

TRINIDAD AND TOBAGO STANDARD

COMPULSORY

REQUIREMENTS FOR LABELLING – PART 20: LABELLING OF REFRIGERANT CONTAINERS

PCTTS 76:PART 20:20XX

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NOTE In order to keep abreast of progress in the industries concerned, Trinidad and Tobago Standards are subject to periodic review. Suggestions for improvements are welcome.

Committee

The Committee responsible for the formulation of this Trinidad and Tobago Standard is as follows:

SPECIFICATION COMMITTEE FOR AIR CONDITIONERS

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Mr Naresh Hayban		Maraj Air Conditioning Limited
Mr Gobadhan Julamsingh Mr Joashzsszsz Collette Mr Tex Ali		Electrical Inspectorate Division, Ministry of Public Utilities
Mr Rushford Khan		RK Air Conditioning
Mr Craig La Croix		Trinidad and Tobago Manufacturers' Association
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Public Comment

Foreword

This specification was declared a Trinidad and Tobago Standard with effect from ..., after the draft finalized by the Specification Committee for Air Conditioners had been approved by the Bureau.

The Trinidad and Tobago Bureau of Standards has recommended that this standard continue to be compulsory to prevent fraud or deception arising from misleading labelling and to protect the consumer or user against danger to health and safety.

This standard will be effective as a compulsory standard on a date to be notified by the Minister responsible for trade and industry in a Notice to be published in the Trinidad and Tobago Gazette, as required by the Standards Act.

This standard is a new standard intended to address labelling requirements for refrigerant containers. It is one of a series of standards on labelling and applies to the labels placed directly on refrigerant containers.

The purpose of this standard is to ensure that labels for refrigerant containers provide invaluable product information in a clear, consistent and legible manner. The label information would allow consumers to make informed purchasing decisions, facilitate redress and assess the value or usefulness of the refrigerant. This standard is also to support the national implementation of the Montreal Protocol. This is an international environmental agreement which establishes requirements for the phase-out of ozone-depleting refrigerants and thereby protects the stratospheric ozone layer.

TTS 76:Part 20:20XX is intended to be used by manufacturers, importers, retailers and users of refrigerant containers.

In developing this standard considerable assistance was derived from the following:

- a) AHRI Guideline K (I-P), *2009 Guideline for Containers for Recovered Non-Flammable Fluorocarbon Refrigerants*;
- b) ISO 817, *Refrigerants – Designation and safety classification*;
- c) TTS 76: Part 2, *Requirements for labelling – Labelling of pre-packaged goods*; and
- d) UL 2182: 2006, *Standard for safety – Refrigerants*.

1 Scope

This National Standard specifies the labelling requirements for refrigerant containers.

This National Standard does not specify labelling requirements for equipment and products which utilize ozone depleting substances or their substitutes including, but not limited to:

- domestic, commercial and industrial refrigeration units
- aerosol sprays
- foam products
- cleaning solvents
- vehicular air conditioning units
- halon based fire fighting equipment
- domestic, commercial and industrial air conditioning units
- fumigation products

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this document. The latest edition of the normative documents referred to applies.

American National Standards Institute (ANSI)

ANSI/ASHRAE Standard 34-2010, *Designation and Safety Classification of Refrigerants*

International Electrotechnical Commission (IEC)

IEC 60027, *Letter symbols to be used in electrical technology*

International Organization for Standardization (ISO)

ISO 817, *Refrigerants – Designation and safety classification*

ISO 7000/IEC 60417, *Graphical symbols for use on equipment*

Trinidad and Tobago Bureau of Standards (TTBS)

TTS 76: Part 1, *Requirements for labelling – Part 1: General principles*

3 Terms and definitions

For purposes of this National Standard, the following terms and definitions shall apply.

3.1

aerosol

a suspension of very fine solid or liquid particles in a gas

NOTE Aerosol is used as a common name for spray, or an aerosol can in which a container is filled with a product and a propellant and pressurised so as to release the product in a fine spray.

3.2

blends

mixtures composed of two or more refrigerants

3.3

chlorofluorocarbons (CFCs)

a family of chemicals that contain chlorine, fluorine and carbon used as refrigerants, aerosol propellants, cleaning solvents and in the manufacture of foam

NOTE CFCs represent one of the main causes of ozone depletion.

3.4

container

the immediate vessel in which a controlled substance is stored or transported

3.5

dip tube

a tube which is fitted internally to the valve of a pressurised container, runs down the centre and draws the liquid up through the valve and are used for liquid phase product withdrawal from cylinders of liquefied products such as liquid hydrocarbon blends, carbon dioxide, propane, ammonia or various refrigerants

3.6

flammable

property of a mixture in which a flame is capable of self-propagating for a certain distance

NOTE 1 In its large sense, it characterises relatively how easy it is for a chemical substance to be ignited and to sustain the combustion. In a more restrained manner, as used in the studies related to the ignition and burning of some products, it designates the capability of a product to burn and sustain a flame reaction under specified test conditions. A combustible-oxidant mixture is not always flammable but restricted to a continuous range of compositions or flammability range.

NOTE 2 The related noun is "flammability".

3.7

fluid

a substance that has no fixed shape and yields easily to external pressure; a gas or a liquid

3.8

hydrocarbons (HCs)

any of a class of chemical compounds composed only of hydrogen and carbon elements used as natural, nontoxic refrigerants, which have no ozone depleting properties and minimal global warming potential

3.9

hydrofluorocarbon (HFC)

any of a class of chemical compounds composed of hydrogen, fluorine and carbon elements used as refrigerants, which have no ozone depleting properties but a high global warming potential

3.10

hydrochlorofluorocarbon (HCFC)

any of a class of chemical compounds composed of hydrogen, chlorine, fluorine and carbon elements used as refrigerants, which have minimal ozone depleting properties but a high global warming potential

3.11

ozone-depleting substance (ODS)

any chemical that can deplete the ozone layer

3.112

ozone

gas molecules comprised solely of three atoms of oxygen

NOTE 1 These molecules of oxygen present in the stratosphere constitutes the ozone layer.

3.13

ozone depletion

the process by which stratospheric ozone is destroyed by man-made chemicals

3.14

propellant

a liquid or gas used in aerosol spray cans to force the product out of the can in a fine spray when the valve is opened

3.15

refrigerant

fluid used for heat transfer in a refrigerating system, which absorbs heat at a low temperature and a low pressure of the fluid and rejects it at a higher temperature and a higher pressure of the fluid usually involving changes of the phase of the fluid

4 General requirements

4.1 In addition to the requirements of TTS 76: Part 1, the following information shall be present on refrigerant containers:

- a) common name or chemical name of the refrigerant in accordance with ISO 817 or ANSI/ASHRAE Standard 34-2010;
- b) composition in accordance with ISO 817 or ANSI/ASHRAE Standard 34-2010;
- c) flammability, toxicity and pressure characteristics either in words or symbols (where applicable);
- d) name or registered trade mark of the manufacturer or responsible local distributor;
- e) country of origin;

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- f) weight of product/net contents;
- g) product usage and instructions for use;
- h) an indication of the presence of a dip tube (where applicable);
- i) storage, maintenance and care;
- j) any special handling requirements;
- k) a statement indicating whether container can be refilled;
- l) any special hazards, warnings and precautions; and
- m) first aid instructions.

5 Presentation of information

5.1 Printing on labels shall be clear and legible. All information required by the standard shall be presented in the English Language with or without accent signs. Where names and addresses are in a foreign language, it shall not be necessary to translate such names and addresses into the English Language but they shall be stated in a form using the English alphabet.

5.2 All statements shall be printed or written in the English Language using the English alphabet with or without accent signs. Letters symbols, graphical symbols or numerical symbols may be used.

5.2.1 If letter symbols are used, they shall be in accordance with IEC 60027.

5.2.2 If graphical symbols are used, they shall be in accordance with ISO 7000/IEC 60417.

6 Specific requirements for recovery containers

6.1 General

All containers for refrigerant recovery shall be marked in a yellow and grey colour scheme to identify the container as a recovery vessel. The filling capacity and integrity of container shall be stated on the container.

6.2 Cylinders with non-removable collars

The body of the cylinder shall be grey. The collar shall be yellow.

6.3 Cylinders with removable caps

The body of the cylinder shall be grey. The shoulder and cap shall be yellow.

6.4 Drums

The drum shall be grey. The top head shall be yellow.

6.5 Ton tanks

The body of a ton tank shall be grey. The ends and chimes shall be yellow.

6.6 Filled recovery containers

Filled recovery containers shall be labelled in accordance with items a, b, c, g, i and j of 4.1.

Public Comment