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

GB/T 13591-2025

Replacing GB/T 13591-2009

**Rules for the filling of acetylene cylinders
(English Translation)**

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1. Structure and drafting rules for standardization documents"

Drafting.

This document replaces GB/T 13591-2009 "Regulations on the Filling of Dissolved Acetylene Cylinders". Compared with GB/T 13591-2009, except for the structural adjustment,

In addition to the integration and editorial changes, the main technical changes are as follows.

- Deleted the terms and definitions of acetylene cylinder tare weight, maximum acetylene quantity and maximum limit pressure (see Chapter 3 of the.2009 edition);
- Changed symbols and abbreviations (see Chapter 4, Chapter 4 of the.2009 edition);
- Added "Basic Conditions" (see Chapter 5);
- Changed the content of filling (see Chapter 6, Chapter 5 to Chapter 7 of the.2009 edition);
- Added the filling requirements for dimethylformamide (DMF) solvent acetylene cylinders

(see Chapter 6);

--- Changed the filling record (see Chapter 7, Chapter 8 of the 2009 edition);

--- Added "Filling Quality and Safety Traceability Information System" (see Chapter 8).

1 Scope

This document specifies the basic conditions for filling acetylene cylinders, filling process control, filling records and filling quality and safety traceability information.

system.

This document applies to the filling of acetylene cylinders manufactured in accordance with GB/T 11638.

This document does not apply to acetylene cylinder clusters and the filling of acetylene mixed gas and fixed containers containing acetylene in chemical production processes.

Filling.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document.

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to

This document.

GB/T 3864 Industrial Nitrogen

GB/T 6026 Acetone for industrial use

GB 6819 Dissolved acetylene

GB/T 7144 Color marking of gas cylinders

GB/T 11638 Acetylene gas cylinders

GB/T 13005 Gas Cylinder Terminology

GB 15258 Provisions for the Preparation of Chemical Safety Labels

GB/T 16804 Gas Cylinder Warning Labels

HG/T 2028 Dimethylformamide for industrial use

TSG07 Licensing Rules for Special Equipment Manufacturing and Filling Units

TSG23 Gas Cylinder Safety Technical Regulations

3 Terms and Definitions

The terms and definitions defined in GB/T 13005 and GB/T 11638 and the following apply to this document.

3.1

The actual weighing value before or after refilling the acetylene cylinder.

3.2

Residual pressure

The pressure of acetylene in the cylinder before refilling it.

3.3

settled pressure

The acetylene cylinder is filled with a specified amount of solvent and acetylene. After it is left to stand, the pressure of the gas in the cylinder is at the uniform ambient temperature at that time.