



## TECHNICAL DATA SHEET (TDS)

### Sodium Sulfite

#### 1. Product Identification

- **Product Name:** Sodium Sulfite
- **Chemical Name:** Disodium sulfite
- **Chemical Formula:**  $\text{Na}_2\text{SO}_3$
- **CAS Number:** 7757-83-7
- **EC Number:** 231-821-4
- **Molecular Weight:** 126.04 g/mol
- **Product Type:** Inorganic salt
- **Appearance:** White crystalline powder or granules
- **Odor:** Odorless

#### 2. Product Description

Sodium sulfite is a water-soluble inorganic compound primarily used as an oxygen scavenger, reducing agent, and antioxidant in industrial processes. It reacts rapidly with dissolved oxygen and oxidizing agents, making it suitable for water treatment, pulp and paper, textile processing, food manufacturing, mining, and chemical production.



### 3. Typical Chemical Specifications

(Industrial Grade – Typical Values)

Property	Specification
Assay (Na <sub>2</sub> SO <sub>3</sub> )	≥ 95.0 %
Appearance	White powder / crystals
Solubility in Water	Completely soluble
Insoluble Matter	≤ 0.05 %
Iron (Fe)	≤ 0.001 %
Sodium Sulfate (Na <sub>2</sub> SO <sub>4</sub> )	≤ 2.0 %
pH (10% solution, 25 °C)	9.0 – 10.5
Moisture	≤ 0.5 %

Specifications may be adjusted based on customer requirements and application.

### 4. Physical Properties

Property	Value
Physical State	Solid
Color	White
Density (bulk)	~1.4 g/cm <sup>3</sup>
Melting Point	Decomposes > 500 °C
Vapor Pressure	Not applicable
Flash Point	Not flammable

### 5. Key Industrial Applications

- **Water treatment:** Oxygen scavenger in boiler and feedwater systems
- **Pulp & paper:** Bleaching, pulping, and wastewater treatment
- **Textile processing:** Reducing agent and chlorine neutralizer
- **Food industry (food grade):** Antioxidant and preservative
- **Mining & flotation:** Mineral separation control
- **Chemical manufacturing:** Reducing agent and intermediate



## 6. Performance & Usage Notes

- Reacts efficiently with dissolved oxygen at controlled dosages
- Excess dosing may increase sulfate concentration in closed systems
- Solubility and reaction speed depend on particle size and water temperature
- Product quality directly affects consistency in continuous operations

## 7. Handling and Storage

- Store in a **dry, cool, and well-ventilated area**
- Protect from **moisture and direct air exposure**
- Keep containers **tightly sealed** when not in use
- Avoid contact with strong oxidizing agents

Proper storage prevents oxidation to sodium sulfate and maintains product effectiveness.

## 8. Packaging Options

- 25 kg multi-layer bags
- 1,000 kg jumbo bags
- Palletized export packaging available

Packaging can be customized based on logistics and handling systems.

## 9. Shelf Life

- **Minimum 24 months** from production date
- Shelf life depends on storage conditions and packaging integrity



## 10. Regulatory & Compliance

- Manufactured under ISO-aligned quality systems
- GHS-compliant Safety Data Sheet (MSDS) available
- Food-grade material available upon request

## 11. Safety Information

This document is not a Safety Data Sheet.  
For health, safety, and regulatory information, refer to the **MSDS**.

## 12. Supplier Information

Sodium sulfite is supplied by **Basekim** for industrial and export markets with full technical documentation, batch testing, and application-specific support.