



MATERIAL SAFETY DATA SHEET

Product name **pH Increaser**
Product id 9020
Revision date 22/08/2011
Supersedes 12/11/2006

Revision: 3

1. Identification of the substance & the company

Chemical name Sodium carbonate, anhydrous

Synonym(s) Soda salt, soda crystal, disodium carbonate, soda ash

Chemical formula Na_2CO_3

Molecular weight 105.99

Supplier NAVA Water Products
95 MacCorkle Ave. SW,
South Charleston, WV 25303,
USA
Tel: (304) 746-3000

Emergency Telephone Chemtrec (800)424-9300

2. Hazards identification

Emergency overview *Odorless, white granules.*
Severe irritant to eyes and mucous membranes

Potential Health Effects:

- Eye Contact Severe irritant
Watering, redness and swelling of the eyelids. Risk of serious or permanent eye lesions.

- Skin contact May cause skin irritation, seen as redness and swelling. In the presence of moisture or sweat, irritation may become more severe leading to rash. May cause dry and chapped skin.

- Inhalation May be irritating to mucous membranes and eyes.

- Ingestion May cause severe irritation and risk of burns to the mouth, throat, esophagus and stomach. Ingestion of large quantities can cause nausea and vomiting (bloody)

NFPA Ratings (Scale 0-4) Health = 2, Fire = 0, Reactivity = 0

HMIS Ratings (Scale 0-4) Health = 2, Fire = 0, Reactivity = 0.



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3. Composition / information on ingredients

Components	CAS No.	Weight %
SODIUM CARBONATE	497-19-8	100

4. First-aid measures

Eye contact Holding the eyelids apart, flush eyes promptly with copious flowing water for at least 20 minutes. Get medical attention immediately.

Skin contact Remove contaminated clothing. Wash skin thoroughly with mild soap and plenty of water for at least 15 minutes. Wash clothing before re-use. Get medical attention if irritation occurs and persists.

Inhalation In case of dust inhalation or breathing fumes released from heated material, remove person to fresh air. Keep him quiet and warm. Apply artificial respiration if necessary and get medical attention immediately.

Ingestion If swallowed, wash mouth thoroughly with plenty of water and give water to drink. Get medical attention immediately.

NOTE: Never give an unconscious person anything to drink.

Note to physician Treat symptomatically and supportively.

5. Fire - fighting measures

Suitable extinguishing media Material is not combustible. Use extinguishing media appropriate to surrounding fire conditions.

Fire fighting procedure In closed stores, provide fire-fighters with self-contained breathing apparatus in positive pressure mode

Unusual fire and explosion hazards None known



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6. Accidental release measures

Personal precautions See section "Exposure controls/personal protection"

Methods for cleaning up Shovel into suitable container for disposal.
Ventilate area and wash spill site after material pickup is complete.
Observe all federal, state and local environmental regulations.

Environmental precautions Prevent from entering into soil, ditches, sewers waterways and/or groundwater.

7. Handling and storage

Handling Avoid prolonged or repeated contact with skin or eyes. Do not wear contact lenses without proper eye protection when using this product. Avoid prolonged or repeated breathing of dusts. Use vacuum or wet mop to clean up dust.

Storage Keep in a closed, properly labeled container in a dry area away from acids. Protect from physical damage.

8. Exposure controls / personal protection

Exposure Limits :

Components	ACGIH-TLV Data	OSHA (PEL) Data
SODIUM CARBONATE 497-19-8	Not determined	Not determined

Ventilation requirements Ventilation must be sufficient to maintain airborne of total dust below 15 mg/m³ , respirable fraction 5 mg/m³ , OSHA recommendation for Particulates Not Otherwise Regulated (PNOR).

Personal protective equipment:

- **Respiratory protection** In case of significant or accidental dust emissions, NIOSH approved dust mask should be worn
- **Hand protection** Cotton gloves are adequate for routine handling of dry product
- **Eye protection** In cases of significant dust, goggles are recommended
- **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.
Safety shower and eye bath should be provided.



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9. Physical and chemical properties

Appearance	White granules
Odour	Slightly pungent
Boiling point/range	Not applicable
Melting point/range	851°C (1564°F)
Flash point	Non-combustible
Flammable/Explosion limits	Not flammable
Auto-ignition temperature	Not applicable
Vapour pressure	Not applicable
Vapor density	Not applicable
Viscosity	No data available
Solubility:	
- Solubility in water	33% maximum by weight in water
Specific gravity	2.533(20°C)
pH	11.6 (1% solution)
Decomposition temperature	>400°C

10. Stability and reactivity

Stability	Stable under normal conditions.
Materials to avoid	Under certain conditions, may react with Al, P ₂ O ₅ , F ₂ , Li and 2,4,6-trinitrotoluene. Reacts with acids and releases large volumes of CO ₂ gas and heat. Soda ash and lime dust in the presence of moisture may form caustic soda, which may cause burns.
Conditions to avoid	Hygroscopic, protect from moisture. Mixing of acid and sodium carbonate solutions could cause CO ₂ evolution and severe splattering.
Hazardous decomposition products	Carbon dioxide (CO ₂) is evolved at very high temperatures (1000°C, 1832°F) or when mixed with acids
Hazardous polymerization	Will not occur

11. Toxicological information

Acute toxicity:	
- Rat oral LD50	>2000 mg/kg
- Rat inhalation LC50	2.3 mg/L (2h)
- Eye irritation (rabbit)	Severe irritant
- Dermal irritation (rabbit)	Mild irritant

Effects of overexposure: May cause severe irritation to the eyes. Dusts and mists may be irritating to the skin, mucous membranes and upper respiratory tract..



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Chronic toxicity	No data available
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Carcinogenicity	Not classified by IARC, OSHA, EPA. Not included in NTP 11th Report on Carcinogens
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12. Ecological information

Environmental Effects	Irrigation on fields or vegetable gardens: Less than 60 mg/l - no risk; between 60 mg/l and 130 mg/l medium risk; more than 130 mg/l - risk for legumes of vegetable gardens, wheat, etc.
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Aquatic toxicity :

- 96 Hour-LC50, Fish	300 mg/l (Lepomis macrochirus)
- 48 Hour-EC50, Daphnia magna	265 mg/l
- EC50, Freshwater algae	242 mg/l (5 days, Nitzschia linearis)

13. Disposal considerations

Waste disposal	Observe all federal, state and local environmental regulations when disposing of this material
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14. Transportation information

DOT	Not regulated
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15. Regulatory information

USA	Reported in the EPA TSCA Inventory.
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CERCLA/SARA - 302 ext. haz. substances

This product contains no Hazardous Substances listed in 40 CFR Part 302.

- SARA (311, 312)

Hazard Class - Acute
Planning threshold: 10,000 lbs
Hazard Class - Chronic
Planning threshold: 10,000 lbs

- 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.



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- Waste Classifications	This material does not meet RCRA's characteristic definition of ignitability, corrosivity, or reactivity, and is not listed in 40CFR 261.33. Not listed under CERCLA
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Canada	Listed in DSL
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-WHMIS hazard class	D2B toxic materials E corrosive material
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16. Other information

This data sheet contains changes from the previous version in section(s)
2, 3, 6, 8, 9, 10, 11, 12, 15

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End of safety data sheet