2: A motor or machinery are considered as free or empty fuel gas fuel when the gas tank is empty of liquid (for gases liquefied gas), positive pressure in the tank does not exceed 2 bar and the device or valve shutdown or isolation is closed and secure.

(C) motors and machinery containing fuels that meet the criteria for

risk class 3 rating should be considered under No. UN 3528 ENGINE, Internal combustion, MOVED A FLAMMABLE LIQUID or UN 3528 ENGINE, FUEL CELL, MOVED A FLAMMABLE LIQUID or UN 3528 MACHINERY, INTERNAL COMBUSTION, MOVED A FLAMMABLE LIQUID or UN 3528 MACHINERY, FUEL CELL, MOVED A Flammable liquids, as appropriate.

(D) engines and machinery containing fuels that meet the criteria for subclass of risk classification 2.1, should be considered under No. UN 3529 ENGINE, INTERNAL COMBUSTION, FLAMMABLE GAS POWERED or UN The 3529 ENGINE, FUEL CELL, FLAMMABLE GAS POWERED or UN The 3529 MACHINERY, INTERNAL COMBUSTION, FLAMMABLE GAS POWERED or UN The 3529 MACHINERY, FUEL CELL, FLAMMABLE MOVED GAS, as appropriate.

Engines and machinery moved both flammable gas and the flammable liquid They shall be recorded under No. 3529 UN proper.

(E) motors and machinery containing liquid fuels that meet the criteria of classification set out in item 2.9.3 for substances which present risk to the environment, and do not meet the classification criteria for any other class or subclass should be considered under No. UN 3530 ENGINE, COMBUSTION INTERNAL or UN 3530 MACHINERY, internal combustion, as appropriate.

(F) engines or machinery may contain other dangerous goods as well as fuels (eg, batteries, fire extinguishers, gas accumulators tablet or safety devices) required for its operation or operation safe, without being subject to any additional requirements for such products, except when specified contrary to this Regulation. However, lithium batteries must meet the requirements set out in item 2.9.4, except when specified otherwise in this regulation (for example, batteries or prototypes

under Special Provision No. 376).

(G) These engines or machinery are not subject to any other requirement of this Regulation if the following requirements are met:

(I) the motor or machinery, including containment means containing dangerous goods, must comply with the construction requirements specified by the competent authority;

(Ii) any valves or openings (for example, ventilation devices) They shall be closed during transport;

(Iii) engines or machines must be oriented so that it prevents unintentional leakage of hazardous products secured by means capable of prevent movement of the engines or machinery that could change their orientation or damage during transport;

(Iv) For UN No. 3528 and UN 3530:

When the motor or the machinery contains more than 60 liters of liquid fuel, and is capable of up to 450 liters should be applied identification requirements set out in item 5.2.2 ..

When the engine or machinery contains more than 60 liters of fuel fluid and has a capacity greater than 450 liters but not more than 3000 liters labels risk must be displayed on two opposite sides, in accordance with the provisions of 5.2.2.

When the engine or machinery contains more than 60 liters of fuel liquid and has capacity greater than 3000 liters must be signaled with labels risk on two opposite sides, in accordance with the items 5.3.1.1.4 5.3.1.1.

(V) For UN No. 3529:

When the engine fuel tank or machinery have a water capacity up to 450 liters should apply the identification requirements established in item 5.2.2.

When the engine fuel tank or machinery have a superior water capacity 450 liters and no more than 1,000 liters risk labels They must be displayed on two opposite sides, in accordance with the provisions of item 5.2.2.

When the engine fuel tank or machinery have a superior water capacity of 1,000 liters should be signaled at risk of labels two opposite sides, in accordance with the items 5.3.1.1.4 5.3.1.1.

(Vi) A transport document in accordance with Chapter 5.4 is required, except for UN No. 3528 and UN 3530, for which a transport document It is required only when the motor or machinery contains more than 60 liters of liquid fuel. This transport document shall contain, in addition, the following expression: "Transport in accordance with the provisions of the Provision Special No. 363. ".

364 - This article may be transported only in accordance with the provisions of Chapter 3.4 if, as presented for transport, the volume is able to overcome the test according to the Test Series 6 (d) of Part I of the Manual of Tests and Criteria.

365 - For articles and manufactured devices containing mercury (see the UN number 3506).

366 - Articles and manufactures instruments containing up to 1 kg of mercury are not subject to this Regulation.

367 - For documentation purposes and volume identification:

The proper shipping name "RELATED MATERIALS WITH PAINTS" can It is used for packaging of shipments containing "INK" or "MATERIAL CONNECTION WITH PAINTS "packed in the same volume.

The proper shipping name "RELATED MATERIALS WITH PAINTS, CORROSIVE, FLAMMABLE "may be used for packaging expeditions containing "INK" or "RELATED MATERIALS WITH PAINT, CORROSIVE, FLAMMABLE "packed in the same volume.

The proper shipping name "RELATED MATERIALS WITH PAINTS, Flammable, Corrosive "can be used for packaging shipments containing "INK" or "RELATED MATERIALS WITH PAINT, FLAMMABLE,

Corrosive "packed in the same volume.

The proper shipping name "WITH RELATED MATERIAL FOR INK PRINTING "may be used for packaging for shipment containing" INK PRINTING "or" RELATED MATERIALS WITH INK FOR PRINTING " packed in the same volume.

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368 - In the case of uranium hexafluoride non-fissile or fissile excepted, the material must be classified as UN 3507 or UN 2978 number.

369 - According to the item 2.0.3.2, this radioactive material in a volume, excepted that has corrosive toxic properties, is classified in the risk of Division 6.1 with subsidiary risk of radioactive and corrosive material.

Uranium hexafluoride can be classified under that designation only if met specific requirements established by the National Nuclear Energy Commission - CNEN.

In addition to the provisions applicable to the transport risk Subclass 6.1 products, the Item 5.1.3.2 prescriptions - in addition to the specific requirements established by the CNEN - Should be applied.

The Class 7 risk label is dispensed.

370 - This designation applies to:

ammonium nitrate containing up to 0.2% combustible substances, including any organic substance calculated as carbon, excluding any other substance added.

ammonium nitrate containing up to 0.2% combustible substances, including any organic substance calculated as carbon, excluding any other substance added, which is not very sensitive for inclusion in Class 1 when tested in according to Test Series 2 (see Part I, Manual of Tests and Criteria and Also, UN 1942) number.

371 - (1) This designation also applies to articles, containing small receptacles pressure release device. Such items must meet the following requirements:

- (A) water capacity of the container under pressure may not exceed 0.5 L and working pressure must not exceed 25 bar at 15 ° C;
- (B) the minimum burst pressure of the pressure vessel should be at least 4 times greater than the gas pressure at 15 ° C;
- (C) each article must be constructed so as to prevent release trigger or not intentional in normal handling, packaging, transport and use.
This may be achieved by means of an additional closing device connected to the activator;

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- (D) each article must be manufactured in order to prevent release of projectiles pressure vessel or parts thereof;
- (E) each article should be fabricated from a material which does not fragment upon break;
- (F) the design type of the article should be subjected to a fire test. For this test, They should apply the requirements of paragraphs 16.6.1.2, except letter "G", 16.6.1.3.1 to 16.6.1.3.6, 16.6.1.3.7 (b) and 16.6.1.3.8 of the Manual of Tests and Criteria. It must be shown that the article relieves its pressure by means of degradable seal fire or other pressure relief device, and so the pressure vessel will not fragment and the article, or fragments thereof, not rise more than 10 meters high.
- (G) the design type of the article should be subjected to a test with simple packaging. An incentive mechanism should be used to drive packaged in the middle packaging. There can be hazardous effects outside the volume, such as volume rupture, metal fragments or container that passes through the packing.

(2) The manufacturer shall draw up technical document design type, manufacture, and as the tests and their results. The manufacturer shall apply procedures ensure that products manufactured in series are made of good quality material, as design type, and able to meet the requirements set out in points of (A) to (g) of Item (1) above. The manufacturer shall provide such information to competent authority upon request.

372 - This designation applies to asymmetric capacitors capable of greater energy storage than 0.3 Wh. Capacitors with capacity energy storage equal to or less than 0.3 Wh and that are not subject Regulation.

energy storage capacity means the energy stored in a Capacitor calculated according to the following equation:

$$Wh = 1 / 2C_N [(U_R)^2 - (U_L)^2] \times (1/3600)$$

Using the nominal capacitance C_C nominal voltage U_R and a nominal voltage (U_L).

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All asymmetric capacitors subject to this Special Provision should meet following conditions:

- (A) capacitors or modules must be protected against short circuit;
- (B) capacitors must be designed and constructed to release safely pressure which may be accumulated during use, by means of a device ventilation or relief on its external envelope. Any liquid that is released in ventilation function must remain inside the packaging or equipment in which capacitor is installed;
- (C) capacitors must submit their energy storage capacity

Wh; and

(D) capacitors containing electrolyte that meet the classification criteria any class or subclass of dangerous products should be designed so supporting a 95 kPa pressure differential.

Capacitors containing an electrolyte that does not meet the criteria for classification of any class or subclass of dangerous goods, including those set in a module or when installed in equipment, are not subject to other provisions of this Regulation.

Capacitors containing an electrolyte that meets the classification criteria of any class or subclass of dangerous goods, with a storage capacity of energy of 20 Wh or less, including those configured in one module are not subject to other provisions of this Regulation when they are able to support a 1.2m drop test unpackaged on a rigid surface without present loss of contents.

Capacitors containing an electrolyte that meets the classification criteria of any class or subclass of dangerous goods that are not installed in equipment and a power storage capacity higher than 20 Wh They are subject to these Regulations.

Capacitors installed in equipment and containing an electrolyte that meets the classification criteria of any class or subclass of dangerous products not are subject to other provisions of this Regulation provided that the equipment is packaged in a sturdy outer package constructed of a suitable material and strength and suitable for use design that is intended to prevent the accidental functioning of capacitors during transport. The equipment

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large and robust containing capacitors may be offered for transport without being packaged on pallets or in which the capacitors are protected equivalent way by the equipment in which they are installed.

Note: nickel-carbon asymmetric capacitors containing alkaline electrolytes of

Class 8, which are unable to meet the requirements of this Special Provision, must be transported allocated to UN 2795 number; electrical BATTERIES, HUMID CONTAINING ÁLCALIS.

373 - Neutron radiation detectors containing not pressurized gaseous boron trifluoride

They may be carried under this designation provided the following conditions:

(A) each radiation detector must meet the following conditions:

(I) the pressure in each detector can not exceed 105 kPa absolute to 20 ° C;

(Ii) the amount of gas may not exceed 13 g per detector;

(Iii) each detector must be manufactured according to a warranty program quality registered;

Note: It is considered fulfilled this requirement applying to ISO 9001: 2008.

(Iv) each neutron radiation detector must have welded metal construction with welding metallic bronze - ceramics in assemblies. These detectors must have a minimum burst pressure of 1,800 kPa, as shown by test qualification of the project - and type;

(V) each detector is subjected, before filling, a trial

Sealing ensures a level of $1 \times 10^{-10} \text{ cm}^3 / \text{s}$.

(B) Radiation detectors transported as individual components must meet the next:

(I) detectors must be packed in intermediate plastic liner and sealed with absorbent material sufficient to absorb all gaseous content;

(Ii) detectors must be packed in strong outer packaging. The volume end should be able to withstand a drop test of 1.8 m without leakage gas content by the detectors;

(Iii) the total amount of gas from all the detectors must not exceed 52 g per

outer packaging.

(C) complete neutron radiation detection systems having detectors which meet the conditions set out in (a) shall be transported as following:

(I) the detectors must be housed in a rugged, sealed outer envelope;

(Ii) the enclosure must contain sufficient absorbent material to absorb the entire contents gaseous;

(Iii) the complete system must be packed in strong outer packaging, able to withstand a drop test of 1.8 m without leakage occurring, the unless a system of external enclosure provides equivalent protection.

The tax document for the carriage of dangerous goods must contain the following statement: "Transport in accordance with Special Provision 373".

Neutron radiation detectors containing up to 1 g boron trifluoride, including those with glass welded joints, are not subject to this Regulation, provided that meet the requirements contained in (a) of that provision and are packed According to the provisions in (b) of this provision. Radiation detection systems containing such detectors are not subject to this Regulation, provided that packaged in accordance with Clause (c) of this provision. Instruction for P200 package set out in item 4.1.4.1 does not apply.

375 - These substances when transported in single or combination packagings containing liquid mass, single or inner packaging up to 5 L of liquid, or having net mass of up to 5 kg for solids, are not subject to this Regulation, provided that the packages meet the general provisions of the items 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.

376 - Batteries or batteries and lithium-ion batteries or lithium metal batteries being defective or damaged, so it does not conform to the type tested accordance with the requirements of the Manual of Tests and Criteria, should meet the requirements of this Special Provision.

For purposes of this provision, include, but are not limited to:

- Batteries or batteries considered defective for safety reasons;
- Batteries or batteries that have leaked or released;

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- Batteries or batteries that could not be diagnosed before transportation; or
- Batteries or batteries that have suffered physical or mechanical damage.

Note: In the evaluation of a battery as defective or damaged, the type of battery and its previous use and improper / incorrect or misuse use, should be taken in consideration.

Batteries must be transported in accordance with the requirements to UN 3090 numbers, 3091, 3480 and 3481, except for Special Provision 230 and when otherwise stated for this special provision.

Volumes should be marked, as applicable, with one of the following expressions: "Lithium-ion batteries Damaged / Defective" or "Metallic Lithium Batteries Damaged / Defective".

Batteries must be packed in accordance with the Instructions Packaging P908, established in item 4.1.4.1 or LP904, established in item 4.1.4.3, as applicable.

Batteries subject to disassemble quickly react dangerously produce a flame or dangerous evolution of heat, or even to produce dangerous emissions gases or toxic, corrosive or flammable vapors in normal transport, can not be transported, unless under specified conditions by the competent authority.

377 - batteries and lithium-ion batteries and lithium metal, and equipment containing such cells and batteries transported for disposal or recycling, packed with or without batteries without lithium, they can be packed in accordance with the Instruction for P909 Packaging established in item 4.1.4.1.

These batteries are not subject to the requirements set out in item 2.9.4.

Additional exemptions can be provided under conditions defined by regulation for each mode.

Packages shall be marked with one of the following expressions: "BATTERY LITHIUM FOR DISPOSAL "or" LITHIUM BATTERIES FOR RECYCLING. "

Batteries identified as defective or damaged shall be carried according to Special Provision 376 and packaged in accordance with the Instructions to Packaging P908, established in section 4.1.4.1, or LP904, established in section 4.1.4.3, as applicable.

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378 - Radiation detectors containing this gas in pressure vessels not

Rechargeable that do not meet the requirements of Chapter 6.2 and instruction P200 packaging item 4.1.4.1 may be transported under this entry since:

- a) The working pressure in each container does not exceed 50 bar;
- b) the capacity of the container not exceeding 12 liters;
- c) Each container has a minimum burst pressure of at least 3 times working pressure when pressure relief device and at least 4 times the working pressure when there is no pressure relief device;
- d) each container is manufactured from material which does not fragment upon break;
- e) Each detector is manufactured according to a control program registered quality:

Note: ISO9001: 2008 is used for this purpose.

- f) The detectors are transported in strong outer packaging. The volume Full must be capable of withstanding a 1.2 meter drop test without breaking

the detector or break the outer packaging. The equipment includes a detector must be packaged in a rugged outer package unless the detector

ensure equivalent protection for the equipment in which it is contained; and

g) The transport document includes the following statement "Transport agreement with Special Provision 378 ".

Radiation detectors, including detectors for radiation systems are not subject to any other requirements of this Regulation, if the detectors meet subparagraphs (a) to (f) above and the ability of the detector container does not exceed 50 ml.

379 - Anhydrous ammonia adsorbed or absorbed on a solid contained in distribution systems ammonia or containers intended to form part of such systems are not subject to other requirements of this Regulation if the following conditions are met:

(A) The adsorption or absorption having the following properties:

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(I) pressure at 20 ° C in the container is less than 0.6 bar;

(Ii) pressure at 35 ° C in the container is less than 1 bar;

(Iii) pressure at 85 ° C in the container is less than 12 bar;

(B) adsorbent or absorbent material may not have hazardous properties listed the risk classes 1 to 8;

(C) the maximum content in the container should be 10 kg of ammonia; and

(D) containers containing ammonia adsorbed or absorbed must meet the following conditions:

(I) containers should be made of material compatible with ammonia as specified in ISO 11114-1: 2012;

(Ii) containers and their closure means must be hermetically sealed and able to contain the generated ammonia;

(Iii) Each container should be able to withstand the pressure generated with a 85° C volume expansion not exceeding 0.1%;

(Iv) Vessels must be provided with device allowing gas release without violent rupture, burst or projection, when the pressure reaches 15 bar; and

(V) Each container should be capable of withstanding a 20 bar pressure without leak when the pressure relief device is turned off.

When transported in a tank of ammonia, the containers must be connected to it so that it is guaranteed that all have the same set resistance with a simple container.

The strength properties mentioned in this special provision must be tested using a prototype of the container and / or reservoir filled to nominal capacity, increasing the temperature until the specified pressure are achieved.

The test results should be documented, traceable and communicated to competent authorities whenever requested.

382 - Polymer granulates can be made from polystyrene, poly (methyl methacrylate) or other polymeric material. As it can be demonstrated according to the test U1 (test method for substances liable to develop flammable vapors)

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subsection 38.4.4, Part III of the Manual of Tests and Criteria, there is no evolution flammable vapor, resulting in a flammable atmosphere will not be necessary classifying granular polymers, expandable, this UN number. This test shall run when no provision for downgrading a substance.

383 - Table Tennis Balls made of celluloid are not subject to the provisions of this Regulation when the net mass of each ball does not exceed 3.0 grams and the total net mass of table tennis balls does not exceed 500

grams per volume.

384 - The risk of label to be used is indicated in the model No. 9A, see section 5.2.2.2.2.

386 - When substances are stabilized by temperature control, the provisions of Item 7.1.6 apply. When chemical stabilization is used, the person offers the package, IBC or tank for transport must ensure that the level of stabilization is sufficient to contain the substance in the package, IBC or tank Hazardous polymerization at a temperature above 50 ° C, or in the case of a tank Portable at 45 ° C. Where chemical stabilization becomes more inefficient temperatures low in the foreseeable duration of transport temperature control is required. These factors must be taken into account, but are not limited, capacity and geometry of the container, IBC or tank and the effect of any This isolation, the temperature of the substance when offered for transmission, duration of the trip and the ambient temperature conditions typically found in path (also considering the season), efficacy and other properties stabilizer used, applicable operational controls imposed by regulations (for example, requirements for protection from heat sources, including other loads transported at a temperature above the temperature environment) and any other relevant factors.

DANGEROUS GOODS IN LIMITED QUANTITIES

3.4.1 general provisions

3.4.1.1 This chapter sets out the arrangements for the transport of goods dangerous fractionated in limited quantities:

a) internal packaging (item 3.4.2);

b) vehicle (item 3.4.3).

Columns 8 and 9 of the Dangerous Goods, establish the maximum quantities of hazardous material per vehicle per package internal, respectively, to which it is allowed to dispense expeditions compliance with certain requirements of this Regulation, pursuant to this Chapter.

3.4.1.2 Waiving these requirements, however, does not relieve any of the agents involved in the operation of their respective responsibilities.

3.4.1.2.1 Except for the exemptions provided for in this Chapter, all other requirements for this type of transport are applicable.

3.4.1.3 To the provisions of items 3.4.2 and 3.4.3, the Fiscal Document transport specified in item 5.4.1.2.1 must meet the provisions of item 5.4.1.6.2.

3.4.1.4 When the quantities and packaging of dangerous goods meet the criteria of limited quantities both by vehicle and by package internal, apply to shipping these products the provisions in items 3.4.2.6 and 3.4.3.4.

3.4.2 Limited quantities for inner packagings or articles

3.4.2.1 The provisions of items 3.4.2.1 to 3.4.2.7 are valid only for dangerous goods in inner packagings or articles carried in quantities lower than those indicated in column 9 of the Dangerous Goods. The word "zero", presented in this column indicates that it is not allowed to transport the product or article According to the provisions of this Chapter.

3.4.2.2 Dangerous goods must be packed only in packages
inmates who are placed in suitable outer packagings. packaging
intermediate may be used. Also, for articles of Division 1.4, Group
S compatibility, the provisions of items 4.1.5.1 to 4.1.5.18 must be met. It is not
must be used internal packaging for the transport of articles such as aerosols or
small containers containing gas. The total gross mass of the package shall not exceed 30 kg.

3.4.2.2.1 inner packagings containing different dangerous products can be
packed in the same outer packaging, provided that such products are not
incompatible and do not interact dangerously in the event of leakage.

3.4.2.3 Except for articles of Division 1.4, Compatibility Group S, trays
wrapped with film wrap heat-shrink plastic that meet the conditions
established in items 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8 are accepted as packaging
foreign for articles or inner packagings containing dangerous goods transported
in accordance with the provisions of this Chapter. fragile inner packagings or liable to
breaking or puncturing, such as those made of glass, porcelain, ceramics or certain plastics,
They should be placed in suitable intermediate packagings that meet
requirements set out in items 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8, and be designed to
so that meet the construction requirements prescribed in item 6.1.4. The total gross mass
This volume should not exceed 20 kg.

3.4.2.4 internal glass containers, porcelain or ceramic containing products
Net Class 8, Packing Group II, shall be surrounded by a pack
and rigid intermediate supports.

3.4.2.5 Symbol for packages containing dangerous goods in quantity limited

3.4.2.5.1 Packages containing dangerous goods in limited quantity per package
internal should bear the symbol shown in Figure 3.4.1 below:

Figure 3.4.1
SYMBOL PACKAGES CONTAINING DANGEROUS PRODUCTS IN QUANTITIES
LIMITED

3.4.2.5.2 The symbol shall be legible, easily visible and able to withstand exposure to time occurs without significant reduction of its effectiveness, regardless of the material Manufacturing used.

3.4.2.5.3 The symbol must have the shape of a square, placed at an angle of 45 (Diamond-shaped). The upper and lower parts as well as the lines must be color black. The central symbol of the area should be white in color or contrasting color. The dimensions minimum must be 100 mm by 100 mm and the minimum width of the line that forms the lozenge should be 2 mm. When the dimensions are not specified, all the features should be in approximate proportion to those shown in Fig.

Note : *It is accepted in land transport the use of the symbol used in air transport*

volume for containing hazardous products in a limited quantity, in accordance with the ICAO Technical Instructions.

3.4.2.5.4 If the volume size so requires, the dimensions of the symbol can be reduced to a minimum of 50 mm x 50 mm, provided that the symbol stays clearly visible. The minimum line width that form the lozenge can be reduced to min to 1 mm.

3.4.2.6 The transport of dangerous goods in limited quantities per package internal, under the conditions set forth in this Chapter, is exempt from the following Requirements:

- a) label (s) risk (s) displayed in the volume;
- b) marking the proper shipping name on the volume;

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- c) segregation of dangerous goods in a vehicle or container;
- d) risk labels and posted security panels in the vehicle or equipment transport loads for the gross amount of product dangerous is up to 1000 kg;
- e) limitations on the route, parking and loading and unloading;
- f) size of the mark or identification of compliance on packaging;
- g) symbol for the transport of hazardous substances into the environment affixed to the vehicle or transport equipment for loads that gross amount of dangerous products is up to 1000 kg; and
- h) symbol size for the transport of dangerous substances to the environment setting the volume.

3.4.2.7 other regulatory requirements remain valid, in particular those refer to:

- a) driving ban passenger in the vehicle;
- b) marking the United Nations number, preceded by the letters UN or

UN in volume;

- c) size of personal protective equipment and equipment service to emergency situations, including fire extinguishers, to the vehicle and the load if this requires;
- d) specific training for the driver of the vehicle;
- e) emergency form postage and envelope for transport;
- f) the handling precautions (loading, unloading, stevedoring); and
- g) risk labels and posted security panels in the vehicle or equipment of transport for loading the gross amount of product hazardous exceeds 1000 kg.

3.4.2.8 Use overpack

3.4.2.8.1 When hazardous products packaged in quantities limited by internal packing are packed in a overpack, the following provisions shall apply:

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(I) the overpack shall be marked with the word "Overpack" in letters measuring at least 12 mm high, unless the markings representing volumes of all dangerous goods (UN number) contained in the overpack are visible; and

Notice: In the case of hazardous imported products, the words "Overpack" or "SOBREEMBALAJE" will be accepted to replace the word "Overpack".

(Ii) the overpack shall be marked with the symbol set out in item

3.4.2.5.1.

3.4.2.8.2 The provisions set out in section 5.1.2.1 apply only to products

dangerous than are contained in the same overpack and do not meet provisions of this Chapter.

3.4.3 Limited quantities per vehicle

3.4.3.1 The provisions of items 3.4.3.1 to 3.4.3.5 are valid only for products or goods transported in quantities equal to or lower than those indicated in Column 8 of the Dangerous Goods, regardless of the size of packaging. THE word "zero", presented in this column indicates that it is not allowed to transport the product or article in accordance with the provisions of this Chapter.

3.4.3.2 If, in the same load, being transported two or more different dangerous products prevails, under the provisions set forth in this chapter, the lowest value shown in Column 8, of all dangerous products transported to the total gross weight of the shipment.

3.4.3.3 Fiscal document for the transport of goods should be informed weight gross, in kilograms, of each hazardous material transported under this condition.

3.4.3.4 The transport of dangerous goods in limited quantities per vehicle, in conditions set out in this Chapter, is exempt from the following requirements:

- a) risk labels and safety signs affixed to the vehicle;
- b) size of personal protective equipment and equipment attendance to emergencies, except fire extinguishers, for vehicle and the load if this requires;
- c) limitations on the route, parking and loading and unloading;

- d) specific training for the driver of the vehicle;
- e) sized emergency card and envelope for transport;
- f) ban on driving passengers in the vehicle; and
- g) symbol for the transport of hazardous substances into the environment

affixed to the vehicle.

3.4.3.5 other regulatory requirements remain valid, in particular referred to:

- a) the handling precautions (loading, unloading, stevedoring);
- b) label (s) affixed risk volume;
- c) marking the proper shipping name and the number of Nations United, preceded by the letters UN or UN in volume;
- d) size of the mark or identification of conformity in volumes;
- e) symbol for the transport of hazardous substances into the environment Posted in volume.

3.4.3.6 The consignor, guided by the manufacturer shall inform in a statement, if Emergency Sheet does not accompany the expedition, which products, dangerous or not, They should be segregated from the transported dangerous product, taking into account all risks (main and subsidiary) thereof.

3.4.4 Transportation of dangerous goods in limited quantities per package internal, for sale in the retail trade

3.4.4.1 The transport of dangerous goods in limited quantities per package internal, for sale in the retail trade, shipments up to 2000 kg gross weight total and intended for consumption by individuals for personal use or care purposes domestic, or veterinary use, and only in these cases, packed volumes in conditions set out in items 3.4.2 to 3.4.2.5, is exempt from the following requirements:

- a) label (s) of hazard (s) posted on volume;
- b) marking the appropriate name for shipment in volume;
- c) segregation of dangerous goods in a vehicle or container;

- d) risk labels and posted security panels in the vehicle or equipment carriage;
- e) limitations on the route, parking and loading and unloading;
- f) size of the mark of conformity in volumes;
- g) size of personal protective equipment and equipment attendance to emergencies, except fire extinguishers, for vehicle and the load if this requires;
- h) specific training for the driver of the vehicle;
- i) emergency form postage and envelope for transportation;
- j) prohibition to conduct passenger in the vehicle;
- k) information on the risks of dangerous products on the tax document;
- l) symbol for the transport of hazardous substances into the environment attached to the vehicle; and
- m) symbol for the transport of hazardous substances into the environment Posted in volume.

3.4.4.1.1 The consignor, guided by the manufacturer shall inform in a statement, if Emergency Sheet does not accompany the expedition, which products, dangerous or not, They should be segregated from the transported dangerous product, taking into account all risks (main and subsidiary) thereof.

3.4.4.2 other regulatory requirements remain valid, in particular referred to:

- a) dial the number of the UN preceded by the letters UN or UN in volume;
- b) packaging conditions set out in 3.4.2.1 to 3.4.2.5;
- c) handling precautions (loading, unloading, stevedoring).

3.4.4.3 In the case of transport of dangerous goods for sale in trade retailer, with risk of contamination, along with food, medicine or objects intended for human or animal use, will not be considered loading bans common when such products are separated from others by vaults of different loads.

3.4.5 Transport toiletries, cosmetics and perfumery

In the case of transport of personnel, cosmetics and hygiene products perfumery, classified as dangerous goods (as Chapter 2 of this Resolution), not the mixed loading prohibitions will be considered and may be transported along with other cosmetics, medicines, toiletries and perfumes or objects intended for use / human or animal consumption without the need for segregation since the Shipper ensures that the products do not present risks of contamination, in accordance with item 5.4.1.7.1.1.

CHAPTER 3.5**CONTAINERS (INCLUDING IBCs AND LARGE PACKAGINGS) EMPTY AND NOT CLEAN
Which contained HAZARDOUS**

3.5.1 Packaging (including IBCs and large packagings) empty and not transported for reconditioning purposes, repair, periodic inspection, remanufacturing, reuse or disposal and which have been emptied so that only hazardous waste products adhering to internal parts of the packages are present when they are delivered to transport should be allocated to UN No. 3509.

3.5.1.1 Do not apply the provisions of this Chapter to empty containers, not clean, containing waste:

- a) dangerous goods of Class 2;
- b) products classified as desensitized explosives of Class 3 or subclass 4.1;
- c) autorreagentes substances subclass 4.1;
- d) radioactive material of Class 7; and
- e) Asbestos, amphibole (ONU 2212), Asbestos, crisotilia (ONU 2590), polychlorinated biphenyls, net (ONU 2315), polychlorinated biphenyls, solid (ONU 3432), biphenyls polihalogenadas,

net or Monometildifenilas-halogenated methane, liquid or terphenyls polihalogenadas, net (ONU 3151) or polihalogenadas biphenyls, solid or Monometildifenilas-methane Halogenated, solid or terphenyls polihalogenadas, solid (ONU 3152);

3.5.2 Packaging (including IBCs and large packagings) empty and not cleaned it contained hazardous products must be transported closed to prevent loss of content caused by vibration or other events related to the stages of operation transportation, and must not contain dangerous sticky residue signal apart outside these packages, subject, where applicable, the provisions of item 4.1.1.18.1.

3.5.3 The transport of empty and not cleaned packaging allocated to UN 3509 is exempt from the following requirements:

- a) size of personal protective equipment and equipment attendance to emergencies, except fire extinguishers, for vehicle and the load if this requires;
- b) limitations on the route, parking and loading and unloading;

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- c) Specific training for the driver of the vehicle;
- d) sized emergency card and envelope for transport;
- e) risk label the size of Class 9 and dial the appropriate name for shipment and number of the United Nations, preceded by the UN or UN letters, in volumes, indicative of UN 3509 number;
- e) bearing the mark of conformity in volumes;
- f) segregation of dangerous goods in a vehicle or container; and
- f) Total quantity of the hazardous product in the fiscal document for transport.

3.5.4 other regulatory requirements remain valid in particular those relate to:

- a) risk labels and safety signs affixed to the vehicle; and
- b) handling precautions (loading, unloading, stevedoring).

3.5.5 Packaging (including IBCs and large packagings) empty and not cleaned it contained hazardous products must keep risk labels, name tag

appropriate for the United Nations and shipment number, preceded by the letters UN or UN for the product originally contained.