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CCS G86



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

GB/T 14600-2025

Replacing GB/T 14600-2009

Electronic gas - Nitrous oxide

电子气体 一氧化二氮

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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 14600-2009 "Gas Nitrous Oxide for Electronics Industry". In addition to structural adjustments and editorial changes, the main technical changes are as follows:

- Changed the scope (see Chapter 1, Chapter 1 of the.2009 edition);
- Changed the technical requirements that nitrous oxide should comply with (see Chapter 4, Chapter 3 of the.2009 edition);
- Changed the sampling requirements (see Chapter 5, 4.1.2 of the.2009 edition);
- Changed the purity calculation method (see 6.1, 4.2 of the.2009 edition);
- Changed the determination method of oxygen, argon, nitrogen, carbon monoxide and carbon dioxide content (see 6.2, 4.5, 4.8 of the.2009 edition);
- Added the method for determining hydrogen content (see 6.2);
- The determination method of total hydrocarbon content has been changed (see 6.3, 4.6 of the.2009 edition);
- Changed the method for determining ammonia content (see 6.4,

1 Scope

GB/T 14600-2025 is the Chinese national standard on electronic gas - nitrous oxide, in the field of chemical technology. 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 25 April 2025 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 November 2025. Classification: ICS 71.100.20, CCS G86. 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 document specifies the technical requirements, sampling, inspection rules, marking, packaging, transportation and storage of nitrous oxide for electronic use, and describes the corresponding The test method provides safety information for nitrous oxide. This document applies to nitrous oxide for electronic use purified from industrial nitrous oxide as raw material.

2 Normative references

The contents of the following documents constitute 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 190 Dangerous Goods Packaging Marking

GB/T 4844 Pure helium, high purity helium and ultrapure helium

GB/T 5099 (all parts) Seamless steel gas cylinders

GB/T 5832.3 Determination of trace moisture in gases Part

3 Cavity ring-down spectroscopy

GB/T 7144 Color marking of gas cylinders

GB/T 8979 Pure nitrogen, high purity nitrogen and ultra-pure nitrogen

GB/T 8984 Determination of carbon monoxide, carbon dioxide and hydrocarbons in gases - Gas chromatography

GB/T 11640 Aluminum alloy seamless gas cylinders

GB/T 14193 Regulations for filling liquefied gas cylinders

GB 15258 Provisions for the preparation of chemical safety labels

GB/T 16804 Gas Cylinder Warning Label

GB/T 28726 Gas analysis - Helium ionization gas chromatography

GB/T 33145 Large volume seamless steel gas cylinders

GB/T 43306 Gas analysis sampling guide TSG

23 Gas Cylinder Safety Technical Regulations

4 Technical requirements

The technical requirements for nitrous oxide shall comply with the provisions of Table 1.