TECHNICAL DATA SHEET

Sodium Metabisulfite - Technical Grade

Revised: 04/27/2026

PRODUCT IDENTIFICATION

Product Name: Sodium Metabisulfite - Technical Grade
CAS Number: 7681-57-4
Molecular Formula: $Na_2O_5S_2$
Molecular Weight: 190.11 g/mol
Grade: Technical Grade
Purity / Concentration: Not Available
Synonyms: Sodium Pyrosulfite, Disodium Metabisulfite

PRODUCT OVERVIEW

Sodium Metabisulfite (CAS 7681-57-4) is a white crystalline powder provided here in technical grade with a minimum assay of 97.5%. It serves as a highly effective reducing agent and preservative, valued for its low impurity profile, including iron levels of only 5 ppm and arsenic at 0.1 ppm.

Grade Significance: Technical grade indicates that this product is manufactured for industrial and commercial applications where high chemical efficacy is required but food or pharmaceutical-grade certification is not necessary.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Assay (wt%)	%	97.5	95	—	Iodometric Titration
Ph Sol 5Pct	%	4.5	4	5	pH Meter
Water Content	%	0.2	—	0.5	Karl Fischer Titration
Arsenic (As)	ppm	0.1	—	1	Atomic Absorption Spectrometry
Heavy Metals (as Pb)	ppm	1	—	5	Atomic Absorption Spectrometry
Iron (Fe)	ppm	5	—	10	Spectrophotometry
Sulfite So3 Wt Pct	%	0.1	—	0.2	Titration

ND = Not Detected. Values are typical and may vary by lot.

PHYSICAL & CHEMICAL PROPERTIES

Appearance	White crystalline powder	**Odor**	Slight sulfurous odor
Solubility	Soluble in water	**Molecular Formula**	$Na_2O_5S_2$
Molecular Weight	190.11 g/mol	**Density (25°C)**	1.48 g/mL

APPLICATIONS

1. **Water Treatment** — It acts as a powerful reducing agent to dechlorinate water and neutralize oxidizing agents, protecting sensitive downstream equipment.
2. **Food Processing** — Used as a preservative to inhibit microbial growth and prevent spoilage, helping to maintain the freshness and color of various food products.
3. **Photography** — Utilized in film and paper development processes to control oxidation and ensure the stability of chemical solutions.
4. **Chemical Manufacturing** — Serves as a vital reducing agent in complex chemical synthesis processes, facilitating the production of various industrial compounds.

STORAGE & HANDLING

Sodium Metabisulfite must be stored in a cool, dry, and well-ventilated area to prevent moisture absorption, which can lead to degradation and the release of hazardous sulfur dioxide gas. Proper storage is essential to manage the chemical's reactivity and mitigate the risks associated with its classification as a substance that causes serious eye damage.

- Store in a cool, dry place away from moisture and incompatible materials.
- Use appropriate personal protective equipment (PPE) such as gloves and goggles.
- Keep containers tightly closed when not in use to prevent moisture absorption.
- Avoid exposure to strong acids or bases to maintain product integrity.
- Ensure adequate ventilation in storage areas to prevent accumulation of vapors.

AVAILABLE PACKAGING

- 2 lbs.
- 5 Lbs.
- 50 Lbs.

SAFETY SUMMARY (CROSS-REFERENCE TO SDS)

Signal Word: Danger

Hazard Statements:

- H302: Harmful if swallowed [Warning Acute toxicity, oral]
- H318: Causes serious eye damage [Danger Serious eye damage/eye irritation]

Emergency Contact: CHEMTEL - 800-255-3924 (24 Hours/Day, 7 Days/Week)

For complete safety information, refer to the Safety Data Sheet (SDS) for this product.

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