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YS

NONFERROUS METALS INDUSTRY STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

YS/T 298-2024

Replacing YS/T 298-2015

High titanium slag

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(English Translation)

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Foreword

This document was issued on 24 October 2024 by the Ministry of Industry and Information Technology of the People's Republic of China, and has been in force since 1 May 2025.

It replaces YS/T 298-2015, High titanium slag. Apart from structural adjustments and editorial changes, the main technical changes compared with YS/T 298-2015 are as follows:

a) the scope has been changed (see Clause 1; Clause 1 of the 2015 edition);

b) the definition of high titania slag has been changed (see Clause 3; Clause 3 of the 2015 edition);

c) the classification has been changed: grade TZ94 has been deleted and grades TZ88-1, TZ88-2, TZ83, TZ80, TZ78, TZ76 and TZ74 have been added (see Clause 4; Clause 4 of the 2015 edition);

d) requirements for ZrO_2, SnO_2, Nb_2O_5 and rutile-type TiO_2 have been added (see Table 1);

e) the chemical composition requirements have been changed (see Table 1; Table 1 of the 2015 edition);

f) the particle size requirements have been changed (see Table 2; Table 2 of the 2015 edition);

g) the particle size test method has been changed (see 6.3; 5.3 of the 2015 edition);

h) a sampling and sample preparation table has been added (see Table 3);

i) the sampling and sample preparation requirements for high titania slag have been changed (see 7.4.2; 6.3 of the 2015 edition);

j) a chemical analysis method for rutile-type titanium dioxide has been added (see Annex A).

This document was proposed by and is under the jurisdiction of the National Technical Committee 243 on Nonferrous Metals of Standardization Administration of China (SAC/TC 243).

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Previous editions: first issued in 1994 as YS/T 298-1994, first revised in 2007 and second revised in 2015; this is the third revision.

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Classification: ICS 77.150.50, CCS H 64.

1 Scope

This document specifies the classification, technical requirements, test methods, inspection rules, marking, packaging, transportation, storage, accompanying documents and order form contents of high titania slag.

This document applies to high titania slag produced by electric furnace smelting from ilmenite concentrate, for use in the production of titanium tetrachloride and synthetic rutile.

2 Normative references

The provisions of the following documents constitute essential provisions of this document through the normative references in the text. For dated references, only the edition corresponding to that date applies; for undated references, the latest edition, including all amendments, applies.

GB/T 1480 Metallic powders - Determination of particle size by dry sieving; GB/T 6679 General rules for sampling of solid chemical products; GB/T 6682 Water for analytical laboratory use - Specification and test methods; YS/T 514 (all parts) Methods for chemical analysis of high titanium slag and rutile.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1
high titania slag
solid granules with a titanium dioxide mass fraction of not less than 74%, obtained by enriching ilmenite concentrate through electric furnace smelting.

4 Classification

According to chemical composition, the product is divided into 13 grades: TZ92-1, TZ92-2, TZ90-1, TZ90-2, TZ88-1, TZ88-2, TZ85-1, TZ85-2, TZ83, TZ80, TZ78, TZ76 and TZ74.

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