

**PART 5**

**EXPEDITION PROCEDURES**

**CHAPTER 5.1****GENERAL PROVISIONS****5.1.0 General Settings:**

5.1.0.1 For purposes of this Regulation, the following are considered:

(A) vehicles for road transport:

- I. Cargo vehicles (single and combined);
- Ii. Mixed vehicles;
- Iii. Tank vehicles;
- Iv. Mobile Pumping Unit (UMB); and
- V. For the carriage of dangerous goods of Class 7.

**Note 1:** Where mixed vehicles are used, dangerous products shall be transported in their own (cargo) compartment, segregated from the Driver and auxiliaries.

(B) vehicles for rail transport:

- I. Wagons and tank wagons.

C) transport equipment:

- I. Cargo containers;
- Ii. Container-tanks; and

## iii. Portable tanks and Multiple Gas Containers

(MEGCs).

**Note 2:** The transport of dangerous goods in bulk in Equipment called "flexitanque", which consists of a built tank Of pillow-shaped flexible material and equipped with Loading and unloading, installed inside a container of the type "Dry Box" intended for the transport of fractional general loads.

(D) bulk cargo: where the dangerous product is transported without any Container or container, being contained by the tank itself installed at the Vehicle or container tank.

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(D) fractionated cargo: where the dangerous product is transported in Containers, IBCs, large containers, portable tanks and Multiple Gas Elements (MEGCs) that do not meet the definition of CSC container.

### **5.1.1 Application and general provisions**

5.1.1.1 This Part sets forth the requirements for the shipment of dangerous goods With regard to risk information, documentation and general provisions.

5.1.1.2 Risk information for the purpose of transporting dangerous products is The identification of packages and packages and the Of transport equipment.

5.1.1.2.1 The identification of packages, articles and packages is done by means of Marking, labeling (display of risk labels) and other applicable symbols. Such As a rule, the marking shall consist of the affixing of the UN number and the appropriate Shipment of the product.

**Notice:** *Volumes may display additional markings or symbols to indicate, for*

*Precautions to be taken during handling or stowage.*

5.1.1.2.2 The signaling of the vehicle and of the transport equipment is done by means of Risk labels, safety panels and other applicable symbols.

### **5.1.2 Use of overpacks**

5.1.2.1 All overpacks must be marked with the word "OVERWEIGHT", with the appropriate name for shipment and the UN number, as Required for the volumes in Chapter 5.2, for each dangerous Packaging, unless the marking and representative labels of all Dangerous substances contained in the overpack are visible, except as required in item 5.2.2.1.12. The letters of the word OVERFLOWING must be at least 12 mm height.

5.1.2.2 Each volume of dangerous products contained in the overpack must meet the To all applicable provisions of these Regulations. The "OVERFLOW" mark is

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An indication of compliance with this requirement. Overpacking may not Compromise the function of each volume.

5.1.2.3 Each volume bearing the symbology, as prescribed in item 5.2.3.2 of this Regulation, and which is placed in an overpack or in a pack- Large scale shall be oriented in accordance with such symbols.

### **5.1.3 Empty and unclean packaging containing dangerous products**

5.1.3.1 Except in the case of Class 7, an empty and unclean Products should remain identified as required for those Products, unless, in order to avoid any risk, Such as cleaning, degassing or refilling with Dangerous to neutralize the danger of the previous product, under the responsibility of the consignor, Subject to the provisions of Chapter 3.5.

5.1.3.2 Containers, tanks, IBCs, as well as other packaging and Used in the transport of radioactive material may not be used

For the storage or transport of other products, unless decontaminated in a manner That the remaining contamination and the radiation emission level (beta, gamma and alpha) Are lower than the respective limits established by the CNEN resolutions.

5.1.3.3 Containers, portable tanks, IBCs, as well as other packaging and

Used in the transport of dangerous goods, may not be used

For storage, use or transportation of other products or objects for use / consumption Human and / or animal.

#### **5.1.4 Packaging with various dangerous products**

When two or more dangerous products are packaged in the same Packaging, the volume shall be identified as required for each product, Exempting the subsidiary risk labels if such risks are represented by a Risk label.

#### **5.1.5 General provisions for Class 7**

5.1.5.1 In addition to the provisions laid down herein, the general provisions on

Such as certificates, notifications, approvals,

Criticality safety and transport indexes, and other

Transportation of radioactive materials are established in CNEN resolutions.

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## **CHAPTER 5.2**

### **IDENTIFICATION OF VOLUMES, ARTICLES AND PACKAGING**

#### **5.2.1. Marking**

5.2.1.1 Except as otherwise provided in this Regulation, the appropriate name for

Shipment of dangerous goods, determined in accordance with item 3.1.2 and the number corresponding UN, preceded by the letters "UN" or "UN", shall be displayed in each volume. The UN number and the letters "UN" or "UN" shall measure at least 12 mm height, except for containers with a capacity of 30 L or less, or 30 kg of mass liquid capacity and for cylinders of 60 L capacity in water, in which they must measure 6 mm in height, and for packagings with a capacity of up to 5 L or 5 kg, in which should be of appropriate size. In the case of unpackaged articles, displayed on the crate, the handling, storage or of the article. In the case of products of Subclass 1.4, Compatibility Group S, should also be marked with the Subclass number and the Group Compatibility, unless the label corresponding to 1.4S is displayed. An example of a volume dialing is:

UN 3265 CORROSIVE LIQUID, ACID, ORGANIC, NE (Caprylyl chloride).

**Notice:** *For Class 7 products, the provisions of set forth in the resolutions of the CNEN.*

- 5.2.1.2 All markings in the volumes required in item 5.2.1.1 shall be:
- (A) easily visible and legible;
  - B) able to withstand exposure to time without significant reduction of its effectiveness;
  - C) placed on the outer surface of the volume, on a colored background contrasting; and
  - D) placed away from other markings in the volume, avoiding to reduce its effectiveness significantly.

5.2.1.3 Rescue packages and rescue pressure vessels shall be additionally marked with the word "RESGATE". The letters of the word "RESGATE" shall be at least 12 mm high.

5.2.1.4 Containers, intermediate, for bulk, with a capacity exceeding 450 Liters, and large packagings shall be marked on at least two opposing sides.

## **5.2.2 Labeling**

### **5.2.2.1 General provisions, posting and special provisions**

*Notice:* Volumes may display additional markings or symbols to indicate, for Precautions to be taken during handling or stowage.

5.2.2.1.1 Risk Labels are used to inform that the shipment is composed of Dangerous products and presents risks. Articles and packages containing dangerous goods Listed in the Hazardous Substance List must bear the label Corresponding to the Risk Class, indicated in Column 3, and, where applicable, the Corresponding to the subsidiary risk indicated by the number of the Class or Subclass constant In Column 4. However, Special Provisions indicated in Column 7 may require the The use of the subsidiary risk label, even if there is no indication in Column 4, as How they can exempt from the use of the subsidiary risk label when it is initially Required in that column.

5.2.2.1.1.1 Safes of cargo used for the transport of dangerous Carry the same risk labels applied to the packaging they are packaging.

5.2.2.1.2 Labels identifying the main and subsidiary risks (s) should be Conform to the models of numbers 1 to 9, illustrated in item 5.2.2.2.2 and detailed in Standard ABNT NBR 7500. The subsidiary risk label for "EXPLOSIVE" is the number 1.

5.2.2.1.3 Except as provided in item 5.2.2.1.3.1, if an unlisted product Specifically in the Hazardous Products List falls within the definition of more than Class, the determination of the principal risk for the product shall be made in accordance with With the provisions of item 2.0.3. In addition to the label required by the Principal Hazard Class, Those corresponding to the subsidiary risks should be placed.

5.2.2.1.3.1 Volumes containing hazardous Class 8 products do not need to carry the Subsidiary risk label, corresponding to model number 6.1, if the toxicity is Only the destructive effect on the tissues. Volumes containing subclass substances



4.2 do not need to carry the subsidiary risk label corresponding to model number 4.1.

5.2.2.1.4 *Risk Labels for Class 2 gases with subsidiary risk (s)*

<i>Subclass</i>	<b>Risk Subsidiary (s) Indicated in Chapter 2.2</b>	<b>Risk Label Main</b>	<b>Risk Label (s) Subsidiary</b>
2.1	none	2.1	none
2.2	none	2.2	none
	5.1	2.2	5.1
2.3	none	2.3	none
	2.1	2.3	2.1
	5.1	2.3	5.1
	5.1, 8	2.3	5.1, 8
	Referring to Fig.	2.3	Referring to Fig.
	2.1, 8	2.3	2.1, 8

5.2.2.1.5 For Class 2, three types of labels are provided: one for gases Subclass 2.1 (red), one for non-flammable, non-toxic Subclass 2.2 (green) and one for toxic gases of Subclass 2.3 (white). When the List of Hazardous Products indicates that a Class 2 gas has a unique risk or Multiple subsidiary risks, the labels should be used in accordance with Table Constant in item 5.2.2.1.4.

5.2.2.1.6 Except as provided in item 5.2.2.2.1.2, each risk label shall be affixed:

- (A) on the same surface as the volume next to the marking of the  
Appropriate for boarding, if the volume dimensions are  
Appropriate;

(B) on the packaging so that it is not covered or obscured by  
Any part or accessory thereof, another label or marking.

5.2.2.1.6.1 Where primary and subsidiary risk labels are required, they shall  
Be affixed close to one another.

5.2.2.1.6.2 When a volume has such an irregular shape or dimensions as small  
That the labels can not be satisfactorily affixed, they may be affixed  
Through a label applied to the volume or other appropriate medium.

5.2.2.1.7 Intermediate bulk containers with a capacity exceeding 450 L, and  
Large packagings shall be labeled on at least two opposing sides.

5.2.2.1.8 Risk labels should be placed on a contrasting color surface.

5.2.2.1.9 *Special provisions for the labeling of self-reactive substances*

A subsidiary risk label relating to "EXPLOSIVE"  
(Model number 1) for self-reactive substances of type B, unless the competent authority  
Competent authority has waived the use of that label for a specific type of packaging whose  
The results of the tests have shown that the self-reactive substance in the  
Explosive behavior.

5.2.2.1.10 *Special provisions for the labeling of organic peroxides*

A risk label should be used for Subclass 5.2 (model number 5.2)  
Affixed to packages containing organic peroxides classified as types B, C, D, E  
This label also indicates that the product may be flammable and for this reason it is not  
The subsidiary risk label for "FLAMMABLE LIQUID" (model number 3).  
In addition, the following subsidiary risk labels shall be affixed:

A) relating to "EXPLOSIVE" (model number 1) for organic peroxides type  
B, unless the competent authority has authorized the exemption  
Label for a particular packaging because the results of the  
Tests have shown that the organic peroxide in such packaging  
Shows explosive behavior;

(B) relating to "CORROSIVE" (model number 8) when the  
Criteria for Packing Groups I or II of Class 8.

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*5.2.2.1.11 Special provisions for the labeling of packages containing dangerous substances  
Infectious*

In addition to the main risk label (model number 6.2), the volumes  
Infectious substances shall carry any other label required by the nature of the  
content.

*5.2.2.1.12 Special provisions for the labeling of radioactive material*

5.2.2.1.12.1 Without prejudice to CNEN regulations, each volume,  
Tank, and container with radioactive material shall display the labels  
Conform to models numbers 7A, 7B or 7C, according to the appropriate category.  
Labels shall be affixed on two opposite sides of the outside of the volume or  
Or affixed to all four sides of the outside of a container or tank.  
Each overpack with radioactive material shall display at least two labels on sides  
Opposites. In addition, each volume, overpack and container with fissile material that does not  
Exceptional fissile material, as established by the CNEN  
Labels conforming to model number 7E. Such labels, where appropriate, should be  
Attached to models conforming to models 7A, 7B or 7C. Labels  
Can not cover the markings specified in item 5.2.1. Any label that is not  
Content must be removed or covered.

5.2.2.1.12.2 The allocation to Risk Labels, models numbers 7A, 7B and 7C, as well as  
The information to be provided on each label, shall  
Specified in the CNEN resolutions.

**Notice:** *O ther special labeling provisions laid down in  
CNEN resolutions should also be addressed, as applicable.*

**5.2.2.2 Specifications for Risk Labels**

5.2.2.2.1 The labels must meet the requirements of the following items and conform, Colors, symbols and general format, to the label templates Item 5.2.2.2.2, detailed in the ABNT Standard NBR 7500.

*Note 1:* In some cases, the labels specified in item 5.2.2.2.2 appear A dotted outer edge, as provided in item 5.2.2.2.1.1. This border is not Necessary when the label is applied on a background of contrasting color.

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*Note 2:* The risk label templates used in air Provided by the ABNT NBR 7500 standard, which may show variations in the Pictograms.

5.2.2.2.1.1 The Risk Labels must be configured as shown in the Figure 5.2.1, detailed in ABN Standard NBR 7500.

**Figure 5.2.1**  
**RISK LABEL FOR VOLUMES, ITEMS AND PACKAGING**

\* The number of the Risk Class or, for Risk Subclass 5.1 and 5.2, the Risk subclass should be shown in the lower corner.

\*\* Additional texts / numbers / letters should, if they are mandatory, or may, if they are

Optional, be shown in this lower half.

\*\*\* The symbol of the risk class or subclass of risk or, for risk subclasses 1.4, 1.5 and 1.6, the subclass number and, for model No 7E, the word FISSIL, shall be Shown in this upper half.

5.2.2.2.1.1.1 Labels shall be affixed to a background of contrasting color or shall be Be circumvented externally, all along their perimeter, by a dotted or to be continued.

5.2.2.2.1.1.2 Risk Labels shall be in the form of a square, placed in a Angle of 45 ° (diamond shape), with minimum dimensions of 100 mm per 100 mm and the Minimum width of the inner line to the edge, which forms the diamond, should be 2 mm. The line The edge of the label shall be drawn at 5 mm from that edge and be parallel to its

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perimeter. In the upper half of the label, the inner line to the edge must be the same color as the Symbol, and, in the lower half, the same color as the number that indicates the class or subclass In the lower corner. When dimensions are not specified, all Characteristics should be in approximate proportion to those shown in item 5.2.2.2.2 and In Standard ABNT NBR 7500.

5.2.2.2.1.1.3 If the volume is small, there is no space Sufficient to display all the information required by the various regulations The risk label dimensions and other symbols may be Accordance with the Table presented in item 5.2.2.2.1.1.3.1, provided that the Pictogram and other elements of the applicable risk labels and symbols remain Visible. The inner line at the edge of the label shall remain at a distance Adopted. The minimum width of the inner line to the edge must remain 2 mm. At Cylinders shall comply with the provisions of item 5.2.2.2.1.2.

5.2.2.2.1.1.3.1 Minimum dimensions of risk labels and other symbols applicable for Use in packages of reduced sizes as established in item 5.2.2.2.1.1.3:

Packing Capacity in Kg or L	Minimum dimensions
≤ 0.5 kg / liter	15 mm x 15 mm
> 0.5 to ≤ 5 kg / liter	20 mm x 20 mm

> 5 to ≤ 25 kg / liter  
> 25 kg / liters

50 mm x 50 mm  
100 mm x 100 mm

5.2.2.2.1.2 Class 2 gas cylinders may, depending on their shape, Orientation and fixation mechanisms for transport, bear risk labels that meet Than specified in this chapter but of a reduced size in accordance with ISO 7225: 2005 "Gas Cylinders - Risk Labels", detailed in ABN Standard NBR 7500, of So that they can be displayed on the non-cylindrical part (shoulders) of such containers. The Labels may overlap to the extent stipulated by ISO 7225: 2005 and Standard ABN NBR 7500. However, in any case, the labels that represent the risk As well as the numbers and symbols appearing on any Completely visible and identifiable.

**Notice:** *When the diameter of the cylinder is too small, so that it does not Labeling on the non-cylindrical top of the cylinder, such a label Can be affixed to the cylindrical part.*

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5.2.2.2.1.3 Except for Subclasses 1.4, 1.5 and 1.6 of Class 1 and model No 7E of Class 7, the upper half of the risk labels shall display the pictogram, symbol of And the lower half should display the number of the Class or Subclass 1, 2, 3, 4, 5.1, 5.2, 6, 7, 8 or 9, as appropriate. The label may include text, such as UN number or words describing the Risk Class (for example: "LIQUID FLAMMABLE "), according to item 5.2.2.2.1.5, provided that the text does not obscure or The other elements of the label.

5.2.2.2.1.4 In addition, Class 1 risk labels, except for Subclasses 1.4, 1.5 and 1.6, shall display, in the lower half, above the number of the Class of Subclass number and the letter corresponding to the compatibility group for the Substance or article. Risk labels for Subclasses 1.4, 1.5 and 1.6 should Upper half, the Subclass number and, in the lower half, the class number and the letter Corresponding to the compatibility group. For Subclass 1.4, Group of Compatibility S, no label is generally required. However, in cases where a label is

Considered necessary for such products, the label shall be that indicated in model number 1.4.

5.2.2.2.1.5 Except for labels on Class 7 products, where  
Insertion of any text (except class number or subclass) in the space below the  
Should be limited to particularities relating to the nature of the risk and precautions to be  
Be taken during handling.

5.2.2.2.1.6 Symbols, texts, and numbers should be in black,  
Labels, except:

- (A) on Class 8 risk labels, where the text, if any, and the number  
Of the Class must be blank;
- (B) on risk labels with a completely green, red or blue background,  
Where they may appear in white;
- (C) on labels of Subclass 5.2, where the symbol may be white; and

5.2.2.2.1.7 All labels, regardless of the manufacturing material used,  
Must be able to withstand inclement weather without substantial reduction of their  
efficiency.

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5.2.2.2.2 *Risk Labeling Models*

## **CLASS 1**

### **Explosive substances or articles**

(# 1)

Subclasses 1.1, 1.2 and 1.3

Symbol (exploding bomb): black. Background: orange. Number "1" in bottom corner.

**(No. 1.4)**

(No. 1.5)

**(No. 1.6)**

Subclass 1.4

Subclass 1.5

Subclass 1.6

Background: orange. Numbers: black. The figures shall measure approximately 30 mm in height and 5 mm in Thickness (for a label measuring 100 mm x 100 mm). Number "1" in bottom corner.

\*\* Location for subclass indication. Do not complete this field if the subsidiary risk is explosive.

\* Location for indication of compatibility group. Do not complete this field if the subsidiary risk is explosive.

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**CLASS 2****Gases**



(No. 2.1)

Subclass 2.1

Flammable gases

Symbol (flame): black or white.

Red background. Number "2" in bottom corner.

(No. 2.2)

Subclass 2.2

Non-flammable, non-toxic gases

Symbol (gas cylinder): black or white.

Background: green. Number "2" in bottom corner.

(No. 2.3)

Subclass 2.3

Toxic gases

Symbol (skull and crossed bones): black.

White background. Number "2" in bottom corner.

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**Flammable liquids**

(No. 3)

Symbol (flame): black or white.

Red background. Number "3" in bottom corner.

**CLASS 4****Flammable solids, substances subject to spontaneous combustion; And substances****Which in contact with water emit flammable gases**

(No. 4.1)

Subclass 4.1

Flammable solids

Symbol (flame): black.

Background: white with seven

Red vertical stripes.

Number "4" in bottom corner.

(No. 4.2)

Subclass 4.2

Substances subject to  
spontaneous combustion

Symbol (flame): black.

Background: white top half,

Red bottom half.

Number "4" in bottom corner.

(No. 4.3)

Subclass 4.3

Substances which, in contact with water, emit gases  
Flammable.

Symbol (flame): black or white.

Blue background.

Number "4" in bottom corner.

**CLASS 5****Oxidizing substances and organic peroxides**

(No. 5.1)

Subclass 5.1

Oxidising substances

Symbol (flame on a circle): black.

Yellow background.

Number "5.1" in bottom corner.

(No. 5.2)

Subclass 5.2

Organic peroxides

Symbol (flame): black or white.

Bottom: red on top half, yellow on half  
Lower.

Number "5.2" in bottom corner.

**CLASS 6****Toxic substances and infectious substances**

(No. 6.1)

Subclass 6.1

Toxic substances

Symbol (skull and crossed bones): black. White background.

Number "6" in bottom corner.

(No. 6.2)

Subclass 6.2

Infectious substances

The lower half of the label may contain the inscriptions: "INFECTING SUBSTANCE" and "in case of damage or

Immediately notify the public health authorities. "Symbol (three crescent crescent

Superimposed in a circle) and inscriptions: black. White background. Number "6" in bottom corner.

## **CLASS 7**

### **Radioactive material**

(No. 7A)

Category I - White

Symbol (trifolium): black.

White background.

Text (required): black,

(No. 7B)

Category II - Yellow

Symbol (trifolium): black.

Background: upper half yellow with white borders,

Bottom half white.

(No. 7C)

Category III - Yellow

On the bottom half of the label:

"RADIOACTIVE"

"CONTENT....."

"ACTIVITY....."

Text (required): black, lower half of the label:

"RADIOACTIVE"

"CONTENT....."

"ACTIVITY....."

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Put a red bar

After the word "RADIOACTIVE".

Number "7" in bottom corner.

In a black border rectangle: "TRANSPORT INDEX".

Insert two vertical bars

Red after the word  
"RADIOACTIVE".

Place three vertical bars

Red after the word  
"RADIOACTIVE".

Number "7" in bottom corner.

(No. 7E)

Class 7: Fissile material

White background.

Text (required): black on the top half of the label: "FÍSSIL".

In a black-bordered rectangle on the lower half of the label:

"CRITICALITY SAFETY INDEX".

Number "7" in bottom corner.

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**CLASS 8****Corrosive substances**

(No. 8)

Symbol (liquid dripping from two glass containers  
And attacking a hand and a piece of metal): black.

Background: upper half white;

Bottom half black with white border.

Number "8" in bottom corner.

**CLASS 9****Various dangerous substances and articles,  
Including substances which present  
Risk to the environment**

(No. 9)

Symbol (seven vertical stripes on top half): black  
White background.

Number "9" underlined in bottom corner.

### 5.2.3 Other applicable symbols

*Notice:* The symbol for the transport of dangerous goods in limited quantities  
Is provided in item 3.4.2.5.

#### 5.2.3.1 Symbol for substances posing a risk to the environment

5.2.3.1.1 Volumes containing substances presenting a risk to the environment,  
That meet the criteria established in item 2.9.3 (UN numbers 3077 and 3082),  
Shall be marked with the symbol shown in Figure 5.2.2 except for packages  
Or combination packagings, provided that single packagings or packagings are  
Combination packagings have a capacity of 5 L or  
Liquid, or 5 kg, for solids.

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**Figure 5.2.2**  
**SYMBOL FOR THE TRANSPORT OF DANGEROUS SUBSTANCES TO THE MEDIUM**  
**ENVIRONMENT**

5.2.3.1.2 Such symbol shall be located near the markings required in item

5.2.1.1. The requirements of items 5.2.1.2 and 5.2.1.4 must also be met.

5.2.3.1.3 The symbol shall be in the form of a square, placed at an angle of 45 °

(Diamond shape). The symbology (fish and tree) should be black in color background White or contrasting color. The dimensions of the symbol must be at least 100 mm x 100 mm and the minimum width of the line forming the diamond should be 2 mm. If Size of the volume so requires, the dimensions of the symbol, as well as the width of the line, Can be reduced as long as it remains clearly visible. When the dimensions are not Are specified, the characteristics and aspects of this symbol must be in Proportion to those shown in Figure 5.2.2.

5.2.3.1.4            Regardless of the manufacturing material used, the symbol shall be Able to withstand inclement weather, without substantial reduction in its effectiveness.

*Note 1:*            *The symbol shown in Figure 5.2.2 applies in addition to any Another requirement for volumes.*

*Note 2:*            *The requirements on identification of the packaging, established in item 5.2.2, apply in addition to the requirements for the symbol required in item 5.2.3.1.*

*Note 3:*            *Packaging, IBCs, and packaging will be accepted in land transport. Ports, containing dangerous products classified in*

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*1 to 9 (in addition to UN Nos 3077 and 3082), which are considered as "marine pollutants" as The IMDG Code of the International Maritime Organization (IMO), with the Marine pollutant, equivalent to the symbol shown in Figure 5.2.2.*

### **5.2.3.2            Orientation arrows**

5.2.3.2.1            Except as provided in item 5.2.3.2.2, packagings combined with Packaging containing dangerous liquid products, Ventilators and cryogenic containers designed for Refrigerated liquefied gases shall be identified with guidance arrows, Presented in Figure 5.2.3, or that conform to the provisions of ISO 780: 1997 Or Standard ABNT NBR 7500.

### **Figure 5.2.3**



**ORIENTATION ARROWS**

Two black or red arrows on a white or contrasting color background.

Rectangular border is optional.

All characteristics should be approximate as shown in the image.

5.2.3.2.1.1 Orientation arrows should be placed on two opposing vertical sides of the volume and point correctly upwards. They must appear within a rectangle and have proportional to the size of the volume, so that they are clearly visible. Optionally, a continuous line rectangular border may be displayed.

5.2.3.2.1.1.1 Such symbology, regardless of the manufacturing material used, shall be able to withstand inclement weather without substantial reduction in its effectiveness.

5.2.3.2.2 Orientation arrows are not required in:

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(A) outer packagings containing pressure receptacles, other than for containers

Cryogenic;

(B) external packagings containing dangerous goods in packagings

With a maximum capacity of 120 ml, with sufficient absorbent material between the internal and external packaging capable of absorbing the liquid contents completely;

(C) outer packagings containing infective substances of Class 6.2 in receptacles

With a maximum capacity of 50 ml each;

(D) outer packagings containing watertight articles, irrespective of their orientation

(Eg thermometers containing alcohol or mercury, aerosols, etc.); or

(E) outer packagings containing dangerous goods in packagings  
Hermetically sealed containers with a maximum capacity of 500 ml each.

*Notice: Radioactive Materials (Class 7) must meet established requirements  
the resolutions of the CNEN as the requirement of the direction arrows.*

5.2.3.2.3 Arrows having a purpose other than the indication of the volume orientation may not  
Be displayed in packages identified in accordance with item 5.2.3.2.

### **5.2.3.3 Symbol for lithium batteries**

5.2.3.3.1 Volumes containing lithium batteries or batteries, prepared in accordance with  
Special Provision 188, shall be marked with the symbol shown in Figure 5.2.4.

follow:

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**Figure 5.2.4**  
**SYMBOL FOR THE TRANSPORT OF LITHIUM BATTERIES OR BATTERIES**

\* Location for UN number

\*\* Location to phone number for additional information

5.2.3.3.2 The symbol shall indicate the UN number preceded by the letters "UN" or "UN", "UN 3090" or "UN 3090", for metallic lithium batteries or batteries, or "UN 3480" or "UN 3480" for lithium-ion batteries. When the lithium batteries or Are contained in equipment, or packed with equipment, the UN number, preceded by the letters "UN" or "UN" should be indicated, ie, "UN 3091" or "UN 3091" or "UN 3481" or "UN 3481", as applicable. When a battery pack contains or lithium batteries allocated to different UN numbers, all UN numbers should be indicated in one or more symbols.

5.2.3.3.3 The symbol must have the shape of a rectangle with dashed border. At dimensions must be at least 120 mm long by 110 mm high, and minimum width of the dashed border should be 5 mm. The pictogram (battery group, damaged and sending flames up the UN number for batteries or lithium-ion batteries or metallic lithium) should be black on white or suitable contrast. The edge dashed should be red. If the volume size so requires, the dimensions of symbol can be reduced to no less than 105 mm long by 74 mm height. When the dimensions are not specified, the features and aspects this symbol must be in approximate proportion to those shown in Figure 5.2.4.

**CHAPTER 5.3****SIGNALS OF VEHICLES AND TRANSPORT EQUIPMENT**

**Note 1:** *The Standard NBR 7500 features illustrations indicating the position and standardization of labels and safety signs, as established in Regulation.*

**Note 2:** *They will be accepted in land transport of dangerous goods equipment transport to and from the ports or airports flying its signaling visibly displayed on the two sides and two ends, given the established the International Maritime Organization (IMO) and the International Aviation Organisation Civil (ICAO), provided that the carrying vehicle in front of the security panel and the other symbols applicable as set out in this Regulation.*

**5.3.1 risk labels****5.3.1.1 general provisions**

5.3.1.1.1 risk labels are elements used in vehicles or equipment transport to report that the shipment consists of dangerous products and features scratches. They must be affixed to the outer surface and on a contrasting background, or have surrounded by a perimeter edge in a continuous or dotted line.

5.3.1.1.1.1 risk labels must match the risk class indicated in Column 3 of the Dangerous Goods and answer the item 5.2.2.1.1.

5.3.1.1.2 Labels subsidiary risks corresponding to the risks listed in Column 4 of the Dangerous Goods must be affixed to the corresponding substances or articles adjacent to the primary risk label.

5.3.1.1.2.1 Vehicles or transport equipment transporting dangerous products bulk of more than one class or subclass of risk, need not carry risk labels subsidiary if such risks are already indicated by risk labels already used for indicate the main risks.

5.3.1.1.3 risk labels not related to dangerous goods transported

They must be removed so that they are not visible and prevented from spreading in an accident.

5.3.1.1.3.1 Vehicles and transport equipment in bulk, which contained products dangerous, must continue carrying the corresponding risk labels until they are cleaned and decontaminated.

5.3.1.1.4 risk labels are not required in the following expeditions:

- a) any quantity of explosives of Division 1.4, Group Compatibility S;
- b) dangerous goods in limited quantities (Chapter 3.4), constant column 8 or volumes with quantity per inner packaging as column 9 (in consignments of up to 1000 kg), the Product Relationship dangerous;
- c) exceptivos volumes of radioactive material (Class 7);
- d) fractionated hazardous products composed of two or more products classes or subclasses different, except Class 1;
- e) a single product (final delivery) resulting from a shipment containing fractionated, initially, two or more product classes or different subclasses.

### **5.3.1.2 *Display of risk labels***

#### **5.3.1.2.1 *Posting risk labels in transport equipment***

5.3.1.2.1.1 risk labels must be attached at the sides and at both ends equipment.

5.3.1.2.1.2 When the container tank, or the portable tank is composed of multiple compartments, which are transported in two or more hazardous and / or waste hazardous products, risk labels corresponding to each product should  
They are attached on each side of the respective compartments and the two ends of

equipment.

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5.3.1.2.1.3 portable tanks not cleaned or empty tank containers and not clean carrying dangerous goods or hazardous waste products should carry labels clearly visible on each side of the respective compartments and two ends, and so they can be viewed by all those involved in the processes of loading or unloading.

5.3.1.2.2 *Posting risk labels on road transport vehicles*

5.3.1.2.2.1 If the risk labels affixed to transport equipment not are visible from outside the vehicle carrying such equipment, the same Labels should also be affixed on both sides and rear of the vehicle. Case Otherwise it is not necessary to sign the vehicles.

5.3.1.2.2.2 In the case of combination vehicles made up of more than one trailer or semi-trailer, risk labels must be affixed on all sides and in all rear of trailers and semi-trailers. In the case of single vehicles, the labels risk must be affixed on both sides and rear.

5.3.1.2.2.3 In the case of vehicle tank with multiple compartments in which are transported two or more dangerous goods and / or dangerous waste products, corresponding risk labels must be affixed on each side of their compartments and rear of the vehicle. However, if they are transported Products same risk class in the different compartments can only be affixed a label indicative risk class on each side and rear of that vehicle.

5.3.1.2.2.4 In Mobile Units Pumping (UMB) risk labels corresponding to the substances or articles carried shall be affixed on each side the safety compartment for explosives, if any, and (s) tank (s) loading in bulk. At the rear of the vehicle must be affixed risk labels corresponding to posted on the security side compartment for explosives, if any, and

(s) of the tank (s) of bulk load. The tanks of Mobile Units Pumping (UMB) to below 1,000 liters, the risk of labels may be replaced by Smaller labels in accordance with item 5.2.2.2.1.1.2. Compatibility groups can not be indicated in risk labels of explosives if the Mobile Units of Pumping (UMB) are carrying substances or articles belonging to more a group compatibility.

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### *5.3.1.2.3 Display of risk labels in railway vehicles*

5.3.1.2.3.1 If the risk labels affixed to transport equipment are not visible from outside the wagon carrying such equipment, the same labels are also be affixed on both sides of this carriage. Otherwise, it is not necessary signal the cars.

5.3.1.2.3.2 In the case of tank car with multiple compartments in which are transported two or more dangerous goods and / or dangerous waste products, corresponding risk labels must be affixed on their side of the Wagon compartments .

### **5.3.1.3 Special provisions for risk Class 1 products - explosives**

5.3.1.3.1 For risk Class 1, compatibility groups can not be indicated in risk labels if the vehicle or transport equipment is carrying substances or articles belonging to more than one group compatibility. Vehicles and transport equipment carrying substances or articles different subclasses of class 1 shall only bear the label corresponding to the risk subclass of higher risk, according to the following order: 1.1 (higher risk), 1.5, 1.2, 1.3, 1.6, 1.4 (Lower risk).

5.3.1.3.2 When substances are carried together of Class 1.5D with substances or articles of Division 1.2, the vehicle must carry the risk label corresponding to the Subclass 1.1.

### **5.3.1.4 Special provisions for risk Class 7 products - materials radioactive**

*Notice:* Special provisions relating to risk labels, established in resolutions CNEN must also be complied with , as applicable .

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### **5.3.1.5 Specifications risk labels**

5.3.1.5.1 The labels risk, independently of the manufacturing material used, reflective or not, must be weather resistant, so they remain intact along the way, preserving the function as intended.

5.3.1.5.1.1 They may be used interchangeably risk labels or foldable from which are designed and posted so that there are no moving parts or do not get lost during transport (e.g., by impacts or actions not intentional), as specified in ISO 7500.

5.3.1.5.2 Except the provisions of section 5.3.1.5.3 for the Class 7 label, the labels Risk should be configured as shown below in Figure 5.3.1:

**Figure 5.3.1**  
**RISK LABEL FOR VEHICLES AND TRANSPORT EQUIPMENT**



The risk labels should have the shape of a square, placed in a angle of 45 ° (diamond shape) with dimensions of 300 mm by 300 mm (up to the edge of label) and have a line positioned at 12.5 mm from the edge and parallel to all its perimeter. O symbol and the line should follow the models set out in item 5.2.2.2.2, detailed in ABNT NBR 7500, for each class or subclass of risk, including in color. Must display the number on the class or subclass (and, for Class 1 products, the letter Compatibility Group) of hazardous products concerned, as prescribed in item 5.2.2.2.2 and the standard NBR 7500 for the corresponding risk label in characters with a minimum height of 25 mm. When the dimensions are not specified, all features shall be in approximate proportion to those

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shown. For vehicles and transport equipment up to loading capacity 3.5 tonnes, risk labels may be smaller, with dimensions of 250 mm by 250 mm (up to the edge of the label) and have a positioned 12.5 mm from the edge and parallel to all its perimeter.

5.3.1.5.3 For Class 7, the risk labels must have minimum dimensions of 250 mm by 250 mm, subject to item 5.3.1.4, with a black line running around all edge, this 5 mm, and must be, in other respects, as shown in Figure

5.3.2. When different dimensions used, the relative proportions must be maintained.

The number "7" may have a height less than 25 mm. The background color of the upper half label should be yellow, due to the lower half is white, the trefoil and the text should be in black. The use of the word "RADIOACTIVE" or the UN number in the lower half of the label is optional.

**Figure 5.3.2**

**LABEL RADIOACTIVE MATERIAL - CLASS 7**

Symbol (trefoil): black; Background: upper half yellow with white border, lower half white.

In the lower half can include the word "RADIOACTIVE" or alternatively as item 5.3.1.4.3, the corresponding UN number, and the number "7" on the bottom.

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**5.3.2            *Security Panels***

**5.3.2.1            *General provisions and posting***

5.3.2.1.1            safety panels are elements used in vehicles or in transport equipment to report that the shipment consists of products dangerous and poses risks. They must be affixed to the outer surface of the vehicle or transport equipment.

***Note 1:***            *Vehicles carrying transport equipment need not carry safety panels on the sides and back if they are already posted and visible such equipment. In front of the vehicle is required to port security panel corresponding.*

**Note 2:** *When the signs affixed to transport equipment can not be viewed from outside the vehicles which carry such equipment, the same signs must be placed on these vehicles, given to the provisions of item 5.3.2.1.4.*

5.3.2.1.2 Security panels should display the number of risk (column 5) and UN number (column 1) of the Dangerous Goods Numerical corresponding to product shipped with the following exceptions:

- a) vehicles or equipment carrying two or more products hazardous, it must be identified by the security panel without any entry;
- b) vehicles or equipment carrying a single dangerous product (Last delivery), resulting from an initial load of two or more products dangerous, which can maintain the security panel without any entry or bear the corresponding security panel to the last transported product;
- c) vehicles and equipment carrying dangerous goods class 1, to be identified by the security panel containing only UN number.

5.3.2.1.3 They are exempt from posting security panel shipments containing only:

- a) radioactive material BAE-I bulk or SCO-I Class 7, inside or on top a vehicle, in a container or a tank with a single UN number,

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provided that shown in the lower half of the risk label, provided that the material not present risk (s) alternative (s);

- b) excepted volume of radioactive material (Class 7);
- c) packaged radioactive material with a single UN number under exclusive use, provided that shown in the lower half of the risk label, provided that the material presents no risk (s) subsidiary (s);
- d) dangerous goods in quantities equal to or lower than the Limited Quantity

per vehicle, contained in Column 8, or internal packaging, constant Column 9 of the Dangerous Goods, provided that the gross amount total hazardous shipment goods is less than 1000 kg;

- e) any quantity of explosives of Division 1.4, Group Compatibility S.

#### 5.3.2.1.4 *Display of security panels*

##### 5.3.2.1.4.1 Display security panels in the transport equipment

5.3.2.1.4.1.1 The safety signs must be posted in a position adjacent to the labels risk required in items 5.3.1.2.1.1.

5.3.2.1.4.1.2 transport equipment in bulk having contained dangerous goods must continue carrying the corresponding security panel until they are clean and decontaminated.

5.3.2.1.4.1.3 transport equipment consisting of multiple tanks compartments in which are carried two or more hazardous products and / or waste of dangerous goods, with the exception of the requirements of item 5.3.2.1.4.1.4, must carry panels security without registration.

##### **5.3.2.1.4.1.4 Special provisions for equipment consisting of tanks multicompartment**

5.3.2.1.4.1.4.1 transport equipment in bulk consisting of tanks with multiple compartments concurrently carrying more than one of the following product UN number 1170, 1202, 1203, 1223, 3475, or aviation fuel allocated to UN numbers 1268 and 1863, but not carrying any other dangerous product, in addition risk label that refers to class, can only carry security panel corresponding to the product of highest risk, namely the lower flash point.

##### 5.3.2.1.4.2 *Display security panels in road transport vehicles*

5.3.2.1.4.2.1 The safety signs must be posted in a position adjacent to the labels risk required in items 5.3.1.2.2.1 and 5.3.1.2.2.2 and in front of vehicles to transport

road.

5.3.2.1.4.2.2 In the case of combination vehicles made up of more than one trailer or semi-trailer, every trailer or semi-trailer must wear safety panels in side and rear, adjacent to risk labels, and in front, corresponding to (s) product (s) it carries. Moreover, it shall be a corresponding security panel in front of the tractor horse.

5.3.2.1.4.2.3 security panels not related to dangerous goods transported They must be removed so that they are not visible and prevented from spreading in an accident. If the safety panels are covered, coverage must be total and remain effective all the way.

5.3.2.1.4.2.4 transport vehicles in bulk having contained dangerous goods must continue bearing the corresponding risk labels until they are clean and decontaminated.

**5.3.2.1.4.2.5 Special provisions for road transport vehicles made for tanks with multiple compartments**

5.3.2.1.4.2.5.1 transport vehicles in bulk consisting of tanks with multiple compartments concurrently carrying more than one of the following product UN number 1170, 1202, 1203, 1223, 3475, or aviation fuel allocated to UN numbers 1268 and 1863, but not carrying any other dangerous product, in addition risk label that refers to class, can only carry security panel corresponding to the product of highest risk, namely the lower flash point.

5.3.2.1.4.2.5.2 In bulk transport vehicles consisting of multiple tanks compartments in which are carried two or more hazardous products and / or waste of dangerous goods, except for prescribed with in item 5.3.2.1.4.1.4.1, the panels security posted at the front and rear must be no inscriptions.

5.3.2.1.4.2.5.3 In Mobile Units Pumping (UMB) security panels corresponding to the substances or articles carried shall be affixed in place adjacent to risk labels required in item 5.3.1.2.2.4. security panels posted the front and rear of the vehicle should be without registration. The tanks of the units

pumping mobile (UMB) with a capacity of less than 1000 liters are dispensed posting security panel, the remaining required risk labels accordance with the provisions of item 5.2.2.2.1.1.2.

#### 5.3.2.1.4.3 *Display security panels in railway vehicles*

5.3.2.1.4.3.1 The safety signs must be posted in a position adjacent to the labels risk required in items 5.3.1.2.3.1 and 5.3.1.2.3.2.

5.3.2.1.4.3.2 bulk transport wagons, which contained hazardous products must continue carrying corresponding security panel until they are clean and decontaminated.

#### 5.3.2.1.4.3.3 **Special provisions for tank wagon made of tanks multicompartment**

5.3.2.1.4.3.3.1 carrying wagons in bulk consisting of tanks with multiple compartments concurrently carrying more than one of the following product UN number 1170, 1202, 1203, 1223, 3475, or aviation fuel allocated to UN numbers 1268 and 1863, but not carrying any other dangerous product, in addition risk label that refers to class, can only carry security panel corresponding to the product of highest risk, namely the lower flash point.

### 5.3.2.2 *Specifications of the security panels*

5.3.2.2.1 The security panels, regardless of the manufacturing equipment used reflective or not, must be weather resistant, so stay intact along the way, preserving the function intended, allowed the use of Interchangeable metal security panels, detailed in the standard NBR 7500.

5.3.2.2.2 Security panels must have the UN number and the number of risk product transported displayed in black characters, with height of 100 mm and width of 55 mm on a rectangular panel orange with 300 mm length and 400 mm, must have black border of 10 mm (see Figure 5.3.3). For vehicles and equipment transportation of up to 3.5 tonnes load capacity, the panels may be lower, with the UN number and the product risk number transported displayed in characters black, with a height of 80 mm and 45 mm, in a rectangular panel orange, with a height of 250 mm and a length of 350 mm should be black border 10 mm, as provided in ISO 7500.

**Notice:** In cases where the security panel to present only the UN number, this should be displayed at the bottom.

5.3.2.2.3 Figure 5.3.3 below shows the information in the panel safety.

**Figure 5.3.3**  
**SECURITY PANEL**

Information in Security Panel, where applicable

\*\*\* Number of risk

\*\*\*\* UN number

**5.3.3 Other applicable symbols**

**5.3.3.1 *Symbol for the transport of substances at high temperature***

5.3.3.1.1 Vehicles or road transport equipment loaded with a substance in a liquid state, which is transported or offered for transport to a temperature less than 100 ° C, or a substance in solid state at temperature less than 240 ° C, must possess, on both sides, the front and back, the symbol shown in Figure 5.3.4. This symbol, triangular, must be color red and have at least 250 mm side.

5.3.3.1.2 Vehicles or railway equipment loaded with a substance in a liquid state, which is transported or offered for transport to a temperature less than 100 ° C, or a substance in solid state at

temperature less than 240 ° C, must possess, on both sides indicated symbol Figure 5.3.4. This symbol, triangular, should be red in color and have at least 250 mm side.

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**Figure 5.3.4**  
**SYMBOL FOR SUBSTANCE TRANSPORT HIGH TEMPERATURE**

**5.3.3.2**            *Symbol for substances which present risk to the environment*

**Notice:**            *Will be accepted in land transport equipment to and from ports containing hazardous products classified in Classes 1 to 9 (in addition to paragraph UN 3077 and 3082), which are considered "marine pollutants" as laid down in IMDG Code International Maritime Organisation (IMO), carrying the pollutant mark marine, equivalent to the symbol shown in Figure 5.2.2.*

5.3.3.2.1            Vehicles or road transport equipment loaded with hazardous substances into the environment, that meet the criteria of item 2.9.3 (ONU 3077 and 3082 numbers) must display the symbol shown in Figure 5.2.2, the two ends and on both sides, allowing viewing by all people involved the loading or unloading operations. This sign shall be at least 250 mm side.



5.3.3.2.2 Vehicles or railway equipment loaded with hazardous substances into the environment, that meet the criteria of item 2.9.3 (ONU 3077 and 3082 numbers) must display the symbol shown in Figure 5.2.2, the two side, allowing viewing by all people involved in cargo operations or unloading. This sign shall be at least 250 mm side.

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## CHAPTER 5.4

### DOCUMENTATION

*Note 1: References to documents in this regulation does not prevent the use of transmission of electronic data processing techniques (PED), or exchange Electronic Data (FDI), as an aid to conventional documentation.*

*Note 2: For electronic surveillance purposes, the information required in section 5.4 should be included in the fiscal document for electronic transport, where applicable.*

#### **5.4.1 Information for the transport of dangerous goods**

##### **5.4.1.1 General provisions**

5.4.1.1.1 Except as otherwise provided in this Regulation, the consignor shall provide the carrier with information about the hazardous material transported beyond any additional information or documentation required in this Regulation. At information may be provided, as specified in this Regulation, in documentation required for transport or, in agreement with the carrier, by electronic data processing or electronic data interchange.

5.4.1.1.2 When the information to the transport is provided by electronic data processing and electronic data interchange, it should be possible reproduction without delay information on a paper document, and the

required sequence for the information should remain in accordance with the requirements in this Chapter.

#### **5.4.1.2 Information on the tax document for the carriage of dangerous products**

5.4.1.2.1 For purposes of this Regulation, tax document for the transport of products dangerous is any document (load statement, invoice, knowledge transportation, cargo manifest, auxiliary documents of electronic documents, or other document accompanying the shipment) that contains all the information required items 5.4.1.3 to 5.4.1.6 and statements required in section 5.4.1.7.

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5.4.1.2.2 Information relating to dangerous products contained in the document tax for transport must be easy to identify, legible, durable and letters uppercase or lowercase.

*Note :* When computerized systems are used to fill the tax document for transport, information can also be displayed without Graphic accentuation.

5.4.1.2.3 Not require separate tax document for dangerous goods when an expedition contains both hazardous and non-hazardous products, and there is no restriction as the number of descriptions of the individual hazardous goods which can appear in the same document.

5.4.1.2.4 If a Tax Document list so as not hazardous products dangerous, dangerous products must be listed first or be emphasized in other way.

5.4.1.2.5 The name, address, CNPJ / CPF of the consignor and the consignee of the goods dangerous must appear on the tax document for the transport of dangerous goods, as well as the date on which the document was issued or delivered to the carrier.

**5.4.1.3**                    ***Information required in the tax document for the transport of products dangerous***

**5.4.1.3.1**                *Description of hazardous products*

The tax document for the transport of dangerous goods must contain for each substance, product or article to be transported, the following information:

- a) the UN number, preceded by the letters "UN" or "UN";

*Note: It is exempted use of the letters "UN" or "UN" in cases the use of electronic document with fields nominally specified.*

- b) the proper shipping name, as provided in Section 3.1.2;

- c) the main risk class number or, where applicable, the Product Risk subclass, accompanied to the Class 1, letter corresponding to the Compatibility Group. The words "Class" or

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"Subclass" can be included before the class number or Subclass the main risk;

- d) where applicable, Class number or subclass of risk corresponding subsidiaries, figured in brackets after Class number or subclass of the main risk. The words "Class" or "Sub" can be included before the numbers Class or Subclass Subsidiary risk;

- e) the packing group corresponding to the substance or article, may It is preceded by the letters "GE" (eg, "EG II") when appear in Column 6 of the Dangerous Goods or any provision Special;

- F) the total quantity of dangerous goods covered by the description (in volume, mass, or net explosive content, as appropriate). In the case of shipment with quantities limited by

vehicle tax document should inform the gross weight of the product expressed in kg.

5.4.1.3.1.1 The transport of empty cylinders and not clean that contained the product dangerous LPG (ONU 1075 number), coming from residential collection, is exempt from presentation of fiscal document only on the path between the consumer's residence and storage centers distributors, subject to the rules governing the distribution service and marketing of the product, established by the authority competent.

5.4.1.4 *Following information from the description of dangerous goods*

The information in the description of the dangerous goods must be submitted, no other additional information filed in the sequence given in item 5.4.1.3.1 of (a) to (E), and the information required in paragraph (f) can be inserted in own field tax document, if any, separated from the rest of the product description information, except as otherwise provided in this Regulation.

The following are examples of descriptions of dangerous products:

**UN 1098 ALLYL ALCOHOL 6.1 (3) I 1000 kg**

**UN 1098, ALLYL ALCOHOL, Division 6.1, (Class 3), GE I 1000 kg**

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5.4.1.5 *Additional information to the proper shipping name in description of dangerous goods*

In the description of dangerous goods, the proper shipping name should be supplemented by the following information:

- a) technical names for the designations "not otherwise specified - (NE) "and" generic ", to which are assigned the Provisions Special # 274 and # 318, in column 7, the Product Relationship Dangerous, as provided in Section 3.1.2.8;
- b) the word "**WASTE**" preceding the proper shipping name of waste dangerous goods (other than those of Class 7)

transported for disposal purposes / or disposal procedures to discard / disposal, unless the same is already part of the proper shipping name;

- c) the word "**HOT**" immediately after the proper name for shipment of a substance transported or offered for transport in a liquid state at a temperature equal to or higher than 100 ° C, or solid state at a temperature not exceeding 240 ° C, unless already is indicated at elevated temperature condition (for example, using the term "**MOLTEN**" or the expression "**TEMPERATURE HIGH** ") as part of the proper shipping name.

#### **5.4.1.6** *Additional information for description of dangerous goods*

Besides the description of the dangerous products, the following information must be included in the fiscal document for the transport of dangerous goods:

##### **5.4.1.6.1** *Total quantity of dangerous goods*

Except for empty and not cleaned packaging, it must be included with total amount (by mass or volume, as appropriate) of each dangerous product referred to in the description to present a proper shipping name, UN number Packing or a different group. For Class 1 products, the amount should be expressed in net mass of explosives. In the case of shipment with quantity limited by vehicle, the fiscal document should inform also exemptions for purposes

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provided for in Chapter 3.4, the total gross weight of the product (the sum of the weight of the package and weight of the contained product) expressed in kilograms. In the case of hazardous products Rescue transported in containers must be made for inclusion, one estimating the amount of hazardous material, further indicating the number and type of each one of the volumes (eg drum, box, etc.). UN designation codes can be used only to complete the description of the type of volume (for example, a

box (4G)). Abbreviations can be used to indicate the unit of measure total amount.

5.4.1.6.2 *limited quantities*

When they are transported dangerous goods in limited quantities, according to the provisions of items 3.4.2 and 3.4.3, should be included in the description of products in Fiscal Document, with the proper shipping name, one of the following words "**limited quantity**" or "**QTY. LTD**".

5.4.1.6.3 *rescue packages and containers under redemption pressure*

When they are transported dangerous goods in a packaging redemption or in a container under redemption pressure, one of the expressions "**VOLUME RESCUE**" or "**CONTAINER IN RESCUE PRESSURE**" should be added to description of products in Fiscal Document, as applicable.

5.4.1.6.4 *Substances stabilized by temperature control*

If the word "**INHIBITED**" part of the proper name for shipment (see section 3.1.2.6), and when stabilization is made by control temperature, both the temperature control as the emergency (see item 7.1.5.3.1) must appear on the Fiscal Document for the transport of hazardous products follows:

**"Control temperature: .... ° C Emergency : .... ° C"**

5.4.1.6.5 *autorreagentes substances and organic peroxides*

For autorreagentes substances of Class 4.1 and peroxides organic that require temperature control during transport, the Fiscal Document for the transport of dangerous goods should indicate the control temperatures and emergency (see section 7.1.5.3.1) as follows:

**"Control temperature: .... ° C Emergency: .... ° C"**

5.4.1.6.5.1 For certain autorreagentes substances of Class 4.1 and certain peroxides Organic Division 5.2, where the competent authority to allow the label dispensing

the subsidiary risk on "EXPLOSIVE" (model No. 1) for a specific volume, Fiscal document shall contain a statement under: "exempted from risk label

Subsidiary explosive. "

5.4.1.6.5.2 When a sample of autorreagente substance is transported (see item 2.4.2.3.2.4 (b)) or organic peroxide (see item 2.5.3.2.5.1), the proper name for boarding the Fiscal document must be accompanied by the word "**SAMPLE**".

5.4.1.6.6 *infectious substances*

The tax document must contain the full address of the recipient, the name and telephone number of a responsible person.

5.4.1.6.7 *radioactive Material*

Additional information to be provided by the consignor and other transport documents and requirements are set out in resolutions of CNEN.

5.4.1.6.8 *Transport of solids in bulk containers*

In the case of bulk containers other than containers, the following indication shall be included in the Fiscal document (see section 6.8.4.6):

**"Container BK bulk (x) approved by the competent authority of ..."**

5.4.1.6.9 *IBC's transportation or Portable tanks after the last expiration date periodic test or inspection*

For transportation in the terms established in paragraphs 4.1.2.2 (b), 6.7.2.19.6 (b) 6.7.3.15.6 (b) or 6.7.4.14.6 (b), the tax document for the transport of dangerous goods It should contain a reference to this situation as follows: "Transport agreement with 4.1.2.2 item (b) ", " Transport in accordance with item 6.7.2.19.6 (b) ", " Transport 6.7.3.15.6 according to item (b) " or " Transport according to item 6.7.4.14.6 (b) ", as applicable.

5.4.1.6.10 *Firework classification reference*

When fireworks allocated to UN numbers 0333, 0334, 0335, 0336 and 0337 are transported, the tax document for the transport of dangerous goods must contain a rating of reference issued by the competent authority (Ministry of

Defense - Army Command).

#### 5.4.1.6.11 Empty containers and not cleaned

To empty and not cleaned packaging, hazard classes or subclasses the originally contained products should be added after product description Fiscal Document, as the following example:

### **UN 3509 EMPTY CONTAINERS, NOT CLEAN, 9, (3, 4.1, 6.1)**

#### **5.4.1.7 Declaration Shipper**

**Notice:** *For certain products, in addition to the declaration of the Shipper, other statements may be required in this Regulation.*

5.4.1.7.1 The tax document for the transport of dangerous goods issued by consignor must also contain, or be accompanied by the statement that the product is properly packed and stowed to support the normal risks of a dispatch and that meets the regulations. The text for this statement should be the next:

*"I declare that hazardous products are properly classified, packaged, marked, and stowed to bear the risks of the transport operations and that meet regulatory requirements. "*

5.4.1.7.1.1 For dangerous goods shipments that meet the provisions of section 3.4.5, the statement required in item 5.4.1.7.1 must be supplemented with additional information there is no risk of contamination between hazardous and non-hazardous.

5.4.1.7.2 The Declaration must be signed and dated by the consignor, and must contain information to enable the identification of the responsible for the issue (eg, RG number, CPF or CNPJ), except when presented in printed document Supervisor.

5.4.1.7.3 In the case of export or import, as the Shipper's Declaration for presented in a different language Portuguese, it must be accompanied by a translation to Portuguese.



**5.4.1.8 additional documentation**

5.4.1.8.1 In addition to the tax document for the transport of dangerous goods, containing the information required in section 5.4.1.2, and the statement required by paragraph 5.4.1.7, vehicles or load carrying equipment that is transporting products dangerous can only circulate through the roads accompanied by the following documents:

The) original certificate of inspection of vehicles and road equipment for the carriage of dangerous goods in bulk (Inspection Certificate the Transportation of Dangerous Goods - CIPP and Vehicle Inspection Certificate - CIV) issued by the National Institute of Metrology, Standardization and Industrial Quality - Inmetro or entity accredited by it;

*Note 1: Transportation of bulk hazardous goods, the use of vehicles is admitted and transport equipment that have inspection certificate internationally accepted and within the expiration date, in accordance with the International Convention for the Safety Containers and Ordinances Inmetro governing the certification of such equipment.*

*Note 2: original factory road vehicles (0 km), which have not undergone any modifications of its original features, be exempt from the initial vehicle inspection, as well as the required size of the Vehicle Inspection Certificate - CIV, for a period of twelve months from the date of their acquisition, evidenced by the document purchase tax, as provided in the Regulations governing the Inmetro subject matter.*

B) document proving the qualification of the driver , provided in traffic law, attesting to the approval specialized course for drivers of road transport vehicles of dangerous goods;

w) Emergency Sheet with product information, so that helps the care actions in the event of any accident or incident, containing instructions provided by the shipper, according to information provided by

manufacturer or importer of the load, which more clearly concisely:

- (I) the nature of the risk posed by dangerous products transported and the emergency measures;

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- (ii) the provisions apply if a person contact the transported products or substances which may come off them;
- (iii) the measures that should be taken in the event of breakage or deterioration containers or tanks, or in case of leak or spill of hazardous products transported;
- (iv) in case of leakage or vehicle impediment continue travel, the necessary measures to carry out the transshipment the charge or, where applicable, handling constraints product;
- (v) number of emergency telephones of the fire department, police, civil defense, environmental agency and, where applicable, competent bodies for Classes 1 and 7, along the route;
- (vi) products considered incompatible for transportation purposes.

**Note 1**        *Emergency Card fields must be filled as applicable, the information contained in the Safety Data Sheet Products Chemicals - MSDS mentioned Decree No. 2657 of July 3, 1998 and regulated the Ministry of Labor and Employment - MTE.*

**Note 2**        *In the road transport of dangerous products, Emergency Sheet should They are in the envelope for transport, must be kept on board by the driver vehicle.*

**Note 3**        *The Emergency file should be placed away from packages containing dangerous products in order to permit immediate access in case of an accident or*

*incident.*

**Note 4** *In case of export or import, the Emergency Sheet or instructions written emergency procedures shall be published in the official languages of countries of origin, transit and destination.*

(D) the consignor declaration in the case of transport of dangerous goods subject the Special Provision 223 (see Chapter 3.3) classified by the shipper as non-hazardous for transport after the product testing according to the criteria of the class or subclass set out in this Resolution, dated, signed and containing information

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possible to identify the person responsible for issuance (for example, the number RG, CPF or CNPJ), except when presented in printed Fiscal Document.

*5.4.1.8 Transporting products of UN No. 3528, 3529 and 3530*

For the transport of the products allocated to UN numbers 3528, 3529 and 3530, the transport document, as required under the Special Provision No. 363, should additionally contain the following expression: "Carriage in accordance with set in Special Provision No. 363. ".

## REFERENCES

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**CHAPTER 5.5**  
**SPECIAL PROVISIONS**

**5.5.1** *Deleted*

**5.5.2** **Special provisions applicable to vehicles and equipment fumigated transport (ONU 3359)**

*5.5.2.1 General information*

5.5.2.1.1 Fumigated vehicles and transport equipment (ONU 3359) not containing no other dangerous goods are subject only to the requirements laid this chapter.

5.5.2.1.2 When fumigated vehicles or transport equipment are loaded with dangerous goods in addition to the fumigant product, all other requirements relating to the product (e.g., identification, signaling and documentation) in this Regulation shall apply without prejudice to this

chapter.

5.5.2.1.3 The transport of dangerous goods in vehicles and equipment fumigated transport is permitted only if such units can be closed so that the gas leakage is reduced to a minimum.

5.5.2.2 *Training*

Personnel involved in the operations and handling of vehicles and fumigated transport equipment must be properly trained, as their responsibility.

5.5.2.3 *Symbol for vehicles and equipment transportation under fumigation*

5.5.2.3.1 Fumigated vehicles and transport equipment must carry the symbol shown in Figure 5.5.1, affixed at each access point load compartment so that it becomes easily viewable by people who need to enter the housing fumigated. The symbol must remain posted until the following provisions are met:

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(A) the vehicle or transport equipment has been submitted to adequate and sufficient ventilation for removal concentrations Noxious gases fumigants; and

(B) the products or fumigated materials have been downloaded from vehicle or transport equipment.

5.5.2.3.2 The symbol should be as shown in Figure 5.5.1.

**Figure 5.5.1**

**SYMBOL FOR VEHICLES OR EQUIPMENT TRANSPORT UNDER SPRAYING**

The symbol must have the shape of a rectangle. The minimum dimensions shall be 400 mm in length and 300 mm in height and the width of the outside line to be 2 mm. O symbol must be printed in black on a white background, height of letters not less than 25 mm. When the dimensions are not specified, all characteristics should be in approximate proportion to those shown.

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5.5.2.3.3 If the vehicle spraying or under transportation equipment has been completely ventilated either by opening the compartment, and by after fumigation mechanical ventilation, the date of occurrence of this process should also be marked the symbol.

5.5.2.3.4 After the vehicle or transport equipment have been completely ventilated and unloaded, the symbol should be removed.

5.5.2.3.5 It is precluded risk labels for Hazard Class 9 (Model No. 9, see section 5.2.2.2.2) vehicle or transport equipment under fumigation, unless contains products of this risk class packed in the cargo compartment.

#### 5.5.2.4 Documentation

5.5.2.4.1 The document related to the transport vehicles or equipment transport that has been subjected to fumigation, which have not been fully ventilated before transport shall include the following information:

- "UN" or "UN" 3359, vehicle under fumigation, 9; or "UN" or "UN" 3359, vehicle under fumigation, Hazard Class 9;
- The date and time of spraying; and
- The type and amount of product used fumigant.

5.5.2.4.2 Can adopt any shape allowed for the transport document, provided it contains the information required in item 5.5.2.4.1 legibly, durable and easy viewing.

5.5.2.4.3 The document should also contain information on the possible disposal fumigant product including fumigation devices, when used.

5.5.2.4.4 It is not required the transport document referred to in item 5.5.2.4.1 when the vehicle or transport equipment under fumigation, has been submitted to the full ventilation and the date of this process is displayed in the symbol referred to in item 5.5.2.3.2, subject to the items 5.5.2.3.3 and 5.5.2.3.4.

**5.5.3 Special provisions apply to volumes, vehicles and equipment transport containing substances with risk of suffocation when used for cooling purposes or packaging (e.g. dry ice, UN 1845, or nitrogen, refrigerated liquid, UN 1977; or argon, refrigerated liquid, UN 1951)**

### 5.5.3.1 *Scope of application*

5.5.3.1.1 The following provisions shall not apply to substances that can be used for cooling purposes or packaging when they are being transported as a consignment of dangerous goods.

5.5.3.1.2 The following provisions do not apply to gases used in cycles cooling.

5.5.3.1.3 There also apply the provisions of the following hazardous products used for cooling purposes or packaging of portable tanks or MEGCs during transport.

5.5.3.1.4 Vehicles and transport equipment loaded with substances intended for refrigeration or packaging include those charged with substances intended for refrigeration or packaging in volumes and loaded with substances intended for cooling or conditioning not Packed.

### 5.5.3.2 *General information*

5.5.3.2.1 Vehicles and transport equipment loaded with substances intended for refrigeration or packaging (except the fumigant product) are not subject during transport, the other provisions of this Regulation, except those willing to follow.

5.5.3.2.2 In addition to the provisions in this chapter, when dangerous products They are transported in vehicles and transport equipment loaded with substances intended for refrigeration and packaging, all the provisions applicable to such Products must also be met.

5.5.3.2.3 The personnel involved in handling or in transport operations vehicles and transport equipment loaded with substances for cooling or packaging should receive appropriate training, as their responsibility.



5.5.3.3.1 packaged dangerous goods requiring refrigeration or packaging, and which apply the instructions for packaging P203, P620, P650, P800, P901 or P904, set out in item 4.1.4.1, must comply with the provisions Instructions contained in said appropriate to Package.

5.5.3.3.2 For other hazardous products requiring refrigeration or packaging and which do not apply the instructions referred to in Packaging item 5.5.3.3.1, volumes must be able to withstand low temperatures and can not be affected or significantly weakened by the refrigerant product or acondicionante. Volumes should be designed and constructed so as to allow release gas to prevent a pressure increase that may cause the rupture of the package. Furthermore, dangerous products must be packaged in a manner that prevents any drive after any dissipation of soda or acondicionante product.

5.5.3.3.3 Volumes containing refrigerant product or acondicionante should be transported in properly ventilated vehicles and transport equipment.

*5.5.3.4 Marking for the transport of packages containing soda product or acondicionante*

5.5.3.4.1 Packages containing dangerous goods used as a coolant or acondicionante must carry a marking consisting of the proper shipping name these products followed by the words "AS COOLANT" or "AS ACONDICIONANTE "as appropriate.

5.5.3.4.2 The marking shall be durable, legible, appropriately dimensioned in compared to the volume size and located so as to be clearly visible.

*5.5.3.5 Vehicles and transport equipment containing dry ice product does not packaged*

5.5.3.5.1 In case of using, during transport, dry ice unpackaged not there may be contact of the product with the metal structure of the vehicle or equipment transport mode that avoids metal embrittlement. Measures should be taken to which create adequate insulation between the dry ice and the metallic structure, is promoting a separation of at least 30 mm (for example, using appropriate materials low heat conductivity).

5.5.3.5.2 In the case of the presence of dry ice around the transported packages, measures should be adopted so as to guarantee that the volumes remain in original position throughout transport, even after the dissipation of dry ice.

5.5.3.6 *Symbol for vehicles and transport equipment containing products Hazardous used as a refrigerant or acondicionante*

5.5.3.6.1 Vehicles and transport equipment loaded with dangerous goods intended for refrigeration or packaging must carry the symbol shown in Figure 5.5.2 affixed to each point load compartment access, so that it becomes easily visible for people who need to enter the vehicle or equipment transport. The symbol must remain posted until the following provisions are met:

(A) the vehicle or transport equipment have undergone the adequate and sufficient ventilation for removal concentrations Noxious soda or acondicionante; and

(B) the products or soft materials or have acondicionantes  
It has been downloaded from the vehicle or transport equipment.

5.5.3.6.2 The symbol should be as shown in Figure 5.5.2:

**Figure 5.5.2**  
**SYMBOL FOR VEHICLES CARRYING OR EQUIPMENT CONTAINING**  
**HAZARDOUS OR USED AS REFRIGERANT ACONDICIONANTE**

\* Insert the proper shipping name of refrigerante or acondicionante. Letters must be in capital letters, filling out only one line and should have at least 25 mm high. If the proper shipping name is long, so that does not fit in space available, the letters can be reduced to the maximum possible size that fits this space. For example: CARBON DIOXIDE, SOLID.

\*\* Insert the words "AS COOLANT" or "AS ACONDICIONANTE" as appropriate. The letters must be in capital letters, filling out only one line and should have, at least 25 mm high.

The marking should have the shape of a rectangle. The minimum dimensions shall be 150

mm in length and 250 mm in height. The word "WARNING" must be in colors red or white and must have at least 25 mm high. When dimensions not are specified, all features shall be in approximate proportion those shown.

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**Page 54****5.5.3.7**            *Documentation*

5.5.3.7.1            The tax document for the transport of dangerous goods for the loaded transport vehicle or equipment or which have been loaded with substances intended for refrigeration or preparation, and that has not been completely ventilated before a shipment should include the following information:

(A) the UN number of soda or acondicionante, preceded by the letters "UN" or "UN"; and

(B) the proper shipping name followed by the words "AS COOLANT" or "AS ACONDICIONANTE" as appropriate.

For example: UN 1845 CARBON DIOXIDE, SOLID (DRY ICE)

AS COOLANT.

5.5.3.7.2            The information required in item 5.5.3.7.1 must be legible, durable and easily identified.

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