



MATERIAL SAFETY DATA SHEET

Product Name pH Decreaser
Product id 9081
Revision date 28/09/2006
Supersedes 27/07/2003

Revision: 2

1. Identification of the substance & the company

Chemical name Sodium bisulfate, anhydrous globular, technical
Synonym(s) Sodium acid sulfate, Nitre cake, Sodium hydrogen sulfate
Chemical formula NaHSO₄
Molecular weight 120
Type of product and use Cleaning compounds, pH adjustment
Supplier NAVA Water Products
95 MacCorkle Ave. SW, South Charleston, WV 25303, USA
Tel: (304) 746-3000
Emergency Telephone Chemtrec (800)424-9300

2. Composition / information on ingredients

Components CAS	Weight %	ACGIH-TLV Data	OSHA (PEL) Data
SODIUM BISULPHATE 7681-38-1	91.5-94.7	Not determined	Not determined
Sodium sulfate 7757-82-6	4.8-8.0	Not determined	Not determined
Water 7732-18-5	0.1-0.8	Not determined	Not determined

3. Hazards identification

Emergency overview *Off-white granular material, with the consistency of salt.
Causes eye irritation
May cause skin and respiratory tract irritation.*

Potential environmental effects Material in dry form is not hazardous to the environment. However it readily dissolves in water to form a weak acid solution. Therefore, keep out of streams and ditches.

Potential Health Effects:
- Eye Contact Causes mild to severe irritation. May cause burns if not flushed with water.



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- Skin contact	Prolonged exposure may cause moderate irritation. May cause burns if not flushed with water.
- Inhalation	Inhalation of dust may irritate or burn nose, throat and lungs.
- Ingestion	Small amounts (tablespoonful) swallowed are not likely to cause injury; however swallowing large amounts may irritate or burn digestive tract.
Chronic effects/Carcinogenicity	Not known to cause cancer.
NFPA Ratings (Scale 0-4)	Health = 1, Fire = 0, Reactivity = 0.
HMS Ratings (Scale 0-4)	Health = 1, Fire = 0, Reactivity = 0.

4. First-aid measures

Eye contact	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advise.
Skin contact	Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advise.
Inhalation	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advise.
Ingestion	Call poison control center, or doctor immediately for treatment advise. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

5. Fire - fighting measures

Flash point	Not applicable
Flammable/Explosion limits	Not explosive/Not flammable
Suitable extinguishing media	Material is not combustible. Use extinguishing media appropriate to surrounding fire conditions. Because material will readily dissolve in water to form a weak acid solution, avoid water contact with material if possible.



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Fire fighting procedure	Product readily dissolves in water to form a weak acid solution. If using water, wear acid protective equipment. No gases or toxic fumes are emitted from this reaction. However, if elevated temperatures (> 806°F) are reached, self-contained breathing apparatus should be worn.
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Unusual fire and explosion hazards	Will decompose above 806°F (430°C) releasing poisonous and corrosive fumes of sulfur oxides.
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6. Accidental release measures

Methods for cleaning up	Vacuum or shovel material and place in disposal container. Avoid excessive dust generation. Dilute residual material with ample supply of water and direct to sanitary sewer if Federal, State or Local regulations permit.
- Water	Readily dissolves in water to form a weak acid solution. If water is isolated or can be contained, neutralize with weak alkaline solution.

7. Handling and storage

Handling	Wear all recommended personal protective clothing when handling. Avoid contact with eyes. Wash thoroughly after handling. Minimize dust generation. Avoid breathing dust.
Storage	Material is hygroscopic and will readily absorb moisture. Keep containers tightly closed. DO NOT store where exposed to moist conditions. DO NOT store near strong alkalis.

8. Exposure controls / personal protection

Ventilation requirements	Ventilation must be sufficient to maintain airborne of nuisance dust below 15 mg/m ³ OSHA recommendation for Particulates Not Otherwise Regulated (PNOR).
Personal protective equipment:	
- Respiratory protection	NIOSH approved respirator
- Hand protection	Rubber gloves
- Eye protection	Safety glasses or goggles
- Skin and body protection	Body covering clothes and boots
Hygiene measures	Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking

9. Physical and chemical properties

Appearance	Off white granules
Physical state	Dry (Anhydrous) crystalline solid, spherical shape beads



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Odor Fresh to pungent
Melting point/range 350°F (177°C)
Solubility:
- Solubility in water 1080 g/l @ 68°F (20°C)
pH <1 @ 5% aqueous solution

10. Stability and reactivity

Stability Stable
Materials to avoid Avoid contact with strong alkaline material such as caustic. Dissolves readily in water to form a weak acid solution. DO NOT MIX with liquid chlorine bleach, ammonia cleansers or similar products.
Conditions to avoid Exposure to moisture
Hazardous decomposition products Sulfur oxides (>430°C)
Hazardous polymerization Will not occur

11. Toxicological information

Toxicity No human data are available for this product.
Acute toxicity:
- Rat oral LD50 2800 mg/kg
Effects of overexposure: This material is neither corrosive nor destructive. Occasionally, a very slight rash may appear.
Carcinogenicity Not classified by IARC, OSHA, EPA.
Not included in NTP 11th Report on Carcinogens.

12. Ecological information

Information on ecological effects This product readily dissolves in water to form a weak acid solution. A 0.05 percent or greater (by weight) solution of this product is likely to be acutely harmful to fish and other aquatic organisms.
Environmental fate Material will decompose in soil. Studies show that there are no adverse effects of applying the main ingredient in this product (sodium bisulfate), directly to crops. However, do not apply excessive quantities to soil.
Germany, water endangering classes (WGK) 1



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13. Disposal considerations

Waste disposal If this product as supplied becomes a waste, it does not meet the criteria of a hazardous waste as defined under the Resource Conservation and Recovery Act (RCRA), 40CFR Part 261. Dispose of in accordance with local, State and Federal laws and regulations.

14. Transportation information

DOT Not regulated

IMO Not regulated

ICAO/IATA Not regulated

15. Regulatory information

USA Reported in the EPA TSCA Inventory

Cercla/Sara - 302 ext. haz. substances This product contains no Hazardous Substances listed in 40 CFR Part 302.

Sara 313 Not listed

Sara (311, 312) hazard class - New Jersey right-to-know list Hazard Class - Acute Listed
Special hazardous Substances-Corrosive

- California-Prop 65 This product does not contain any ingredient known to the State of California to cause cancer or reproductive toxicity as listed under the State drinking Water and Toxic Enforcement Act of 1986.

- Workplace Classification This product is classified as an Irritant by definition of OSHA Hazard Communication Standard (29CFR 1910.1200).

Canada Listed in DSL
Listed in WHMIS.
Controlled Product Hazard Class D2B. This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

- Cepa All components of this product are acceptable for use under the provisions of CEPA



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EEC No.	231-665-7
Japanese METI	1-83, 1-491, 1-1501
Australia	Listed in AICS
China inventory	Listed
Korea	Listed in ECL (KE- 31481)

16. Other information

This data sheet contains changes from the previous version in section(s)
3, 10, 12

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In an event of discrepancy between the contents of this MSDS and the English version of it, the English version shall prevail.

End of safety data sheet