

Translated English of Chinese Standard: GB25577-2010

www.ChineseStandard.net → Buy True-PDF → Auto-delivery.

Sales@ChineseStandard.net

GB

NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA

GB 25577-2010

**National food safety standard –
Food additives – Titanium dioxide**

GB/ 25577-2010 -- How to BUY & immediately GET a full-copy of this standard?

1. www.ChineseStandard.net;
2. Search --> Add to Cart --> Checkout (3-steps);
3. No action is required - Full-copy of this standard will be automatically & immediately delivered to your EMAIL address in 0~60 minutes.
4. Support: Sales@ChineseStandard.net. Wayne, Sales manager

Issued on: December 21, 2010

Implemented on: February 21, 2011

Issued by: Ministry of Health of the People's Republic of China

Table of Contents

Foreword.....	3
1 Scope.....	4
2 Normative references.....	4
3 Molecular formula and relative molecular mass.....	4
4 Technical requirements	4
Appendix A (Normative) Testing method	6

National food safety standard – Food additives – Titanium dioxide

1 Scope

This Standard is applicable for the food additive titanium dioxide which is prepared from the raw materials such as titanite iron ore and sulfuric acid OR is prepared with rutile ore (or enriched titanite iron ore) by using chlorination.

2 Normative references

The referenced documents in this Standard are essential to the application of this Standard. For the dated documents, only the versions with the dates indicated are applicable to this Standard; for the undated documents, only the latest version (including all the amendments) are applicable to this Standard.

3 Molecular formula and relative molecular mass

3.1 Molecular formula

TiO₂

3.2 Relative molecular mass

79.87 (According to the international relative atomic weight in 2007)

4 Technical requirements

4.1 Sensory requirements

Sensory requirements shall comply with the requirements of Table 1.

Table 1 -- Sensory requirements

Item	Requirements	Inspection methods
Colour, Flavour	White without peculiar smell	PLACE appropriate amount of sample into the 50mL beaker; OBSERVE the colour and tissue state under the natural light; SMELL the flavour.
Tissue state	Powder	

Appendix A

(Normative)

Testing method

A.1 Warnings

Some reagents used in this Standard's test method are toxic or corrosive. It must be careful when performing the operation! If it is splashed onto the skin, the skin shall be washed with water immediately. Severe cases shall be treated immediately.

A.2 General provisions

The reagents and water used in this standard, unless otherwise specified, refer to the analytical pure reagents and the grade-3 water as specified in GB/T 6682-2008. The standard volumetric solutions, impurity standard solutions, preparations and products used in the tests shall be prepared in accordance with the provisions of HG/T 3696.1, HG/T 3696.2 and HG/T 3696.3, unless otherwise specified.

A.3 Identification test

Take approximate 0.5g of the sample. Add 5mL of the sulfuric acid. Perform heating slowly until the sulfuric acid appears smog; cool it down. Carefully dilute it to 100mL with water AND; filter it. Then take approximate 5mL of the filter liquor. Add a few drops of the test solution -- hydrogen peroxide. The filter liquor appears orange red.

A.4 Determination of titanium dioxide - Aluminum reduction method

Weigh $0.20\text{g} \pm 0.01\text{g}$ of the sample which has been dried, according to A.5. The accuracy is 0.0001g. Other operations are the same as the 7.1 of GB/T 1706-2006.

A.5 Determination of the loss on drying

Same as the 7.2 of GB/T 1706-2006. Dry for 3 hours.

A.6 Determination of the loss on ignition

A.6.1 Instruments and equipment

High temperature furnace: it can be controlled at $800^{\circ}\text{C} \pm 25^{\circ}\text{C}$.

A.6.2 Analytical procedures

This is an excerpt of the PDF (Some pages are marked off intentionally)

Full-copy PDF can be purchased from 1 of 2 websites:

1. <https://www.ChineseStandard.us>

- SEARCH the standard ID, such as GB 4943.1-2022.
- Select your country (currency), for example: USA (USD); Germany (Euro).
- Full-copy of PDF (text-editable, true-PDF) can be downloaded in 9 seconds.
- Tax invoice can be downloaded in 9 seconds.
- Receiving emails in 9 seconds (with download links).

2. <https://www.ChineseStandard.net>

- SEARCH the standard ID, such as GB 4943.1-2022.
- Add to cart. Only accept USD (other currencies - <https://www.ChineseStandard.us>).
- Full-copy of PDF (text-editable, true-PDF) can be downloaded in 9 seconds.
- Receiving emails in 9 seconds (with PDFs attached, invoice and download links).

Translated by: Field Test Asia Pte. Ltd. (Incorporated & taxed in Singapore. Tax ID: 201302277C)

About Us (Goodwill, Policies, Fair Trading...): <https://www.chinesestandard.net/AboutUs.aspx>

Contact: Wayne Zheng, Sales@ChineseStandard.net

Linkin: <https://www.linkedin.com/in/waynezhengwenrui/>

----- The End -----