

DRAFT GRENADA NATIONAL STANDARD

Requirements for Labelling: Labelling of Refrigerant Containers

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Comments Period January 15th – February 29th , 2016

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TABLE OF CONTENTS

	PAGE
0.0 FOREWORD	1
1.0 SCOPE	1
2.0 TERMS AND DEFINITIONS	2
3.0 GENERAL REQUIREMENTS	3
4.0 PRESENTATION OF INFORMATION	4
5.0 SPECIFIC REQUIREMENTS FOR RECOVERY CONTAINERS	4

NOTICE

The Grenada Bureau of Standards has released the following draft standard for public comments:

1. Requirements for Labelling: Labelling of Refrigerant Containers

The standard addresses labelling requirements for all refrigerant containers. It applies to the labels placed directly on refrigerant containers. The standard is intended to be used by manufacturers, importers, distributors, transporters and all users of refrigerant containers.

Copy of this draft can be found at the Bureau's office located at Queen's Park, St. George's and the National Ozone Unit, Energy Division, Ministry of Finance and Energy.

All comments, in writing should be addressed and sent to the Director (Ag), Grenada Bureau of Standards, P.O. Box 2036, Queen's Park, St. George's or emailed to gdb@spiceisle.com

The last day for comments is February 29th, 2016.

0.0 FOREWORD

- 0.1 This standard addresses labelling requirements for all refrigerant containers. It is one in a series of standards on labelling and applies to the labels placed directly on refrigerant containers.
- 0.2 The purpose of this standard is to ensure that labels for all refrigerant containers provide adequate 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, including health, safety and environmental considerations.
- 0.3 This standard is intended to be used by manufacturers, importers, distributors, transporters and all users of refrigerant containers.
- 0.4 This standard was developed as part of the implementation activities of Grenada's phase-out obligations under the Montreal Protocol. The Montreal Protocol is a multilateral environmental agreement which establishes requirements for the phase-out of ozone-depleting substances and the protection of the stratospheric ozone layer.
- 0.5 It was decided that National Standards Bodies (NSB) should use the Trinidad and Tobago draft standard as a base document as per the decision taken at the Thematic Workshop on Standards in the Refrigeration and Air-conditioning sector, held in Panama City, October, 2014, organized by UNEP regional office for Latin America and the Caribbean.
- 0.6 In preparing this draft standard assistance was derived from the following documents:
1. TTS 76: Part 20: 2015 – Requirements for Labelling: Labelling of Refrigerant Containers;
 2. GDS 1: Part 1: 1990 – Specification for the Labelling of Commodities – General Principles;
 3. GDS 1: Part 2: 1990 – Specification for the Labelling of Commodities – Labelling of Prepackaged Goods.

1.0 SCOPE

1.1 This standard specifies all the labelling requirements for refrigerant containers.

1.2 This 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 firefighting equipment;
- domestic, commercial and industrial air conditioning units;
- fumigation products.

2.0 TERMS AND DEFINITIONS

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

2.1 **Aerosol** - a suspension of very fine solid or liquid particles in air or another gas and is able to be released as a fine spray by means of a propellant gas.

2.2 **Blends** - mixtures composed of two or more refrigerants.

Note 1: Blends can be Azeotrope and Zeotrope.

Note 2: Azeotrope is a blend consisting of one or more refrigerants of different volatilities that does not appreciably change in composition or temperature as it evaporates (boils) or condenses (liquefies) under constant pressure. Refrigerant blends assigned an R5xx series number designation by ISO 817 are azeotropes (UNEP 2010, Manual for Refrigeration Serving Technicians).

Note 3: Zeotrope is a refrigerant blend consisting of two or more substances of different volatilities that appreciably changes in composition or temperature as it evaporates (boils) or condenses (liquefies) at a given pressure. A zeotropic

refrigerant blend assigned an R4xx series number designation in Iso 817 (UNEP 2010, Manual for Refrigeration Serving Technicians).

2.3 **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 are one of the main cause of ozone depletion.

2.4 **Container** - the immediate vessel in which a refrigerant is stored or transported.

2.5 **Dip tube** - a tube which is fitted internally to the vessel of a pressurized container, runs down the centre and draws the liquid up through the valve and is used for liquid phase product withdrawal from cylinders of liquefied products such as liquid hydrocarbon blends, carbon dioxide, propane, ammonia and other refrigerants.

2.6 Flammability – the ability of a substance to burn or ignite causing fire or combustion.

NOTE 1: In its large sense, it characterizes relatively how easy it is for 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.

2.7 **Fluid**- a substance that is a gas or liquid, having no fixed shape and yields easily to external pressure.

2.8 **Hydrocarbons (HCs)** - are a class of chemical compounds composed only of hydrogen and carbon elements used as natural refrigerants.

Note: HCs have zero ozone depleting potential and are usually flammable in nature.

2.9 **Hydrofluorocarbon (HFC)** - are a class of chemical compounds composed of hydrogen, fluorine and carbon elements used as refrigerants.

2.10 **Ozone-depleting substance (ODS)** - any chemical that can deplete the ozone layer.

- 2.11 **Ozone** - gas molecules comprised solely of three atoms of oxygen.
- Note 1: These molecules of oxygen present in the stratosphere constitute the ozone layer.
- 2.12 **Ozone Depletion** - the process by which stratospheric ozone is depleted by man-made chemicals.
- 2.13 **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.
- 2.14 **Refrigerant** - fluid used for heat transfer in a HVAC/R (Heating, Ventilating and Air Conditioning and Refrigeration) system, which absorbs heat at a low temperature and a low pressure of the fluid and rejects it at a high temperature and a higher pressure of the fluid usually involving changes of the phase of the fluid.
- 2.15 **Toxicity** – the degree to which a substance can damage an organism.

3.0 GENERAL REQUIREMENTS

3.1 The following information shall be present on all refrigerant containers:

- a) common name or chemical name of the refrigerant in accordance with ANSI/ASHARE Standard 34-2013;
- b) composition in accordance with ANSI/ASHARE Standard 34-2013;
- c) Flammability, toxicity and pressure characteristics either in words or symbols (where applicable);
- d) complete name and address of the manufacturer and or authorized local distributor;
- e) country of origin;
- 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;
- m) first aid instructions;
- n) date of manufacture;
- o) description of all ingredients in descending order of proportion and
- p) all refrigerants that are recycled/reclaimed shall be clearly and conspicuously labelled with the words 'recycled', 'reclaimed' as appropriate.

4.0 PRESENTATION OF INFORMATION

4.1 The information to be included on the label of every container shall be in English Language.

4.2 The only exception to the presentation of label information in English Language is the brand and name and address of manufacturer. Where they are presented in the official language of the exporting country other than English Language then it is acceptable.

4.2.1 The information on the label shall be legible and durable up to the point of sale and where appropriate, during normal working life and use.

4.2.2 The label information shall not be false, misleading or deceptive.

5.0 SPECIFIC REQUIREMENTS FOR RECOVERY CONTAINERS

5.1 General

All containers for refrigerant recovery shall be of a yellow and grey colour scheme to identify the container as a recovery vessel. The filling capacity (water capacity), structural integrity and service pressure of the container shall be on the container.

5.2 Containers with non-removable collars

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

5.3 **Containers with removable caps**

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

5.4 **Drums**

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

5.5 **Ton tanks**

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

5.6 **Filled recovery containers including bags**

Filled recovery containers shall be labeled in accordance with items a, b, c, f, g, i, j, l, m and n of 4.

END OF DOCUMENT