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

GB/T 32151.10-2023

**Requirements of the carbon emissions accounting and
reporting - Part 10: Chemical production enterprise**

碳排放核算与报告要求 第10部分：化工生产企业

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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 is part 10 of GB/T 32151 Carbon Emission Accounting and

Reporting Requirements: GB/T 32151 has been published as follows part:

- Part 1: Power generation enterprises;
- Part 2: Grid enterprises;
- Part 3: Magnesium smelting enterprises;
- Part 4: Aluminium smelting enterprises;
- Part 5: Iron and steel production enterprises;
- Part 6: Civil aviation enterprises;
- Part 7: Flat glass production enterprises;
- Part 8: Cement production enterprises;
- Part 9: Ceramic production enterprises;
- Part 10: Chemical production enterprises;
- Part 11: Coal production enterprises;
- Part 12: Textile and clothing enterprises;
- Part 13: Independent coking enterprises;

1 Scope

GB/T 32151.10-2023 is Part 10 of the Chinese carbon emission accounting and reporting series and covers chemical production enterprises. Chemicals are the hardest sector to account for: emissions arise not only from fuel combustion and purchased electricity but from the process itself, where carbon enters as feedstock and leaves partly in the product and partly as CO₂, and where the same site may run dozens of processes with different carbon balances. Getting the accounting boundary and the mass balance right is therefore the substance of the standard. It sets the accounting boundary, the measurement and monitoring requirements, and the calculation steps and methods for each emission source, together with the reporting, with informative annexes giving the report format template, default values for the relevant parameters and a data quality control plan template. It took effect on 1 July 2024.

This document specifies the accounting boundaries, measurement and monitoring, accounting steps and accounting methods for the accounting and reporting of carbon emissions of chemical production enterprises: data quality management, and report content and format:

Note: By convention, the term "carbon emissions" is used in this document to refer to greenhouse gas emissions, including carbon dioxide (CO₂) and nitrous oxide (N₂O): This document is applicable to the accounting and reporting of carbon emissions by chemical production enterprises: Enterprises whose main business is the production of chemical products can Calculate carbon emissions according to the method provided in this document and prepare corporate carbon emissions report:

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 210 Industrial Sodium Carbonate

GB/T 213 Method for determination of calorific value of coal

GB/T 384 Determination of calorific value of petroleum products

GB/T 476 Determination of carbon and hydrogen in coal

GB/T 1606 Industrial Sodium Bicarbonate GB/T 3286:

1 Chemical analysis methods for limestone and dolomite Part 1: Determination of calcium oxide and magnesium oxide content Complex drop Flame Atomic Absorption Spectrometry GB/T 3286:

9 Chemical analysis methods for limestone and dolomite Part 9: Determination of carbon dioxide content - Soda asbestos absorption Gravimetric method

GB/T 6052 Industrial liquid carbon dioxide

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

GB/T 13610 Composition analysis of natural gas - Gas chromatography

GB/T 15316 General technical rules for energy conservation monitoring

GB 17167 General rules for the allocation and management of energy metering instruments in energy-consuming units

GB/T 21367 Requirements for the allocation and management of energy metering instruments in chemical enterprises

3 Terms and definitions

The terms and definitions defined in GB/T 32150-2015 and the following apply to this document: