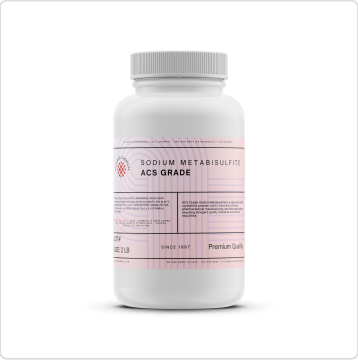
TECHNICAL DATA SHEET

Sodium Metabisulfite - ACS Grade

Revised: 04/27/2026

PRODUCT IDENTIFICATION



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

PRODUCT OVERVIEW

Sodium Metabisulfite ACS Grade is a high-purity white crystalline powder, identified by CAS 7681-57-4, designed for rigorous laboratory and industrial standards. With an assay of 97.8% and strictly controlled impurity levels, such as heavy metals at 1 ppm, this reagent is essential for sensitive chemical processes and analytical applications.

Grade Significance: ACS Grade signifies that the chemical meets the high-purity standards set by the American Chemical Society, ensuring consistent and reliable results for demanding analytical and laboratory applications.

CERTIFICATE OF ANALYSIS — TYPICAL VALUES

PARAMETER	UNIT	TYPICAL	MIN	MAX	TEST METHOD
Assay (wt%)	%	97.8	97	—	Titration
Ph Of 5 Pct Solution	%	4.5	4	5	pH Meter
Residue After Ignition	%	0.02	—	0.02	Gravimetric
Arsenic (As)	ppm	0.1	—	1	ICP-MS
Heavy Metals (as Pb)	ppm	1	—	10	ICP-MS
Iron (Fe)	ppm	1	—	5	ICP-MS
Chloride (Cl^-)	ppm	5	—	10	Ion Chromatography
Sulfate (SO_4^{2-})	ppm	10	—	20	Ion Chromatography
Insoluble Matter	%	0.0010	—	0.0050	Gravimetric

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	**Vapor Pressure (20°C)**	0.02 mmHg
Density (25°C)	1.48 g/mL		

APPLICATIONS

1. **Food and Beverage** — Functions as a reliable preservative to prevent oxidation and spoilage in various food products, extending shelf life.
2. **Water Treatment** — Acts as an effective reducing agent to neutralize residual chlorine, ensuring safe water quality standards.
3. **Analytical Chemistry** — Utilized in precision titrations and laboratory procedures to accurately determine the concentration of various oxidizing agents.
4. **Photography** — Serves as a critical reducing agent in photographic development processes to maintain chemical balance and image quality.

STORAGE & HANDLING

Sodium Metabisulfite must be stored in a cool, dry, and well-ventilated area to prevent degradation and the release of hazardous sulfur dioxide gas. Proper containment is critical because the material causes serious eye damage and requires careful handling to avoid accidental ingestion or inhalation.

- Store in a cool, dry place away from moisture and incompatible materials.
- Use HDPE containers for storage to prevent chemical reactions.
- Avoid exposure to air to minimize oxidation and degradation.
- Use appropriate personal protective equipment (PPE) such as gloves and goggles when handling.
- Ensure adequate ventilation in the storage area to prevent accumulation of fumes.

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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