



## SAFETY DATA SHEET

According to OSHA Hazard Communication Standard 29 CFR 1910.1200 (GHS)

Product name **ProTech Alkalinity Increaser**  
Product id AS\_2059\_PT  
Revision date 15/09/2014  
Supersedes 10/08/2011

Revision: 4

### 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  
Toll Free Number: 1-800-811-2327  
Emergency Telephone Chemtrec: (800) 424-9300  
Medical: (800) 420-9236

### 2. Hazards identification

GHS Product is not subject to classification according to GHS. No label elements required.  
GHS classification Not classified  
Labels and other form of warning Not classified  
Symbol(s) Not required  
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



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### 4. First-aid measures

<b>Eye contact</b>	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. Get medical attention immediately.
<b>Skin contact</b>	Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
<b>Inhalation</b>	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.
<b>Ingestion</b>	If swallowed, wash mouth thoroughly with plenty of water. Get medical attention immediately. ++++++. NOTE: Never give an unconscious person anything to drink. ++++++.

#### Most important symptoms and effects, acute or delayed

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

- Eye Contact	Not irritant
- Skin contact	Not irritant
- Inhalation	None known
- Ingestion	Material is practically non-toxic. Small amounts (1-2 tablespoonfuls) swallowed during normal handling operations are not likely to cause injury as long as the stomach is not overly full; swallowing larger amounts may cause injury.
<b>Note to physician</b>	Large doses may produce systemic alkalosis and expansion in extracellular fluid volume with edema. No specific antidote. Treat symptomatically and supportively. In case of ingestion DO NOT induce vomiting.

### 5. Fire - fighting measures

<b>Suitable extinguishing media</b>	Material is not combustible. Use extinguishing media appropriate to surrounding fire conditions.
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**Unusual fire and explosion hazards** When heated to decomposition, may release poisonous fumes of Na<sub>2</sub>O, CO<sub>2</sub>.

**Fire fighting procedure** Fire fighters should wear full protective clothing and self-contained breathing apparatus (SCBA) in positive pressure mode.

### 6. Accidental release measures

**Personal precautions** Use approved respirator, chemical safety goggles, rubber gloves, boots and protective clothes

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

**Environmental precautions** Avoid release to the aquatic environment.

### 7. Handling and storage

**Handling** Sodium Bicarbonate reacts with acids to yield carbon dioxide gas which can accumulate in confined spaces. Do not enter confined spaces until they have been well ventilated and carbon dioxide and oxygen levels have been determined to be safe.

**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

**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** Dust mask required if total dust level exceeds 10 mg/m<sup>3</sup>.



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<b>- Hand protection</b>	Protective gloves Impervious gloves (rubber or neoprene) (when working with solutions)
<b>- Eye protection</b>	Chemical safety goggles
<b>- Skin and body protection</b>	Full body protective clothes and boots.
<b>Hygiene measures</b>	Do not eat, smoke or drink where material is handled, processed or stored. Wash hands thoroughly after handling and before eating or smoking. Safety shower and eye bath should be provided.

### 9. Physical and chemical properties

<b>Appearance</b>	White crystalline powder
<b>Odor</b>	None
<b>pH</b>	8.2 (1% solution)
<b>Melting point/range</b>	Not applicable (decomposes)
<b>Boiling point/range</b>	Not applicable
<b>Flash point</b>	Non-combustible
<b>Evaporation rate (ether=1)</b>	Not applicable
<b>Flammable/Explosion limits</b>	Not applicable
<b>Vapor pressure</b>	Not applicable
<b>Vapor density</b>	Not applicable
<b>- Solubility in water</b>	8.6 g/100ml at 20°C
<b>Auto-ignition temperature</b>	Not applicable
<b>Bulk density</b>	62 lb/Ft <sup>3</sup>
<b>Specific gravity</b>	2.20

### 10. Stability and reactivity

<b>Reactivity</b>	Reacts with acids
<b>Stability</b>	Stable
<b>Possibility of hazardous reactions</b>	Sodium Bicarbonate reacts with acids to yield carbon dioxide gas which can accumulate in confined spaces.
<b>Conditions to avoid</b>	Contact with acids except under controlled conditions. Heating above 65 °C.
<b>Materials to avoid</b>	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.
<b>Hazardous decomposition products</b>	Na <sub>2</sub> O, CO <sub>2</sub>



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### 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

**Target organ effects** None

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

**Carcinogenicity** Not included in NTP 13th Report on Carcinogens  
Not classified by IARC, OSHA, EPA.

### 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.

**Biodegradation** Biodegradation is not relevant for inorganic salts.

**Bioaccumulative potential** Not expected to bioaccumulate



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### 13. Disposal considerations

<b>Waste disposal</b>	Dispose of in a landfill in accordance with local, state and federal regulations
<b>Disposal of Packaging</b>	Empty containers should be disposed of in accordance with all applicable laws and regulations

### 14. Transportation information

<b>DOT</b>	Not regulated
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### 15. Regulatory information

<b>USA</b>	Reported in the EPA TSCA Inventory.
- Section 302 (EHS):	Not listed
<b>CERCLA/SARA - 302 ext. haz. substances</b>	No CERCLA RQ is applicable.
- SARA 313	Not listed
- SARA (311, 312)	Not listed
<b>Canada</b>	Listed in DSL
<b>EU</b>	Reported in EINECS
<b>Japan</b>	ENCS no. (1)-164 ISHL no. (1)-164
<b>Australia</b>	Listed in AICS
<b>Korea</b>	Listed
<b>Philippines</b>	Listed in PICCS



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### 16. Other information

**This data sheet contains changes from the previous version in section(s)**  
2, 4, 5, 7, 8, 10

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

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**End of safety data sheet**