



MATERIAL SAFETY DATA SHEET

Product name **Azure Alkalinity Booster**
Product id 2059-AZ
Revision date 11/08/2011
Supersedes 06/12/2006

Revision: 3

1. Identification of the substance & the company

Chemical name Sodium Bicarbonate
Synonym(s) Baking Soda, Bicarbonate of Soda
Molecular weight 84.02
Type of product and use For treatment and balancing of pools, spas and hot tubs
Supplier NAVA Water Products
95 MacCorkle Ave. SW,
South Charleston, WV 25303,
USA
Tel: (304) 746-3000
Emergency Telephone Chemtrec (800)424-9300
Medical 1-800-420-9236

2. Hazards identification

Emergency overview *White granules. Product is non combustible. Reacts with acids to release carbon dioxide gas and heat.
No significant health effects anticipated.*
NFPA Ratings (Scale 0-4) Health = 0, Fire = 0, Reactivity = 0.
HMIS Ratings (Scale 0-4) Health = 0, Fire = 0, Reactivity = 0

3. Composition / information on ingredients

| Components | CAS No. | Weight % |
|--------------------|----------|----------|
| Sodium bicarbonate | 144-55-8 | 100 |



MATERIAL SAFETY DATA SHEET

| | | |
|----------------------|---------------------------------|--------------------|
| Product name | Azure Alkalinity Booster | |
| Product id | 2059-AZ | |
| Revision date | 11/08/2011 | Revision: 3 |
| Supersedes | 06/12/2006 | |

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.

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. Material with low toxicity.

5. Fire - fighting measures

Suitable extinguishing media Material is not combustible. Use extinguishing media appropriate to surrounding fire conditions.
Water, water fog, carbon dioxide (CO₂), dry chemical, foam

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

Unusual fire and explosion hazards When heated to decomposition, may release poisonous fumes of Na₂O, CO₂.



MATERIAL SAFETY DATA SHEET

Product name Azure Alkalinity Booster
Product id 2059-AZ
Revision date 11/08/2011
Supersedes 06/12/2006

Revision: 3

6. Accidental release measures

Personal precautions See section "Exposure controls/personal protection"

Methods for cleaning up Sweep up and shovel into suitable containers for disposal. Wash spill site with water after material pickup is complete.

7. Handling and storage

Handling Use air conveying/mechanical systems for bulk transfer to storage. For manual handling of bulk transfer use mechanical ventilation to remove airborne dust from railcar, ship or truck. Use approved respiratory protection when ventilation systems are not available. Selection of respirators is based on the dust cloud generated.

Storage Store in a dry, cool area away from incompatible materials (see "materials to avoid").

8. Exposure controls / personal protection

Exposure Limits :

| Components | ACGIH-TLV Data | OSHA (PEL) Data |
|--------------------------------|----------------|-----------------|
| Sodium bicarbonate 144-55-8 | Not determined | Not determined |



MATERIAL SAFETY DATA SHEET

Product name Azure Alkalinity Booster
Product id 2059-AZ
Revision date 11/08/2011
Supersedes 06/12/2006

Revision: 3

Ventilation requirements Minimize eye and skin contact by using appropriate protective equipment. Use local exhaust as necessary, especially under dusty conditions.

Personal protective equipment:

- **Respiratory protection** NIOSH approved respirator
- **Hand protection** Protective gloves
- **Eye protection** Chemical safety goggles
- **Skin and body protection** Full body protective 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.

9. Physical and chemical properties

| | |
|-----------------------------------|-----------------------------|
| Appearance | White granules |
| Odour | None |
| Boiling point/range | Not applicable |
| Melting point/range | Not applicable (decomposes) |
| Flash point | Non-combustible |
| Flammable/Explosion limits | Not applicable |
| Auto-ignition temperature | Not applicable |
| Vapour pressure | Not available |
| Evaporation rate (ether=1) | Not applicable |
| Vapor density | Not applicable |
| Solubility: | |
| - Solubility in water | 8.6 g/100ml at 20°C |
| Bulk density | 62 lb/Ft3 |
| Specific gravity | 2.20 |
| pH | 8.2 (1% solution) |

10. Stability and reactivity

Stability Stable

Materials to avoid Reacts with acids to release carbon dioxide gas and heat. May yield free caustic in presence of lime dust (CaO) and moisture (i.e., water, perspiration). Dangerous reaction with monoammonium phosphate or a sodium-potassium alloy may occur.



MATERIAL SAFETY DATA SHEET

| | | |
|----------------------|---------------------------------|--------------------|
| Product name | Azure Alkalinity Booster | |
| Product id | 2059-AZ | |
| Revision date | 11/08/2011 | Revision: 3 |
| Supersedes | 06/12/2006 | |

| | |
|----------------------------|--|
| Conditions to avoid | Contact with acids except under controlled conditions Heating above 65 °C |
|----------------------------|--|

Hazardous decomposition products

None

Hazardous polymerization

Will not occur

11. Toxicological information

Acute toxicity:

| | |
|------------------------------|--------------|
| - Rat oral LD50 | 7.3 g/kg |
| - Rat inhalation LC50 | 4.74 mg/l |
| - Eye irritation (rabbit) | Not irritant |
| - Dermal irritation (rabbit) | Not irritant |

Dermal sensitization

Not a sensitizer

Effects of overexposure:

Sodium bicarbonate is a GRAS (Generally Recognized As Safe) food ingredient. No significant toxicity is expected.

Target organ effects

None

Chronic toxicity

Administration of large doses of sodium bicarbonate to patients with renal insufficiency can produce systemic alkalosis.

Carcinogenicity

Not classified by IARC, OSHA, EPA.
Not included in NTP 11th Report on Carcinogens

12. Ecological information

Aquatic toxicity :

| | |
|-------------------|---|
| - LC50, Fish | 7100 mg/l (Bluegill), 7700 mg/l (Rainbow trout) |
| - EC50, Crustacea | 4100 mg/l (Daphnia) |

Persistence and degradability

Not expected to persist in the environment.

Bioaccumulative potential

Not expected to bioaccumulate



MATERIAL SAFETY DATA SHEET

| | | |
|----------------------|---------------------------------|--------------------|
| Product name | Azure Alkalinity Booster | |
| Product id | 2059-AZ | |
| Revision date | 11/08/2011 | Revision: 3 |
| Supersedes | 06/12/2006 | |

13. Disposal considerations

Waste disposal Dispose in a safe manner in accordance with local/national regulations.

14. Transportation information

DOT Not regulated

15. Regulatory information

USA Reported in the EPA TSCA Inventory.

- Section 302 (EHS): Not listed

- SARA 313 Not listed

- SARA (311, 312) Not listed

Canada Listed in DSL

16. Other information

This data sheet contains changes from the previous version in section(s)

1, 5, 8, 9, 10, 11, 12, 13, 15

Although the information and recommendations set forth herein (hereinafter "information") are presented in good faith and believed to be correct as of the date hereof, NAVA Water Products makes no representations as to the completeness or accuracy thereof.

Information is supplied upon the condition that the persons receiving same will make their own determination as to its safety and suitability for their purposes prior to use.

In no event will NAVA Water Products be responsible for damages of any nature whatsoever resulting from the use of or reliance upon information.

NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESSED OR IMPLIED, OF MERCHANT ABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE, ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH THE INFORMATION REFERS.



MATERIAL SAFETY DATA SHEET

Product name Azure Alkalinity Booster
Product id 2059-AZ
Revision date 11/08/2011
Supersedes 06/12/2006

Revision: 3

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

Prepared by HEALTH, SAFETY & ENVIRONMENT DEPARTMENT
CLEARON CORPORATION
95 MacCorkle Ave., S.W.
South Charleston, WV 25303
USA
Phone number: (304)746-3000

End of safety data sheet