

ICS 77.100
CCS H 11



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

GB/T 4701.10-2025

Replacing GB/T 4701.10-2008

**Ferrotitanium - Determination of sulfur content - Infrared
absorption method and combustion-neutralization titration
method**

钛铁 硫含量的测定 红外线吸收法和燃烧中和滴定法

Issued on: December 2, 2025

Implemented on: July 1, 2026

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

Table of Contents

- 1 Scope
- 2 Normative references
- 3 Terms and Definitions
- 4 Method

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. This document is Part 10 of GB/T 4701. GB/T 4701 has already published the following parts.

---Determination of Titanium Iron Content by Ferrous Ammonium Sulfate Titration (GB/T 4701.1);

---Determination of Titanium Iron Silicon Content by Sulfuric Acid Dehydration Gravimetric Method (GB/T 4701.2);

---Determination of Titanium, Iron, and Copper Content. Copper Reagent Spectrophotometry and Flame Atomic Absorption Spectrometry (GB/T 4701.3);

---Determination of titanium, iron, and manganese content by arsenite-nitrite titration and periodate spectrophotometry (GB/T 4701.4);

---Determination of Titanium, Iron, and Aluminum Content by EDTA Titration (GB/T 4701.6);

---Determination of titanium iron phosphorus content. Bismuth phosphorus molybdenum blue spectrophotometric method and molybdenum blue spectrophotometric method (GB/T 4701.7);

---Determination of the carbon content of titanium-iron alloy by infrared absorption method (GB/T 4701.8);

---Determination of the sulfur content of titanium iron by infrared absorption method and combustion neutralization titration method (GB/T 4701.10);

---Determination of Titanium Iron and Titanium Content by Diantipyrrolidone Spectrophotometric Method (GB/T 4701.12);

---Determination of the contents of titanium, iron, silicon, manganese, phosphorus, chromium, aluminum, magnesium, copper, vanadium, and nickel by inductively coupled

plasma atomic emission spectrometry (GB/T 4701.13). This document replaces GB/T 4701.10-2008 "Determination of Titanium Iron Sulfur Content by Infrared Absorption Method and Combustion Neutralization Titration Method", and is consistent with... Compared with GB/T 4701.10-2008, apart from structural adjustments and editorial changes, the main technical changes are as follows:

- a) Requirements for reagents and water have been added (see 4.2, 5.2);
- b) An ultra-low carbon-sulfur crucible was added as described in Method 1 (see 4.2.10);

1 Scope

GB/T 4701.10-2025 is the Chinese national standard covering sulfur in ferrotitanium by two routes - combustion with infrared detection for the modern laboratory and the combustion-neutralisation titration for the one without the instrument, with the same result required of both. Part 10 of the ferrotitanium analysis series. It replaces GB/T 4701.10-2008. It was issued on 2 December 2025 and has been in force since 1 July 2026, replacing GB/T 4701.10-2008. The document is under the responsibility of the China Iron and Steel Association. This page is published from the official record of the 2025 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.

2.Determining the repeatability of standard measurement methods Basic methods of sex and representation

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 4010 Sample collection and preparation for chemical analysis of ferroalloys

GB/T 6379.1 Accuracy (correctness and precision) of measurement methods and results - Part

GB/T 6379.2 Accuracy (correctness and precision) of measurement methods and results - Part

GB/T 6682 Specifications and test methods for water used in analytical laboratories

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

3 Terms and Definitions

This document does not contain any terms or definitions that need to be defined.

chinastandards.org · PREVIEW