

Number: 04/2012/TT-BCT

*Ha Noi, Day 13 month 02 2012*

## **CIRCULAR**

### **Stipulating the regulations on classification and chemical labeling**

Pursuant to Decree No. 189/2007/ND-CP dated December 27, 2007 of the Government defining the functions, tasks, powers and organizational structure of the Ministry of Industry and Trade ; Decree No. 44/2011/ND-CP of June 14, 2011 of the Government amending and supplementing Article 3 of Decree No. 189/2007/ND-CP;

Pursuant to the Law on Chemicals November 21, 2007;

Pursuant to Decree No. 89/2006/ND-CP of August 30, 2006 of the Government on the product label; Circular 09/2007/TT-BKHCN April 6, 2007 of the Ministry of Science and Technology guiding the implementation of some articles of Decree No. 89/2006/ND-CP;

Minister of Industry and Trade stipulated the classification and labeling of chemicals according to Global Harmonised System as follows:

### **Chapter I**

#### **General Provisions**

##### **Article 1. Scope**

1. This Circular guides classification and labeling of chemicals produced or imported for circulation in Vietnam.

2. The following chemicals are outside the scope of this Circular:

a) Temporary import chemicals for re-export or temporary import for participation in trade fairs, exhibitions and then re-export, transit and transfer gate chemical; non-commercial import chemicals, chemicals in the process of study at research and production institutions; chemicals for production, import for security, defense, disaster response, emergency disease response or other special cases ;

b) Chemicals as gifts or donations; luggage of people on exit;

c) Chemical under the jurisdiction of the Ministry of Science and Technology, Ministry of Health, Ministry of Agriculture and Rural Development.

##### **Article 2. Objects for application**

Organizations and individuals in Vietnam and overseas manufacturing, franchise production, processing, cassava, repackaging (hereinafter referred to as manufacturing), business, importing chemicals in the territory of Socialist Republic of Vietnam.

### **Article 3. Term definitions**

In this circular, the following terms shall be interpreted as follows:

1. Globally Harmonized System of Classification and Labeling of Chemicals (hereinafter referred to as GHS) is a system of UN guiding classification and labeling of chemicals.

2. Chemical as a single, compound or mixture substance created or exploited by humans from natural materials, synthetic materials specified in Clause 1, Article 4 of the Law on Chemicals.

3. Substance is a single, compound substance or even impurity created in process of manufacturing; additives essential for warranting stably physical or chemical properties, except solvents when split its nature is unchangeable as stipulated as in Article 1, Part 4, Law of Chemical.

4. Mixture includes two or more substances having no mutual chemical reactions in normal condition as Article 3, Part 4, Law of Chemical.

5. Dangerous chemical is the chemical specified in Article 4, Part 4, Law of Chemical and having one or some of dangerous as the principle of GHS

- a) Easily explosive
- b) Strongly oxidizing;
- c) Strongly corrode;
- d) Flammable;
- e) Acute toxicity;
- f) Chronic toxicity;
- g) Irritation to humans;
- h) Causing cancer or risk of causing cancer;
- i) Causing genetic modification;
- k) Toxicity to reproduction;
- l) Bioaccumulation;
- m) Persistent organic pollution;
- n) Toxicity to environment.

6. Chemical label is written text, prints, drawings of letters, drawings, photographs, signs are imprinted or embossed directly or affixed, attached firmly on commercial packages to show the necessary information about the chemical and mainly help people know and use as the basis for the authority to inspect, supervise and manage.

7. Labeling of chemicals is to reflect the basic and necessary content on chemical to help the consumer know, select, consume and use; to let the producer and traders promote their goods and to let the authorities implement the inspection and control.

8. Original label of chemical is the first label printed, affixed or attached firmly on commercial packaging of chemicals after completing operations in the packaging production lines.

9. Additional labels are labels to show the required content translated from original labels in foreign languages into Vietnamese and added additional content required in Vietnamese under law which the original label misses.

10. Packaging of chemicals contains chemicals, along with chemical circulation and consists of two types:

- a) Direct packaging contacting directly with chemicals;
- b) Outer packaging used to package one or more units of chemical having direct packaging.

11. The name and address of the organization or individual taking responsibility for the chemical is the name and address of the organization or the individual producing, importing chemicals.

12. Production date is the day when process of producing, bottling, packaging is completed or other forms to complete the final stage of the range of chemicals.

13. Expiration date (or using time limit) of the chemical is the time line defined for a range of chemicals which after this time, these chemicals are not allowed to use.

14. Circulation of chemical is to display, transport and store chemicals in the process of buying and selling chemicals, except for the cases provided for in Article 11 of this Circular.

**Article 4.** Accountability on classification and labeling of chemicals

1. Organizations and individuals producing or importing chemicals are responsible for labeling chemicals before putting chemicals in use and circulation on the market, unless otherwise provided for in Article 11 of the draft circular and accountable for classifying chemicals according to the provisions of Chapter II of this Circular.

2. Chemical imported into Vietnam with original inconsistent labels with the provisions of this Circular, the importer have to make additional labels before putting into circulation and to keep the original label. Content noted on additional labels must comply with the provisions of this Circular.

3. Organizations and individuals producing or importing chemicals must comply with the provisions of the law on intellectual property and is

responsible before the law on the issue of intellectual property for the content of the label.

## **Chapter II**

### **CHEMICAL CATEGORY**

#### **5. Classification of chemicals as hazardous material**

**1.** Hazardous materials are classified according to the chemical group and the following characteristics:

- a) Explosives;
- b) Flammable gases;
- c) Flammable Aerosol;
- d) Oxidizing gases;
- e) Pressurized gas;
- f) Flammable liquids;
- g) Flammable solids;
- h) Self-reactive compounds;
- i) Liquid leads fire;
- k) Solid leads fire;
- l) Solids spontaneous heating;
- m) The spontaneous heating;
- n) Compounds creat flammable gases when in contact with water;
- p) Oxidizing liquids;
- q) Oxidizing solids;
- r) Organic peroxides;
- s) Metal corrosion.

**2.** Details and criteria for classification of hazard specified in Appendix 1 to this Circular.

**Article 6.** Classification of chemicals according to their hazard level affect human health and the environment

#### **1. Harmful effects on humans**

- a) Acute toxicity;
- b) Skin corrosion;
- c) Injury to the eye;
- d) The sensitivity of the respiratory or skin;
- e) Ability to germ cell mutagens;
- f) Ability to cause cancer;
- g) Reproductive toxicity.

#### **2. Harmful effects on the environment**

- a) Water Environment;
- b) Effect on the ozone layer.

3. Details and criteria for classification of hazard specified in Appendix 2 to this Circular.

### **Chapter III**

#### **CHEMICAL LABELING**

##### **Article 7. Position for chemical labels**

Position for chemical labels made under the provisions of Paragraph 1 of Article 6 of Decree No. 89/2006/ND-CP. Labels must be printed, affixed or attached on packaging of chemicals with locations helping consumers easily recognize label's content.

##### **Article 8. Size of chemical label**

Organizations and individuals that manufacture or import chemicals take responsible for the labeling and self-determining size of label, but the size of the label must be fully recorded content required under the provisions of Section 1 of Chapter III of this Circular and easily know the content with emmetropic eyes.

**Article 9. Colors of letters, symbols and pictures on the label of chemicals**

1. The color of the letters, numerals, drawings, photographs, signs, symbols labeled have to be clear. For the content required by the regulations, letters, numerals must have color contrast against the background color of the label in accordance with Article 8 of Decree No. 89/2006/ND-CP.

2. In case of not showing contrast color of letters, numerals, the letters, numerals have been casted, imprinted or embossed clearly.

##### **Article 10. Language presented on the label chemicals**

1. The content shown on the label required chemicals must be in Vietnamese, except as provided for in Clause 4 of this Article.

2. Chemicals produced and circulated in the country, in addition to the implementation of the provisions of paragraph 1 of this Article, the content shown on the label can be recorded simultaneously in another language. Content written in other languages have to be corresponded to Vietnamese content. Size of another language is not greater than the font size of the content in Vietnamese.

3. Chemicals imported into Vietnam which is not shown on the original label or not to show all contents required by Vietnamese must have additional label to show the contents prescribed in Article 12 of this Circular in Vietnamese and keep the original label of chemicals.

4. The following content may be in the original language with Latin letters must be truthful, clear, accurate and reflect the true nature of the chemical:

a) International nonproprietary name or scientific name of the component, the component of the chemical can not be translated into Vietnamese or with translation but no meaning.

b) Name and address of foreign companies manufacturing, franchising to manufacture chemicals.

**Article 11.** Cases inapplicable with labeling chemicals

1. The cases referred to in paragraph 3, paragraph 4 of Article 5 of Decree No. 89/2006/ND-CP.

2. Chemicals for import are in transit from customs gate to warehouse kept of organizations and individuals producing or importing ,chemicals label at least have to include : code for chemical identity; warning map , warning words, risk warning.

3. Chemicals are in transit from the production facility to storage locations, storage locations that store and preserve are in rights of the management of the same organization or individual producing chemicals.

4. Chemicals haven't yet completed the packaging step in the production line at the manufacturing facility.

**Section 1**

**CONTENT OF LABEL**

**Article 12.** Compulsory contents must be shown on the label chemicals

The compulsory content made under the provisions of Clause 48, Article 12 of Decree No. 89/2006/ND-CP and the provisions of the GHS include:

1. Chemical name.
2. Code for chemical identity..
3. Warnings image , warning words
4. Precautions.
5. Quantification.
6. Component or component quantity
7. Date of manufacture.
8. Expiry date (if applicable).
9. Information on manufacturers, importers, distributors.
10. Origin.
11. Guides for using and preserving

**Article 13. Responsibilities of additional labels**

The content on the additional label must not misrepresent the content of the original labels as specified in Article 12 of this Circular. In case of adding compulsory content that is missed on original label, organizations, individuals labeling must take responsibility before law for the accuracy and truthfulness of content added.

**Article 14.** Other information shown on the chemical labels

In addition to the required content specified in Article 12 of this Circular, organizations and individuals producing or importing chemicals may add other content to the label. The content has to ensure the truthfulness and accuracy, not to mislead the chemical properties, do not misrepresent the content required on the chemical labels . Other content may be recorded in Safety sheet or in guideline sheet..

**Article 15.** Cases when transporting chemical labels

1. Chemicals in circulation, except for the cases specified in Article 11 of this Circular, transporting chemicals must have label with Article 12 of this Circular and warnings map under Appendix 3 to this Circular.

2. Warning map of chemical transport must be made directly on the packaging for chemicals having no external packaging. Warning image of chemical transport must be placed on the outside packaging in case the chemicals have direct packaging and outside packaging.

**Section 2**

**CHEMICALS LABELIN METHOD**

**Article 16.** Way to record compulsory contents on the chemical labels.

- Chemical name

Chemical name is called by manufacturers under common name, trade name or other name on the label chemicals. Some chemicals that organizations, individuals regard as secret can be labeled with the general international name.

For example, a write-chemicals:

By IUPAC Name: n-Butyl Acetate

Trade Names: Normal Butyl Acetate

Other name (not the scientific name): NBAC

2. Code for Chemical Identification

a) Chemical identification codes must be used on the chemical labels and it must match the symbols on the safety sheet called Material Safety Data Sheet (MSDS for short);

b) Labels for a compound must show the chemical identity of the compound. When contributing to the risk of acute toxicity, skin corrosion or serious eye damage, germ cell mutations, cancer, reproductive toxicity,

skin or respiratory sensitivity shown on the label, the information for mixture or alloy must show identification of all chemical ingredients or alloying elements can cause these risks on the label. Where necessary, the competent authority may require to put onto the label all the ingredients or alloying elements contributing to the risk of a mixture or alloy.

### 3. Warning images , warning words, hazard warning

a) Organizations and individuals producing or importing must have appropriate warning images, warning words and hazard warning according to the provisions of Annex 1 and Appendix 2 of this Circular;

b) Warning images supply information to help the users understand exact the content of chemical labels. Warning images in more detailed are specified in Appendix 4 to this Circular.

For example, warning images: Image "fire" on the package directly warn one of the following chemicals:

- Flammable substances;
- Self-reactive substances;
- Quality pyrophoric, self-led fire;
- Quality spontaneous heating;
- Substances reacting with flammable gas;
- Organic peroxides.

c) Warning words are used to indicate the correspond degree of risk and warn readers about the potential risks on the label. Warning words are shown in lowercase letters, uppercase letters or bold tall letters not less than 2 mm. Warning words used in the GHS include words : ‘Danger’ is used for more serious level (eg in the main part of the risk levels 1 and 2); ‘Warning’ is used for less dangerous level;

c) Warning level of risk represents the risk, describes the nature of chemical risk. Content for warning is printed in capital letters or letters with a height of not less than 2 mm.

For example, flammable gases are classified and has the correspond warning images, warning words as follows :

	<b>Level 1</b>	<b>Level 2</b>
Warnings image	Flame	There is no graphical
Warning word	<b>Danger</b>	<b>Warning</b>
Warnings	Highly flammable gas	Flammable gases

### 4. Precautions

Precautions are represented by specific information or images to describe recommendations implemented to minimize or prevent adverse effects from exposure to hazardous chemicals.



For example: way to record recommendation for HI-URETHAN LV17 as follow:

Precautions:

- See special instructions before use.
- If swallowed: require medical assistance immediately.
- If inhaled: Move victim to fresh air area.
- If skin contact: wash off with soap and water.
- If contact with eyes: immediately wash with water and request medical assistance.

5. Quantification

a) Ways to record quantity of chemicals in the status of chemicals: Chemicals being in solid or gas are recorded in the net weight; chemicals being mixtures of solid and liquid are recorded in the net weight and volume of solids; Chemicals being in compressed air are recorded in the net weight of the compressed air and net weight of pressure bottle or net weight of compressed air and total weight of compressed gas, pressure vessels; Chemicals being in pastes or gelatinous, are recorded in net weight or net volume; Pasty chemicals in the aerosol are recorded in the net weight of the paste and pressure sprayer substance ; Liquid chemicals is recorded in actual volume at 20 ° C ; liquid chemicals in the aerosol are recorded in actual volume at 20 ° C of both liquid and spray pressure;

b) The unit of measurement records

- Record the unit of measure on the label of chemicals by the full name or symbol of the unit. For example, write a "g" or "g", credited as "milliliter" or "ml";
- The unit's name is written in lowercase, not uppercase for first letter. For example, kilogram and gam is not written as kilogram or Gam (except temperature: Celsius, ° C);
- Symbol of unit is written in lowercase and vertical. For example: kg, g, l are not written as Kg, G, L;
- The unit of measurement and number are written with a blanks. For example: 200 g or 300 ml are not written as 200g, 300ml;
- Presenting calculation have to write the number in parentheses or parentheses for each number. For example: (500 ± 5) g or 500 g ± 5 g, unwritten 500 ± 5 or 500 ± 5 g;
- Presenting the decimal of the quantity has to use a comma (,), is not used dots. For example: 1,250 kg , not write 1.250 kg ;
- Unit of weight: kilogram (kg), gram (g), milligrams (mg). Less than 01 kg, using unit of gam ( eg: 500 g but 0.5 kg) ; less than 01 g, using "mg" (eg 500 mg but 0.5g);

- The unit of volume: l (l), milliliter (ml). Less than 1 l , using "ml" (for example: 500 ml but 0.5 l).

#### 6. Component or quantity component

a) Write the chemical formula. For chemicals contained in pressure vessels must add load capacity.

For example: A sulfuric acid, formula  $H_2SO_4$  ; concentration: 99%

b) For mixtures, recording component or quantity component such as solids by percentage of weight of solids, liquids as a percentage of the volume of each liquid, gaseous by percentage of volume of each gas, liquid solid by percentage of volume of solids and liquids.

#### 7. Date of manufacture

Date, month and year of production are recorded as follows:

a) The production date, expiry date on the label is fully written or in capital letters NSX in order of day, month and year of the calendar year. Day, month or year are recorded by two digits ; year is allowed to be written in 4 digits. The date, month and year of a timeline have to be written in the same line. For example, the production date is April 2, 2006, the label on one of the following ways:

- NSX: 020406; or
- NSX 02 04 06, or
- NSX: 02042006, or
- NSX: 02 04 2006 or
- NSX: 02/04/06.

b) If the abbreviation "NSX" not written with digit of day, month and year must label instructions. For example, at the bottom of packaging record production and expiry date "020406", the label must include the following: View NSX at the bottom of the packaging;

c) If the label records production day "NSX" in foreign language, instruction must be given on the label. For example, in packaging production date is "MFG 020406", the label must include the following: NSX see "MFG" on the packaging;

d) If the production date is written in a foreign language, the additional label have to record: production date or abbreviation in capital letters NSX, see "Mfg. Date" on the package.

#### 8. Expiry day

If chemicals have expiry day , way to record as Article 16 of Decree No. 89/2006/ND-CP and Clause 5 of Section II of Circular No. 09/2007/TT-BKHCHN dated April 6 , 2007 of the Ministry of Science and Technology *guiding a number of articles of Decree No. 89/2006/ND-CP.*

#### 9. Information of manufacturers, importers, distributors

Name, address and telephone of the manufacturer, importer or distributor of chemical substances have to be recorded on the label.

#### 10. Origin of chemicals

a) The origin of the chemical is defined as follows: write "made in" or "origin" with the names of countries or territories that produce chemicals;

b) For chemicals produced in Vietnam for domestic circulation the address of the place of manufacture of chemicals is recorded without origin of chemicals.

#### 11. Usage and maintenance instructions

Labels must record chemicals usage and maintenance instructions to help the user identify as a basis for selection of storage, preservation and safe use of chemicals.

For example, instruction on the usage and maintenance of HI-URETHAN LV17 as follows:

- Avoid breathing dust / smoke / gas / mist / vapor / spray. Avoid release to the environment. Keep away from heat / sparks / open flame. Do not eat drink or smoke when using the product. Wash hands after contact. Grounding containers to avoid static electricity. Use only with equipment no ignition. Keep container lids.

- Use proper ventilation.

- Use protective equipment as required.

- Store at low temperatures. Close the lid immediately after use.

#### 12. How to record other information

Other information labeled have to be truthful, accurate, not misrepresent the characteristics of the chemical, not misrepresent other content on the label.

For example, writing the following information: Further information on chemical safety data sheets (MSDS) or other information in usage paper

#### **Article 17.** Additional labels

1. Additional labels must be attached to the packaging of chemicals and does not conceal the contents of the original label.

2. If additional labels are large enough, the contents not recorded or recorded partly must be shown as provisions of Article 12 of this Circular.

3. If additional label are too small for the compulsory content, the content required such precautions; usage, maintenance instructions are recorded in accompanying document and additional label have to present these documents with contents.

**Article 18.** How to record warning images when transporting chemicals

Warning image when transporting chemicals is minimum information for users to understand correctly, does not cause a misunderstanding of the label chemicals. Detailed images of transporting chemicals specified in Appendix 4 to this Circular. Warning images must be clearly identified with the naked eye on the direct packaging or on the outside packaging (if any), the location is easy to observe.

For example, warning image for transporting chemical: Figure 5 in Appendix 4 with the flame on the black circle on a yellow background ; the label warn that chemicals transported are oxidizer (substance gas, liquid, solid oxidation).

## **Chapter IV**

### **Implementing Provisions**

**Article 19.** Responsibility

1. Department of Chemicals is responsible for dissemination, monitoring, guiding and inspecting the implementation of this Circular.

2. Department of Industry and Trade of the provinces and cities directly under the Central Government is responsible for inspecting the implementation of this Circular within their local management.

3. Organizations and individuals producing or importing chemicals have to send a classification and labeling of chemicals and materials related to the Chemicals Agency before 15 (fifteen) working days from the date of the chemical in use and circulation in the market. Information considered as confidential business, organization or individual must notify the Department of Chemical chemicals before putting into use, circulation in the market and to the implementation with other agencies as required.

4. Organizations and individuals inside and outside the country producing or importing chemical and organizations and individuals with relevant activities take responsible for the implementation of Decree No. 89/2006/ND-CP, Circular 09/2007/TT-BKHCHN and the provisions of this Circular.

**Article 20.** Roadmap for applying classification and labeling chemicals

1. Chemical manufactured and imported have to be classified and labeled before putting into use, circulation in the market before this Circular take effects and circulated.

2. For single substance:

a) From the date of taking effect, organizations and individuals producing or importing chemicals have to review the contents of

classification and labeling of chemicals according to the provisions of this Circular;

b) After 02 (two) years from the date of taking effect, before putting chemicals in use and circulation markets, organizations and individuals producing or importing chemicals have to complete the classification and labeling chemicals under the provisions of this Circular .

3. For mixtures

a) From the date of taking effect, organizations and individuals producing or importing chemicals have to review the contents of classification and labeling of chemicals according to the provisions of this Circular;

b) After 04 (four) years from the date of taking effect, before putting chemicals in use and circulation markets, organizations and individuals producing or importing chemicals take responsible for classifying, labeling chemicals specified in this Circular.

**Article 21. Enforcement**

1. This Circular takes effect from March 30, 2012.

2. In the course of implementation, if any arising problems, organizations and individuals have to report to the Ministry of Industry and Trade to study and treat. /.

***Recipients:***

- The ministries, ministerial-level agencies, Government agencies;
- People's Committees of provinces and central cities;
- Document Inspection Department (the City);
- Government Website;
- Gazette;
- Website of Ministry of Industry and Trade;
- Saved : office

**FOR MINISTER  
DEPUTY MINISTER**

**Nguyen Nam Hai**