

ICS 27.010
CCS F01



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

GB 45549-2025

**Norm of energy consumption per unit production of graphite
and fluorite**

石墨和萤石单位产品能源消耗限额

Issued on: March 28, 2025

Implemented on: April 1, 2026

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

Table of Contents

- 1 Scope
- 2 Normative references
- 3 Terms and definitions
- 4 Energy consumption limit levels

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. 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 is proposed and coordinated by the National Standardization Administration. Energy consumption limits per unit product for graphite and fluorite

1 Scope

GB 45549-2025 is the Chinese national standard on norm of energy consumption per unit production of graphite and fluorite, in the field of energy and heat transfer engineering. It carries no /T suffix, which in the Chinese system means compliance is mandatory: a product or a practice within its scope has to meet it to be lawfully made, sold or carried out in China. It was issued on 28 March 2025 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 April 2026. Classification: ICS 27.010, CCS F01. 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 limit level, technical requirements, statistical scope and calculation of energy consumption per unit product (hereinafter referred to as energy consumption) of graphite and fluorite. method. This document is applicable to the calculation and assessment of energy consumption of graphite and fluorite production enterprises, as well as the energy consumption control of new construction, reconstruction and expansion projects.

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/T 2589 General rules for comprehensive energy consumption calculation GB/T 3518 Flake Graphite

GB/T 3519 Microcrystalline graphite

GB/T 12723 General rules for the compilation of energy consumption limits per unit product

GB/T 44539 Fluorite Technical Specification

3 Terms and definitions

The terms and definitions defined in GB/T 2589 and GB/T 12723 and the following apply to this document.

3.1 During the statistical reporting period, various energy sources consumed in the production of flake graphite products are converted into the amount of energy consumed in the production of 1 ton of flake graphite.

3.2 During the statistical reporting period, various energy sources consumed in the production of microcrystalline graphite products are converted into the amount of energy consumed in the production of 1 ton of microcrystalline graphite.

3.3 During the statistical reporting period, various energy sources consumed in the production of fluorite lump ore are converted into the amount of energy consumed in the production of 1 ton of fluorite lump ore.

3.4 During the statistical reporting period, various energy sources consumed in the production of fluorite powder are converted into the amount of energy consumed in the production of 1 ton of fluorite powder.

3.5 During the statistical reporting period, various energy sources consumed in the production of fluorite concentrate are converted into the amount of energy consumed in the production of 1 ton of fluorite concentrate.

4 Energy consumption limit levels

4.1 The energy consumption limit levels of graphite per unit product are shown in Table 1, among which Level 1 has the lowest energy consumption.