



Sodium Bisulfite, 40% Aqueous Solution

PRODUCT BULLETIN

CAS NUMBER: 7631-90-5

CHEMICAL FORMULA: NaHSO₃ in aqueous solution

DESCRIPTION: Sodium bisulfite is a reducing agent made available in a ready-to-use liquid form. It is manufactured by absorbing SO₂ in an alkaline solution. It is a clear, colorless to pale yellow solution with a pungent odor.

NSF CERTIFICATION: Sodium Bisulfite manufactured at Tuscaloosa, AL and Pasadena, TX are NSF-60 certified. Maximum use in potable water is 50 mg/l.

APPLICATION:

- Chemical reduction of chlorine, chlorine dioxide, and hydrogen peroxide from pulp and vent gas scrubbing processes.
- Thermomechanical pulping additive to improve strength, increase brightness, and lower pulping energy.
- Used with Borol™ (sodium borohydride) for on-site generation of sodium hydrosulfite for bleaching of mechanical pulp.
- Dechlorination of municipal and industrial waste water.
- Reducing agent for bichromate (hexavalent chromium) to the trivalent form.
- Raw material for the production of sodium thiosulfate and sodium sulfite.
- Replacement for liquefied sulfur dioxide.

CHEMICAL AND PHYSICAL PROPERTIES:

	Minimum	Maximum	Typical
*NaHSO ₃ % by wt.	38.0	42.0	40.0
*Specific Gravity @ 20°C	1.31	1.38	1.34
*pH	3.8	5.0	4.0
SO ₂ available % by wt.	23.4	25.8	24.6
Sodium Thiosulfate (ppm)	-	-	100
Density (lbs/gal)	-	-	11.2
**Iron as Fe (ppm)	-	-	<5
**Sulfate as Na ₂ SO ₄ % by wt.	-	-	0.5

*Certificate of Analysis Properties

** Specific to customer requirements and shipping point

PACKAGING: 4,500 gallon stainless-steel tank trucks, railcars, intermediate bulk containers, and 55 gallon drums.

Borol is a registered trademark of Rohm and Haas Company

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**HANDLING &
STORAGE:**

Materials of Construction:

Storage tanks - Polyethylene, FRP, 316 SS, or rubber-lined carbon steel.

Pumps & piping - 316L SS, PVC, rubber-lined steel, CPVC, Teflon lined steel.

Forty-percent (40%) sodium bisulfite solution will crystallize at approximately 43°F. A temperature of 60-95°F is a suitable and safe range to prevent crystallizing of sodium bisulfite solutions. Excess heat will cause SO₂ evolution from sodium bisulfite solution, thereby creating a safety hazard and reducing the assay of the solution. If heating is necessary to prevent crystallization, temperatures in excess of 100°F should be avoided.

SAFETY:

Sodium bisulfite should be handled in open or well ventilated areas. Wear approved respirator for SO₂ in areas where exposure limits may be exceeded. Eye and skin contact is prevented through the use of safety glasses, goggles, face shield, protective clothing, and gloves. Contact with sodium bisulfite should be removed with copious amounts of water. **Do not use this product until the MSDS has been read, understood, and required safety precautions are followed.**

SHIPPING POINTS:

Tuscaloosa, Alabama; Baton Rouge, Louisiana; and Pasadena, Texas

DOT MARKINGS:

Bisulfites, inorganic, aqueous solutions, n.o.s. (Sodium Bisulfite), 8, UN2693, PG III, RQ (Sodium Bisulfite, 5000 lbs/2270 kg), Placarded Corrosive

SALES OFFICE

For Product Information:

TEL: 662-494-3055

FAX: 662-494-2828

Post Office Drawer 1217

West Point, MS 39773

To Place an Order:

TEL: 800-953-3585

FAX: 800-953-3588

IMPORTANT

The information on this Product Bulletin is believed to be accurate but is not warranted to be so. Protective equipment, health effects, and other related safety measures are based on intended and anticipated product use. Recipients are advised to confirm in advance of need that the information is applicable and suitable to their circumstances.