

ICS 13.020.10

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

**GB/T 47223-2026**

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**Green product assessment - Inorganic fertilizer**

绿色产品评价 无机肥料

**Issued on: February 27, 2026**

**Implemented on: September 1, 2026**

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**Issued by: State Administration for Market Regulation;  
Standardization Administration of the PRC**

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## Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1. Structure and Drafting Rules of Standardization Documents". Drafting. Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents. This document was jointly proposed by the China Petroleum and Chemical Industry Federation and the National Green Product Evaluation Standardization General Group. This document is under the jurisdiction of the National Technical Committee on Standardization of Fertilizers and Soil Conditioners (SAC/TC105). This document was drafted by: Shanghai Chemical Industry Research Institute Co., Ltd., Shenzhen Bada Ecological Engineering Co., Ltd., and China National Institute for Standardization. Institute, Xinyangfeng Agricultural Technology Co., Ltd., CNOOC Chemical Co., Ltd., Henan Xinlianxin Chemical Industry Group Co., Ltd. Company, Sichuan Meifeng Chemical Co., Ltd., Guizhou Xiyang Industrial Co., Ltd., SDIC Xinjiang Lop Nur Potash Co., Ltd., Shikefeng Chemical China National Chemical Engineering Co., Ltd., China Phosphate and Compound Fertilizer Industry Association, China Nitrogen Fertilizer Industry Association, Anhui Hongsifang Fertilizer Co., Ltd., Fujian Shen Yuanxin New Materials Co., Ltd., Sichuan Jinxiang Sairui Chemical Co., Ltd., Ladomei Technology Group Co., Ltd., Chongqing Jianfeng Chemical Co., Ltd. Limited Liability Company, Hubei Century Yuntian Chemical Engineering Co., Ltd., Woda Agricultural Technology Co., Ltd., Hebei Silicon Valley Fertilizer Co., Ltd. Company, Golmud Zangge Potash Fertilizer Co., Ltd., Hubei Maosheng Biotechnology Co., Ltd., Shandong Mingquan Modern Agricultural Service Co., Ltd., Jiangsu Jiangnan Eco-Carbon Technology (Group) Co., Ltd., Inner Mongolia Lanjing Eco-Technology Co., Ltd., and Hubei Deyi Fertilizer Co.,

Ltd. The main drafters of this document are. Zhu Yi, Fang Peng, Huang Peizhao, Yang Lei, Shen Bing, Wang Pan, Liu Xinqiang, Li Changying, Xu Bingsheng, Liu Qingwang, and Xie Xiaomei. Fang Junwen, Gao Li, Cao Weiyu, Chen Yong, Tan Zhanao, Wang Jianhua, Tang Yin, Wang Xiaochun, Chen Rong, Zheng Dianfeng, Yi Qiang, Song Liqiang, Zhang Youping, Zhou Yixin Zhao Xinhui, Jian Kaizhong, Zhu Jian, Tang Xiangyang, Zhou Zhuo, Wu Liang, Zhao Lei, Zhao Shuguang, Cheng Shuai, Wei Yanli, Han Yueming, Chen Gang, Wang Hao, Song Jiaying, Zhang Peisheng Wang Zhenbang.

In response to the national call for ecological civilization construction and to promote the green and high-quality development of the inorganic fertilizer industry, this paper is based on the overall framework of GB/T 33761. Based on the technical characteristics of inorganic fertilizer products, this document was developed. This document establishes a green product evaluation index system for inorganic fertilizers. The system encompasses five dimensions. resource attributes, energy attributes, environmental attributes, quality attributes, and low-carbon attributes. This document emphasizes the scientific rigor, practicality, and operability of the evaluation methods, employing a combination of quantitative assessment and qualitative analysis. To ensure the objectivity and accuracy of the evaluation results, clear evaluation indicators and grading standards are established to facilitate the evaluation by manufacturers, consumers, and... This document aims to facilitate understanding and application by regulatory agencies and other relevant parties. Furthermore, it draws heavily on relevant domestic and international standards and technological achievements, taking into account my country's inorganic fertilizer industry. Based on the actual situation of the materials industry, a green technology path that meets the needs of industry development was proposed. The formulation and implementation of this document will help promote technological innovation in the inorganic fertilizer industry and improve the environmental performance and market competitiveness of products. This will contribute to the realization of my country's goals of green agricultural development and ecological civilization construction. Green product evaluation of inorganic fertilizers

## 1 Scope

GB/T 47223-2026 is the Chinese national standard covering how a mineral fertilizer is assessed as a green product - the energy and emissions of ammonia synthesis and of phosphate processing, the phosphogypsum and other residues, the cadmium and other contaminants carried in from the rock, and the nutrient efficiency of the finished product. Fertilizer is one of the heaviest industrial carbon footprints there is, most of it in the hydrogen for ammonia. First edition, 19,000 words. It was issued on 27 February 2026 and has been in force since 1 September 2026, as a first edition. The document is under the responsibility of the China Petroleum and Chemical Industry Federation. This page is published from the official record of the 2026 edition; the clause text of a standard this recent is not yet in circulation, and the figures, limits and tables it contains are those of the document itself, delivered in full with the English translation.

This document specifies the evaluation requirements and methods for inorganic fertilizer green products. This document applies to urea, ammonium chloride, fertilizer-grade ammonium sulfate, superphosphate, triple superphosphate, calcium magnesium phosphate, fertilizer-grade potassium chloride, and agricultural products. Green products made from inorganic fertilizers such as potassium sulfate, nitrophosphate, potassium nitrate phosphate, monoammonium phosphate, diammonium phosphate, compound fertilizers, and blended fertilizers. evaluate.

## 2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included. For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies. This document.

GB/T 535 Fertilizer-grade ammonium sulfate GB/T 2440 Urea

GB/T 2441.1 Determination of Urea - Part

## 9 Spectrophotometric Method for Methylene Diurea Content

GB/T 2589 General Rules for Calculating Comprehensive Energy Consumption

GB/T 2946 Ammonium Chloride

GB/T 6274 Terminology for Fertilizers and Soil Conditioners

GB/T 8170 Rules for rounding off numerical values and the representation and determination of limiting values

GB/T 8572 Determination of Total Nitrogen Content in Compound Fertilizers by Distillation Titration

GB/T 8574 Determination of Potassium Content in Compound Fertilizers

GB/T 10205 Monoammonium Phosphate, Diammonium Phosphate

GB/T 10209.1 Determination of monoammonium phosphate and diammonium phosphate - Part