

The information provided conforms to ANSI Standard Z400.1

**BUFFERIGHT®**

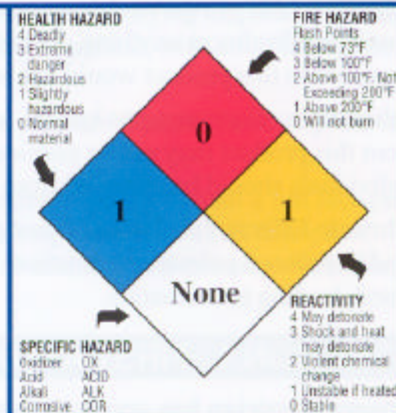
Natural 99% Sodium Bicarbonate

## MATERIAL SAFETY DATA SHEET

Sodium bicarbonate



**BIOPRODUCTS®**



### SECTION 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Bioproducts, Inc.  
320 Springside Drive, Suite 300  
Fairlawn, OH 44333  
Phone: (216) 665-1999

Effective Date: 11/30/94  
Revision: One  
Last Revision Date: 10/93  
Emergency Phone: (619) 372-2291

#### PRODUCT: Bufferight

Chemical Name: Sodium bicarbonate

Chemical Family: Inorganic salts

Synonyms: Bicarbonate of soda; Carbonic acid monosodium salt; Sodium hydrogen carbonate

Chemical Formula:  $\text{NaHCO}_3$

Formula Wt.: 84.01

### SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS No.	Wt %
Sodium bicarbonate	144-55-8	>99 %

#### Exposure Guidelines

**OSHA Standards:** None established for this product; Nuisance dust limits established – 8 hr Time Weighted Average (TWA): 15 mg/m<sup>3</sup> (total dust); 5 mg/m<sup>3</sup> (respirable dust)

**NIOSH Recommendations:** None established.

**ACGIH Threshold Limit Values:** None established for this product; Nuisance dust limits established – 8 hr Time Weighted Average (TWA): 10 mg/m<sup>3</sup> (total – Particulates Not Otherwise Classified)

### SECTION 3. HAZARDS IDENTIFICATION

#### Emergency Overview

This product may present a nuisance dust hazard, causing irritation to respiratory system and eyes. May dry skin causing chapping and redness.

#### NFPA Ratings:

Health

1

Fire

0

Reactivity

1

Key: 0 – Minimal, 1 – Slight, 2 – Moderate, 3 – Serious, 4 – Severe

#### Potential Health Effects

**Target Organs:** Respiratory system, eyes, skin, gastrointestinal tract.

**Routes of Exposure:** Inhalation, dermal and eye contact, ingestion.

#### Signs/Symptoms of Exposure

**Eyes:** May be irritating to eyes causing redness, burning and tearing.

**Skin:** Prolonged and frequent contact with skin may cause redness, dryness and chapping.

**Ingestion:** No symptoms known, as product is considered very unlikely to produce any toxicity except in very large doses. While almost anything, including water and table salt, may cause illness if taken in excessive amounts, normal exposure to this product would not be expected to produce toxicity.

**Inhalation:** No symptoms known, as product is considered to be non-toxic if inhaled. Although inhalation of dust from this product may not be considered toxic, it is certainly a hazard if there is inhalation of too many particles. Individuals should be removed from exposure to too high a concentration of even relatively non-toxic substances.

**Chronic Effects:** Inhalation of dust particles without adequate respiratory protection over a long period of time may lead to reduced pulmonary function. If left untreated and exposure is continued, dry skin conditions may be aggravated, leading to dermatitis.

## SECTION 4. FIRST AID MEASURES

**Ensure physician has access to this MSDS.**

**Eyes:** Immediately flush eyes with large amounts of water for 15 minutes, lifting lower and upper lids while rotating eyes during wash. Ensure no particles remain in creases of eyelids. If so, continue to wash. Get medical attention if irritation persists.

**Skin:** Wash area of skin contact thoroughly with soap and water. Remove and wash contaminated clothing. If irritation persists after washing affected area, get medical attention promptly. Wash clothing before re-use.

**Inhalation:** If inhaled, immediately remove victim to fresh air and call emergency medical care. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

**Ingestion:** If large amounts are swallowed and *person is conscious*, induce vomiting. Never induce vomiting for an unconscious person. Get medical attention.

## SECTION 5. FIRE FIGHTING MEASURES

**Flashpoint (OC):** Not applicable

**Auto Ignition Temp:** Not applicable

**LEL:** Not applicable

**UEL:** Not applicable

**Sensitive to Mechanical Impact?** No

**Static?** No

**Extinguishing Media:** Product is not flammable or combustible. Use extinguishing media appropriate to primary source of fire. Otherwise, use carbon dioxide, foam or water spray.

**Special Procedures:** Carbon dioxide will be generated if large amounts of product are involved in a fire. Fire fighters should be equipped with respiratory protection adequate for oxygen deficient atmospheres. Soda ash, a respiratory, eye and skin irritant, will also be generated at temperatures above 200°F. Avoid skin contact and inhalation of these dusts.

**Explosion Hazards:** None known.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

Ventilate enclosed areas and use appropriate personal protective equipment. Sweep or vacuum spilled material in a manner to avoid the generation of dust. Reclaim product for re-use, if possible, or collect in DOT approved containers for disposal in an appropriate manner.

## SECTION 7. HANDLING AND STORAGE

Keep containers tightly closed. Store in a cool, dry, well-ventilated location, away from strong acids and temperatures above 132°C (270°F).

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Respiratory Protection

**Up to 100 mg/m<sup>3</sup>:** Any dust, mist or fume respirator; any air supplied respirator; or any self-contained breathing apparatus.

**Up to 250 mg/m<sup>3</sup>:** Any supplied air respirator operated in a continuous flow mode or any powered air-purifying respirator with dust/mist/fume filter.

**Up to 500 mg/m<sup>3</sup>:** High efficiency particulate filter with full face piece; any powered air-purifying respirator with tight fitting face piece and a high efficiency particulate filter; any self-contained breathing apparatus with a full face piece; any supplied air respirator with a full face piece.

**Up to 7500 mg/m<sup>3</sup>:** Any supplied air respirator with a full face piece operated in a pressure demand or other positive pressure mode.

**EMERGENCY or entry into UNKNOWN concentrations:** Self-contained breathing apparatus with a full face piece operated in a pressure demand or other positive pressure mode; or any supplied air respirator with a full face piece operated in a pressure demand or other positive pressure mode in combination with auxiliary self-contained breathing apparatus operated in a pressure demand or other positive pressure mode.

**Escape:** Any air purifying full face piece respirator (gas mask) with a high efficiency particulate filter or any appropriate escape-type self-contained breathing apparatus.

#### **Skin Protection**

Gloves and aprons as needed to prevent skin contact. If large quantities are handled loosely to generate spillage and dust, use body coverings and boots. A safety shower and eye wash should be available.

#### **Eye Protection**

Safety goggles to prevent particles from entering eyes. Contact lenses should not be worn when working with this product unless covered with goggles.

#### **Engineering Controls**

Use general/ local exhaust ventilation to keep dust concentrations below Permissible Exposure Levels (PELs) given for nuisance dusts in Section II.

### **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance:** White granular solid

**Odor:** None

**Boiling Point:** Not applicable

**Vapor Pressure:** Not applicable

**Solubility (wt.%):** 8.8 @ 20°C (68°F)

**Specific Gravity (H<sub>2</sub>O = 1):** ~2.2 @ 20°C (68°F)

**Odor Threshold:** Not applicable

**Physical State:** Solid

**Melting Point:** Loses CO<sub>2</sub> at 132°C (270°F)

**Vapor Density:** Not applicable

**% Volatiles:** ~72% when heated >132°C

**Evaporation Rate:** Not applicable

**Oil/Water Coefficient:** Not available

### **SECTION 10. STABILITY AND REACTIVITY**

**Stability:** Stable

**Conditions to Avoid:** Keep away from incompatible materials. Avoid temperatures above 132°C (270°F).

**Incompatibility:** Contact with strong acids will cause an exothermic reaction which generates heat and may cause pressure to build, especially if reaction occurs in a closed container. Contact with monoammonium phosphate, especially in the presence of water, may also cause pressure to build due to the generation of ammonia and CO<sub>2</sub> gas.

**Hazardous Decomposition Products:** Carbon monoxide and carbon dioxide may evolve.

**Hazardous Polymerization:** Will not occur

### **SECTION 11. TOXICOLOGICAL INFORMATION**

**Irritation data:** skin (human) – 30 mg/3D  
eye (rabbit) – 100 mg/3S

**Mutagenicity Data:** Unscheduled DNA Synthesis Analysis (rat/oral) – 50,400 mg/kg/4W

**Toxicity Data:** intraperitoneal (mouse) – TDLo: 40 mg/kg  
oral (infant) – LD<sub>50</sub>: 1260 mg/kg  
oral (rat) – LD<sub>50</sub>: 4220 mg/kg

**Classification of carcinogenicity:** Not considered carcinogenic by NTP, IARC, or OSHA.

## SECTION 12. ECOLOGICAL CONSIDERATIONS

**Environmental Fate:** No data available

**Ecotoxicity Values:** No data available

**Terrestrial Fate:** No data available

**Aquatic Fate:** No data available

**Atmospheric Fate:** No data available

**Biodegradation:** No data available

**Abiotic Degradation:** No data available

**Bioconcentration:** No data available

**Soil Adsorption/Mobility:** No data available

**Volatilization:** No data available

## SECTION 13. DISPOSAL CONSIDERATIONS

This product is not regulated as a hazardous waste under RCRA. DO NOT discharge to sewer.

## SECTION 14. TRANSPORT INFORMATION

**Proper Shipping Name:** Non-regulated

**ID No.:** None

**Hazard Class:** None

**Packaging Group:** None

**Label:** None required

## SECTION 15. REGULATORY INFORMATION

### United States

**TSCA – Inventory:** Listed

**Water Standards:** Not regulated

**Atmospheric Standards:** Not regulated

**Soil Standards:** Not regulated

**CERCLA:** Not regulated

**SARA Title III:** This product is not regulated under Section 302, 311, 312 or 313 of SARA.

### Other Regulations

**California – Exposure Limits – PELs:** None listed

**Ceiling:** None listed

**Notations:** None listed

**Direct. List of Haz. Substances:** Not listed

**Florida – Hazardous Substances List:** Not listed

**Massachusetts – Right-to-Know List:** Not listed

**Minnesota – Haz. Subs. List:** Not listed

**New Jersey – Right-to-Know List (Total):** Not listed

**Pennsylvania – Right-to-Know List:** Not listed

**Michigan – Critical Materials List:** Not listed

**Canada – WHMIS: Ingredient Disclosure List:** Not listed

**Risk Phrases:** None required

## SECTION 16. OTHER INFORMATION

**Contact:** Mr. Sam Beverly (x 2117)

**Phone:** (800) 876-6027

Mr. Dan Andreasen (x 2121)

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