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

GB/T 3864-2025

Replacing GB/T 3864-2008

Industrial nitrogen

工业氮

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Table of Contents

Foreword

1 Scope

2 Normative references

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 3864-2008 "Industrial Nitrogen". Compared with GB/T 3864-2008, except for structural adjustments and editorial changes, In addition, the main technical changes are as follows.

- Deleted the content related to the use, molecular formula and relative molecular mass of industrial nitrogen in the scope (see Chapter 1, 2008 edition Chapter 1);
- Increased requirements for 99.5% and 99.9% purity industrial nitrogen, and increased carbon monoxide content, carbon dioxide content, and moisture content and total impurity content requirements (see Chapter 4, Chapter 3 of the 2008 edition);
- Added requirements for industrial nitrogen batching (see 5.1);
- Changed the requirements for industrial nitrogen sampling and sampling safety (see 5.2, 4.1.2 of the 2008 edition);
- Changed the requirements for industrial nitrogen sampling (see 5.3, 4.1.3 and 4.1.4 of the 2008 edition);
- Changed the calculation method of nitrogen purity (see 6.1, 4.2 of the 2008 edition);
- Added the method for determining the content of carbon monoxide and carbon dioxide in nitrogen (see 6.2);
- Changed the method for determining the oxygen content in nitrogen (see 6.3, 4.3 of the 2008 edition);
- Changed the method for determining the moisture content in nitrogen (see 6.4, 4.4 of the 2008 edition);
- Added requirements for exhaust gas treatment (see 6.5);
- Changed the requirements for inspection rules and added provisions for numerical

rounding (see Chapter 7, 4.1.3 of the 2008 edition);

- Changed the labeling requirements (see 8.2);
- Added requirements for accompanying documents (see 8.3);
- Changed the provisions on packaging, filling, transportation and storage (see Chapter 9, Chapter 5 of the 2008 edition);
- Added safety information for nitrogen (see Chapter 10).

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

This document was proposed by the China Petroleum and Chemical Industry Federation.

This document is under the jurisdiction of the National Gas Standardization Technical Committee (SAC/TC206).

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The previous versions of this document and the documents it replaces are as follows.

- First issued in 1983 as GB 3864-1983 "Gaseous Nitrogen for Industrial Use";
- First revised in 1996 as GB/T 3864-1996 "Industrial Nitrogen";
- Revised for the second time in 2008 to GB/T 3864-2008 "Industrial Nitrogen";
- This is the third revision. Industrial nitrogen

1 Scope

This document specifies the technical requirements for industrial nitrogen as well as batching, sampling, test methods, inspection rules, marking, labeling, accompanying documents. The document describes the requirements for components, packaging, filling, transportation, and storage, and describes relevant test methods, providing safety information for industrial nitrogen.

This document applies to industrial nitrogen in gaseous and liquid forms separated or purified from air.

2 Normative references

GB/T 150

GB 190

GB/T 191

GB/T 3634.2

GB/T 5099

GB/T 5832.1

GB/T 5832.2

GB/T 6285

GB/T 7144

GB/T 8170

GB/T 8979

GB/T 8984

GB/T 11640

GB/T 14194

GB 15258

GB/T 15382

GB/T 16804

GB/T 16483

GB/T 24159

GB/T 27550

GB/T 28051

GB/T 28054

GB/T 28124

GB/T 30685

GB/T 33145

GB/T 34525

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