

OFFICIAL MEXICAN STANDARD
NOM-003-SCT2/1994
CHARACTERISTICS OF THE LABELS OF
PACKAGES AND PACKAGINGS INTENDED FOR THE
TRANSPORT OF HAZARDOUS
MATERIALS AND WASTES.

1. PURPOSE.

This Official Mexican Standard sets forth the characteristics, dimensions, symbols and colors of labels to be displayed by all packages and packagings, which labels identify the risks presented by the hazardous materials and wastes during their transport and handling.

2. APPLICABILITY.

This Official Mexican Standard applies compulsorily to the shippers, transporters and consignees of hazardous substances, materials and wastes which transit through the general lines of land communication.

Packages and packagings of hazardous materials transported in accordance with the provisions of Standard NOM-011-SCT2, "Conditions for the transport of hazardous substances, materials and wastes in limited quantities," need not be labeled.

3. REFERENCES.

To correctly implement this standard, the following Official Mexican Standards must be consulted:

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| NOM-002-SCT2/1994 | LISTING OF THE MOST COMMONLY TRANSPORTED HAZARDOUS SUBSTANCES AND MATERIALS. |
| NOM-004-SCT2/1994 | SYSTEM FOR THE IDENTIFICATION OF UNITS INTENDED FOR THE LAND TRANSPORT OF HAZARDOUS SUBSTANCES, MATERIALS AND WASTES. |
| NOM-010-SCT2/1994 | COMPATIBILITY AND SEGREGATION PROVISIONS FOR THE STORAGE AND TRANSPORT OF HAZARDOUS SUBSTANCES, MATERIALS AND WASTES. |

- NOM-011-SCT2/1994 CONDITIONS FOR THE TRANSPORT OF HAZARDOUS SUBSTANCES, MATERIALS AND WASTES IN LIMITED QUANTITIES. NOM-024-SCT2/1994 SPECIFICATIONS FOR THE CONSTRUCTION AND RECONSTRUCTION, AS WELL AS METHODS OF TESTING OF PACKAGES AND PACKAGINGS FOR HAZARDOUS SUBSTANCES, MATERIALS AND WASTES.
- NOM-EE-59 PACKAGE AND PACKAGING - SYMBOLS FOR HANDLING, TRANSPORT AND STORAGE.
- NOM-CRP-001/ECOL WHICH SETS FORTH THE CHARACTERISTICS OF HAZARDOUS WASTES, PROVIDES A LISTING OF SAID HAZARDOUS WASTES, AND ESTABLISHES THE LIMITS AT WHICH A WASTE BECOMES HAZARDOUS BY VIRTUE OF ITS ENVIRONMENTAL TOXICITY.
- NOM-CRP-003/ECOL WHICH SETS FORTH THE PROCEDURE FOR DETERMINING THE INCOMPATIBILITY BETWEEN TWO OR MORE WASTES CONSIDERED TO BE HAZARDOUS UNDER OFFICIAL MEXICAN STANDARD NOM-CRP-001-ECOL/1993.

4. DEFINITIONS.

- 4.1 Package.- Any receptacle or vessel in which the product is contained for the purpose of its distribution or sale.
- 4.2 Packaging.- Material which duly surrounds, holds or protects products already placed into packages, which packagings facilitate and withstand the storing and transport operations.
- 4.3 Preponderance.- Greater risk of a substance in relation to another.
- 4.4 System of Identification for Units Intended for the Land Transport of Hazardous Materials and Wastes.- A form of graphic visual expression involving rhombuses containing: symbols, numbers, letters or texts for identifying the hazardous material or waste transported in its package or packaging.

- 4.5 Label.- Any written, printed or graphic visual or affixed sign or symbol which indicates, by means of an interpreting code, the contents, handling, risk and dangerousness of hazardous materials and wastes.
- 4.6 Symbol.- A simple image which shows in graphic, easily-interpreted form, the meaning of the type of risk of the hazardous material.

5. CLASSIFICATION.

The symbols used for the identification of risks involved in the land transport of hazardous Materials and wastes, as indicated in this Standard, are in accordance with the classification set forth in articles 7 through 16 of Chapter I of Title One of the Regulation regarding the Land Transport of Hazardous Materials and Wastes.

6. GENERAL PRINCIPLES.

All packages and packagings intended to transport hazardous materials or wastes whose net mass or capacity does not exceed 400 kg or 450 liters, respectively, must display an adhesive or printed label or labels (primary or secondary, as the case may be) making it possible to easily identify, by visual scanning, the risks associated with the material or waste inside the package and packaging.

6.1 The labels have the following purposes:

- a) To recognize, from the general aspect of their color, shape and symbol, packages and packagings holding hazardous materials and wastes;
- b) To identify the nature of the potential risk of the hazardous material or waste by the means of symbols.

The five basic symbols of labels, and their four secondary symbols, together with their corresponding meanings, are as follows:

BASIC SYMBOLS

- Bomb (explosion hazard)

- Flame (fire hazard)
- Skull and crossbones (poisoning hazard)
- Schematized trefoil (radioactivity hazard), and
- Liquids dripping from two test tubes onto a hand and a metal plate (corrosion hazard)

COMPLEMENTARY SYMBOLS

- Flame over a circle (oxidizers or organic peroxides).
- Gas cylinder (compressed non-flammable, non-toxic gases).
- Three crescents over a circle (infectious substances).
- Seven vertical stripes (miscellaneous hazardous substances).

- c) To prevent [sic], in handling and stowing of the materials by means of label colors, a useful first orientation [sic] for handling and stowage. [sic]

6.2 Characteristics of labels.

The placement of labels shall not [be such as to] cover, for any reason whatsoever, the markings of the package and packaging[. Furthermore, they must be close to these markings [--] 150 mm (6 inches) is the recommended distance from the markings[. Likewise, the labels shall be placed on both visible side faces of the package and packaging or [outside] container.

- 6.2.1 They must be square, with minimum side dimensions of 100 mm x 100 mm, except in the case of the packages and packagings with dimensions such that they can only display smaller labels with opposite vertices in vertical position in the form of a diamond or rhombus, with a line

of the same color as the symbol, at 5 mm from the outer edge and parallel to it (see Figure No. 1).

- 6.2.2 The labels are divided into two halves. With the exception of Divisions 1.4, 1.5 and 1.6, the upper half of the label is reserved for the symbol and the lower half for the class or division number and, if appropriate, the compatibility group letter. The text corresponding to the risk is optional.

- 6.2.3 Except in the case of Divisions 1.4, 1.5 and 1.6, labels for Class 1 show, in their lower half, the division number and compatibility group letter of the substance. Labels for Divisions 1.4, 1.5 and 1.6 show, in their upper half, the division number, and in their lower half, the compatibility group letter. For Division 1.4, Compatibility Group "S", no label whatsoever is required.
- 6.2.4 In the case of primary risk labels for Class 5, the division number of the substance must be shown in the bottom corner of the label. For all other primary risk labels, the class number of the substance shall be indicated in the bottom corner of the label. Models of the primary risk labels corresponding to each class are illustrated in Annex No. 2.
- 6.2.5 Blank spaces in the text that appear in the lower half of the labels for Class 7 substances must be completed with the indicated data before the products are transported.
- Empty Class 7 receptacles which are transported must be identified with a label showing the name of "**Empty**", as is indicated in Figure 3[;] its dimensions must be 135 mm per side or it must be fully proportional to the size of the package and packaging.
- On labels which do not correspond to Class 7 substances, the space located below the symbol must not show, apart from the class or division number, any text other than the indications regarding the nature of the risk and precautions to be taken in handling.
- 6.2.6 The symbols, texts and numbers must be printed in black in all labels, except:
- a) the Class 8 labels, where the text (if any) and class number must appear in white, and
 - b) labels with an entirely green, red or blue background, where they may be shown in white.

- 6.2.7 All labels must be highly resistant so as not to become substantially discolored or misshaped during normal usage, in order to avoid the deterioration of the information contained in said labels.
- 6.2.8 Labels must be affixed onto a surface of a color contrasting with the color of said labels.
- 6.2.9 As regards gas cylinders or bottles containing Class 2 gases, and considering their shape, as well as their position and their securing devices during transport, the labels may be, without departing from the models described in this Standard, of a reduced size in the appropriate proportion, and they shall be affixed in the non-cylindrical part (in the shoulder) of said bottles.
- 6.2.10 Placement of the labels shall not [be such as to] cover, for any reason whatsoever, the markings of the package and packaging[. Furthermore, they must be close to these markings, for which 150 mm (6 inches) is the recommended distance. Likewise, the labels shall be placed on both visible side faces of the package and packaging or [outside] container.

6.3 Secondary Risk Labels

- 6.3.1 When a substance or material presents more than one major risk (for example, a fire risk and a poisoning risk), the package and packaging shall display, in addition to the label corresponding to the primary risk, secondary labels indicating the major secondary risks.

The labels shall at all times correspond to the hazardous material or waste to be transported.

When these are substances which are included by name in Official Mexican Standard NOM-002-SCT2, it shall be necessary to affix a label indicating the risk referred to in the "class or division" column, and a secondary risk label indicating the risk to which it belongs with a class or division number [missing words] is referred to in the secondary risk column.

- 6.3.2 In the specific case of class 2 substances which meets [sic] the definition of more than one class which is not expressly mentioned in Standard NOM-002-SCT2, the primary risk class of the substances must be determined in accordance with Table No. 4 which presents the order of preponderance of the risk characteristics. In addition to the label required for that primary risk class, the package and packaging must display the corresponding secondary risk labels in accordance with Figure No. 4.
- 6.3.3 For Class 8 substances, no Division 6.1 secondary risk label is required, if their toxicity arises solely from the destructive effect on live tissues. For substances of Division 4.2, no Division 4.1 secondary risk label is required.
- 6.3.4 Provided that the package and packaging displays labels indicating the secondary risk, only the package and packaging [sic] which identifies the primary risk of the substances must show, in its lower vertex, the class or division number, as appropriate, while the packages and packagings which identify the secondary risks must not show any division number or class whatsoever.
- 6.3.5 For Class 2, three (3) different labels have been provided: one for flammable gases of Division 2.1 (red), another for non-toxic, non-flammable gases of Division 2.2 (green), and another for toxic gases of Division 2.3 (white).

Where the list of hazardous substances indicates that a Class 2 gas offers one or several secondary risks, the labels indicated in Table 1 shall be used. In all cases, the primary risk label indicated in the third column of said table must be adjusted to the models reproduced in Figure No. 2.

TABLE 1
LABELS FOR CLASS 2 GASES
WITH SECONDARY RISKS

| Division | Secondary risk(s) indicated in Standard NOM-002-SCT2/1994 | Primary risk label (with Class 2 number in lower corner) | Secondary risk label(s) |
|----------|---|--|-------------------------|
| 2.1 | None | 2.1 | None |
| 2.2 | None | 2.2 | None |
| | 5.1 | 2.2 | 5 |
| 2.3 | None | 2.3 | None |
| | 2.5 | 2.3 | 3 |
| | 5.1 | 2.3 | 5 |
| | 5.1, 8 | 2.3 | 5, 8 |
| | 8 | 2.3 | 8 |
| | 2.1, 8 | 2.3 | 3, 8 |

6.4 Labelling for handling and storing.

The previous specifications essentially refer to labels which indicate risks. However, the packages and packagings may display, if appropriate, additional labels with other marks or symbols indicating the precautions to be taken in handling or storing a package or packaging (for example, a symbol representing an umbrella to indicate that the package or packaging must be kept dry), handling label for orienting the package and packaging. These labels, as well as their symbols and captions, must [conform to] the provisions of Official Mexican Standard NOM-EE-59 now in force.

6.5 Labels for mixed and consolidated packages and packagings.

- 6.5.1 Mixed Packages and Packagings.- When packing and packaging hazardous materials and wastes which are compatible, but which fall under different classes of hazard, within the same package or within the same outside container or overpack[, said] package, outside container or overpack shall display the various corresponding primary and secondary labels[;] that is, it must be labeled as required for each class of hazardous material contained therein.
- 6.5.2 Consolidated Packaging.- When two or more packages and packagings containing a compatible hazardous material or waste are placed within the same outside container or overpack, the outside container or overpack must be labeled as required for each class of hazardous material contained therein.