

Technical Data Sheet for Dolomite

Standard No.: TDHX-Dolomite-2025-08

Release Date: Aug 28, 2023

CAS Number: 16389-88-1

Scope of Application: Applicable to most of the dolomite products produced by our company

1. General Provisions

1.1 Purpose

This standard aims to ensure that the produced dolomite products meet customer requirements and national quality standards, ensuring product stability, reliability, and consistency.

1.2 Scope

This standard applies to most types of dolomite products produced by our company.

1.3 Reference Standards

GB/T 3286.1-2012: Methods for chemical analysis of limestone and dolomite

GB/T 3286.2-2012: Determination of silicon dioxide content

GB/T 3286.4-2012: Determination of iron oxide content

Other relevant national and industry standards

2. Product Requirements

2.1 Chemical Composition Requirements

Indicator	Required Value (wt%)
CaO	27-35
MgO	22-30

Indicator	Required Value (wt%)
SiO ₂	≤8
Fe ₂ O ₃	≤0.5
Al ₂ O ₃	≤0.5
Whiteness	80-95

2.2 Physical Properties Requirements

Indicator	Required Value
Appearance	White to greyish-white crystals/powder
Density	2.84 - 3.20 g/cm ³
Mohs Hardness	3.5 - 4.0

2.3 Packaging Requirements

- **Packaging Weight:** 25/50kg/bag, or ton bags (or as per customer specifications)
- **Packaging Material:** Customized as per customer requirements (woven bags, kraft paper bags, ton bags, paper-plastic composite, etc.)
- **Labeling:** Each package should have a clear label indicating the product name, factory name, product model, and other relevant information.

3. Production Process Control

3.1 Raw Material Procurement Requirements

- All raw materials should undergo strict supplier audits and provide relevant quality certificates.
- The inspection standards for raw materials should meet the chemical composition and physical performance requirements listed in this standard.

3.2 Production Process Requirements

- All process flows during production should comply with equipment operation procedures to ensure product consistency and stability.
- Regular inspection of production equipment should be conducted to ensure normal operation and avoid material contamination or loss.
- The production environment should be kept clean and dry to prevent the products from absorbing moisture, contamination, or foreign impurities.

3.3 Quality Control

- After each batch of products is produced, necessary quality inspections must be conducted to ensure that the products meet the requirements of this standard.

- Regular checks of the production environment should be performed, including temperature and humidity monitoring, to prevent external factors that may affect product quality.

4. Testing Methods

4.1 Chemical Composition Testing

Titration and ignition methods are used to quantitatively analyze the main elements in the product to ensure that the relevant content and impurity levels meet the requirements.

4.2 Particle Size Distribution Testing

A laser particle size analyzer is used to test the particle size distribution of the powder to ensure that it meets the required d50 value.

4.3 Moisture Content Testing

A moisture analyzer is used to determine the moisture content in the product sample.

4.4 Specific Gravity Testing

A gas pycnometer or a particle density bottle is used to test the specific gravity of the powder.

5. Storage and Transportation

5.1 Storage Requirements

- The product should be stored in a dry and well-ventilated place to avoid moisture absorption and contamination.
- The storage temperature should be maintained between -5°C and 35°C, with lower humidity being more ideal.
- Prevent the product from being contaminated by external environmental factors, especially avoid contact with acidic substances.

5.2 Transportation Requirements

- During transportation, the product should be protected from severe vibration, exposure to damp environments, and contact with harmful substances.
- Suitable transportation tools should be used to ensure that the packaging remains intact and undamaged.

6. Product Shelf Life

- The product has a long shelf life, typically 2-3 years, but shelf life can be affected by storage conditions. If stored in optimal conditions with intact packaging, the shelf life can be extended.
- Products that have exceeded their shelf life should undergo quality inspection and must not be sold or used. If necessary, the product should be disposed of.

7. Additional Provisions

7.1 Interpretation Rights

This standard is interpreted and revised by Haichengtaidinghuaxin Mineral Products Processing Co., Ltd. For any questions, please contact the Quality Control Department.

7.2 Effective Date

This standard takes effect from the release date, and all production and inspection activities will be conducted according to this standard.

7.3 Disclaimer

This TDS is for general reference only and does not constitute a product specification. Actual parameters may vary depending on ore sources and processing methods; batch testing is recommended prior to use.