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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 16163-2012

Replacing GB 16163-1996

Classification of gases filled in cylinder

瓶装气体分类

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Foreword

Accordance with the standards GB/T 1.1-2009 "Standardization Guide Part 1. Standard structure and preparation of" rules given in draft. This standard replaces GB 16163-1996 "Bottled compressed gases classified." Compared with this standard GB 16163-1996, the main changes are as follows:

- Modify the classification of gas critical temperature range;
- Modify the original standard FTSC digitally encoded S items from the original seven merged into six, namely. 1. Low pressure liquefied gas Body, two high pressure liquefied gases, 3 dissolved gas, 4 compressed air (1), 5 compressed gas (2), 6. cryogenic liquefied gases (deep Cold type);
- Increased gas UN number and English name, the English name of the gas in Appendix A are arranged alphabetically by the English prefix refrigerant Chinese name by GB/T 7778 "numbering and refrigerant safety classification" Writing;
- An increase of eight kinds of low-temperature liquefied gas (cryogenic type);
- Kind of gas from 80 kinds to 108 kinds;
- Flammable gas instead of flammable gas, flammable gas in turn divided into. (1) Combustible Gas Group A. less than lower explosion limit in air 10% of the combustible gas; (2) combustible gas B. Explosion limit in air is greater than or equal to 10% of the combustible gas;
- Refer to "China country program to phase out ozone-depleting substances (revised)," the contents of the original "bottled compressed gas classification" should be eliminated Gas. three high pressure liquefied chlorodifluoromethane (R-13), dichlorodifluoromethane low pressure liquefied gas (R-12), tetrafluoroethylene two Chloroethane (R-114), five chloropentafluoroethane (R-115), etc. But still listed in this standard, and an indication of 2010 to stop production and use. This standard by the National Standardization Technical Committee cylinder (SAC/TC31) and focal points. This standard was drafted. National Standardization Technical Committee cylinders, China Industrial Gases Industry

Association. Drafters of this standard. Wang Yang, Ma Changhua, Cheng Hao. The standard standard replaces the previous editions.

--- GB 16163-1996. Bottled gas classification

1 Scope

GB/T 16163-2012 is the Chinese national standard on classification of gases filled in cylinder, in the field of fluid systems and general-purpose components. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 11 May 2012 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 September 2012. Classification: ICS 23.020.30, CCS C68. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the classification and coding FTSC commonly used bottled gas. This standard applies to compressed gas cylinder filling (also known as permanent gas), low temperature liquefied gas (cryogenic type), liquefied gases and dissolved gas. This standard does not apply adsorbed gas.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated edition applies to this article Member. For undated references, the latest edition (including any amendments) applies to this document.

GB/T 13005 cylinders term

3 Terms and Definitions

GB/T 13005 and define the following terms and definitions apply to this document.

3.1 Bottled gas gasesfilledincylinder Compressed, liquefied way, cryogenic liquefaction (cryogenic type), dissolution, adsorption storage and transportation of bottled gas.

4 Classification principles

4.1 Principles Lower than the critical temperature equal to -50 °C gas compressed gas is higher than the critical temperature of -50 °C gas liquefied gas is high Collectively and low pressure liquefied gas liquefied gases. The critical temperature is higher than -50 °C and 65 °C lower than the equivalent gas of high pressure liquefied gases. The critical temperature

is higher than 65 °C the low pressure gas is liquefied. Classified according to the critical temperature of the compressed gas and physical state in the cylinders; according to their chemical properties, flammability, toxicity, corrosivity into Line grouping; press FTSC coding, marking the basic characteristics of each gas, as a basis for classification, constitutes a comprehensive classification system.

4.2 Class 1 compressed gases and cryogenic liquefied gases a group of non-flammable, non-toxic and non-flammable toxic gases; b group combustible non-toxic and combustible toxic gases; c Group cryogenic liquefied gas (cryogenic type). a group and b group gas in normal ambient temperature (-40 °C ~ 60 °C, the same below) filling, storage and use are gaseous under. c group and transport gas at filling in the insulating cylinders for welding cryogenic liquid form, in the course of a liquid or liquid is vaporized Gaseous at room temperature and use.