

## Sodium Bicarbonate

Revision Date: February 1, 2018

Section 1: Identification

Product Name: Sodium Bicarbonate Emergency Phone Number: CHEMTREC: 800-424-9300

Other Identification: Baking Soda, Bicarbonate of Soda, CAS#: 144-55-8

Sodium Hydrogen Carbonate

Manufacturer: Natural Soda LLC Intended Use: Food and baking ingredient, specialty

> 3200 County Road 31 products, fire retardant, animal Rifle, Colorado 81650 USA nutrition, pharmaceutical, household and personal care, mild cleaners,

Phone Number: 1-970-878-3674 general industrial.

Section 2: Hazard(s) Identification

Classification of Substance Not Classified Typical Range: 63 - 75 lbs / ft3

Classification (GHS-US):

Label Elements Applicable labeling Other Hazards: Inhalation: Breathing dusts may **GHS-US Labeling:** cause coughing or difficulty breathing

Eye Contact: Direct eye contact Unknown Acute Toxicity (GHS-US): Not available

may cause irritation, reddening or tearing.

Skin Contact: Direct contact may

cause irritation.

Section 3: Composition / Information on Ingredients

CAS# 144-55-8 Substance Common Name: Sodium Bicarbonate

Chemical Name: Sodium Bicarbonate, Bicarbonate of Formula: NaHCO,

Soda, Sodium Hydrogen Carbonate **Purity** 99+% (w/w)

Impurities: No impurities relevant for

classification and labeling.

Section 4: First-Aid Measures

Most Important Symptoms and Effects, Acute and Delayed Description of First-Aid Measures

> General: No known delayed effects. Never General: None expected under normal

conditions of use. give anything by mouth to an unconscious person. If you feel unwell, seek medical advice.

**Eye Contact:** Contact may cause irritation due to Eye Contact: Immediately rinse eyes with water.

Remove any contact lenses, and mechanical abrasion. continue flushing eyes with running water for at least 15 minutes. Get immediate medical attention.

Skin: Contact with large amounts of dust Skin: Wash affected areas with plenty

may cause mechanical irritation. of water, and soap if available, for several minutes. Seek medical attention if irritation develops or

persists

Inhalation: Prolonged inhalation of dust may Inhalation: Remove from area to fresh air. Seek cause respiratory irritation.

medical attention if respiratory irritation develops or if breathing

becomes difficult.

Ingestion: Large doses may produce systemic **Ingestion:** May cause nausea, vomiting and alkalosis and expansion in

abdominal pain. Large doses can

cause alkalosis.

Indication of Any Immediate Medical Attention and Special Treatment Needed. If exposed or concerned, get medical advice and attention.

extracellular fluid volume with edema



Advice for Firefighters: No special precautions required.

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## Section 5: Fire-Fighting Measures

General: This product will not burn, and can be used as a dry powder extinguishing medium.

Suitable Extinguishing Media: Use material suitable for surrounding

**Extinguishing Media** 

fire conditions.

Unsuitable Extinguishing Media: None General Measures: Wear self-contained breathing

> apparatus when entering area unless atmosphere is proved to be safe.

**Special Hazards Arising Protection During Firefighting:** Do not enter fire area without proper

from the Substance protective equipment, including

respiratory protection. Fire Hazard: Not Flammable

Explosion Hazards: Not Explosive **Hazardous Combustion Products:** CO2 (displacement of breathable

atmosphere).

Reactivity: Hazardous reactions will not occur

under normal conditions.

#### Section 6: Accidental Release Measures

General Personal Precautions, Protective Equipment and Emergency Procedures: For dry spills, sweep or shovel and place in containers for disposal in accordance with applicable regulations (see Disposal Considerations section). Handle in accordance with good industrial hygiene and safety practices. Avoid formation of dust. Avoid excess skin and eye contact. Avoid contamination of bodies of water during cleanup.

For Non-Emergency Personnel: Keep dust levels to a minimum Environmental Precautions: Avoid any mixture with an acid into sewer or drain (CO2 gas formation).

Wear suitable personal protective

equipment

Equip cleanup crew with proper Methods for Containment: Vacuum or shovel into bags. For Emergency Personnel:

> protection. Methods for Cleanup:

Avoid generation of dust during Ventilate area. cleanup of spills. Keep in suitable

closed labeled container for disposal.

Section 7: Handling and Storage

Precautions for Safe Handling: Avoid contact with eyes, skin and Conditions for Safe Storage: Store in a cool, dry and well-

> clothing. Wash hands thoroughly with soap and water after handling and before eating, drinking or

smoking.

ventilated location. Good

housekeeping should be maintained to minimize dust accumulation and

generation.

#### Section 8: : Exposure Controls / Personal Protection

#### Control Parameters (Particles not otherwise classified)

limits

US ACGIH (TWA): 3 mg/m3 Respirable Dust Use vented goggles or safety glasses Eye Protection:

10 mg/m3 Total Dust in excessively dusty conditions.

US OSHA PEL (TWA): 5 mg/m3 Respirable Dust Skin Protection: Not required under normal

15 mg/m3 Total Dust conditions. Use gloves and protective clothing if excessively

dusty, or if skin is damaged.

Engineering Controls: Use local exhaust ventilation to Respiratory Protection: None required where adequate keep airborne levels below exposure ventilation is provided. If airborne

concentrations are high, use a NIOSH/MSHA approved respirator that has been selected by a technically qualified person for the

specific work conditions.

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Section 9: Physical and Chemical Properties

Appearance: White granular solid **Explosive Limits:** Not applicable

Odor: No odor Vapor Pressure: Not applicable

Odor Threshold: Not applicable Vapor Density: Not applicable

**pH Value:** 1% Solution = 8.0-8.5 Bulk Density: 60 lbs/ ft3

Melting Point: Decomposes above 500C without melting Specific Gravity: (H<sub>2</sub>O=1 @ 4°C): 2.16

Boiling Point: Not applicable Solubility In Water: 8.8% at 20°C

Flash Point: Not applicable Partition coefficient: Not applicable (inorganic substance)

Evaporation Rate: Not applicable Auto-ignition temperature: Not applicable

Flammability Not applicable (can be used to put out fires) **Decomposition temperature:** >50°C

Molecular Weight: 84.01 g/cc Viscosity: Not applicable

Boiling Point: Decomposes on heating

Toxicity:

Not classified

Section 10: Stability and Reactivity

Reactivity: Hazardous reactions will not occur under normal Conditions to Avoid: Exposure to moisture or moist air.

circumstances. Temperatures above 150°F (65°C)

**Chemical Stability:** Stable in dry air, in moist air forms sodium Incompatible Materials: Acids. Aluminum (tarnishes).

carbonate, which is an irritant,

Possibility of Hazardous Hazardous polymerization will not occur. **Hazardous Decomposition** When heated to decomposition, Reactions:

Products: sodium bicarbonate produces carbon

dioxide

Section 11: Toxicological Information

Eyes: Mid (rabbit) 100 mg/30 sec Symptoms after Inhalation: Prolonged inhalation of dust may cause

respiratory irritation. Skin: Mid (human) 30 mg/ 3 days-intermittent

Symptoms after Skin Contact: Large amounts of dust may cause Ingestion: Oral LD60 (rat) 4220 mg/kg

mechanical irritation. Oral LD60 (mouse) 3360 mg/kg

Symptoms after Eye Contact: Contact may cause irritation due to Oral LDL5 (man) 20 mg/kg/ 5 days intermittent mechanical abrasion.

Oral LDL5 (infant) 1260 mg/kg Large doses may produce symptomatic Symptoms after Ingestion:

alkalosis and expansion in extracellular

fluid volume with edema.

Chronic Symptoms: None expected under normal

conditions of use

Skin Corrosion/Irritation: Not classified Carcinogenicity: Sodium Bicarbonate is not listed as

a carcinogen by the Environmental Serious Eye Damage/

Protection Agency (EPA), the State Not classified Irritation: of California, the National Toxicology Respiratory or skin Program, or the International sensitization: Not classified Agency for Research on Cancer. See

Regulatory Information Section for Germ cell mutagenicity: Not classified additional information.

Teratogenicity: Not classified

Carcinogenicity: Not classified

Specific Target Organ

Reproductive Toxicity: Not classified Aspiration Hazard: Not classified



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### Section 12: Ecological Information

Toxicity: Persistence and Degradability: Not established

LC 50 Fish 1 7100 mg/l (Bluegill) Bio-accumulative Potential: Not established

LC 50 Fish 1: 8250-9000 mg/l (Exposure time 96h) Mobility in Soil Not available

EC 50 Daphnia 1: 4100 mg/l Other Adverse Effects: No other adverse effects are identified

EC 50 Daphnia 1: 2350 mg/l (Exposure time 48h)
LC 50 Fish 2: 7700 mg/l (Rainbow trout)

#### Section 13: Disposal Considerations

**Disposal Guidance:** If permitted by local and state regulations, place in a hazardous or industrial waste landfill. Tonnage quantities are not, however, recommended for the landfill, and if possible, should be re-used for an appropriate application. Small quantities may be flushed to sewers if permitted by NPDES or POTW permit. Refer to federal, state, provincial and local regulations for applicable site-specific requirements. Keep out of drinking water sources. See Regulatory Information for more details.

### Section 14: Transport Information

U.S. Department of

Transportation (DOT)

Identification Number: Sodium Bicarbonate is not a DOT

Hazardous Material.

International Transportation: Sodium Bicarbonate has no U.N. number,

and is not regulated under international rail, highway, water, or air transport

regulations.

Transportation of Dangerous

Goods (TDG): Not Regulated.

### Section 15: Regulatory Information

TSCA Number: 144-55-8 California Proposition 65: Not listed.

TSCA Number: Not listed under any section. SARA III: Section 302-No; 311-No; 312-No;

313-No

CERCLA (Superfund): Not listed under any section. Workplace Hazardous

Materials Information System

(WHMIS): Not a controlled product

Clean Water Act (CWA): Not listed. EU Classification: Not a dangerous substance

Safe Drinking Water Act OSHA: Treat as particulates not otherwise

(SWDA): Not listed. regulated.

International Agency for ACGIH: Treat as particulates not otherwise

Research on Cancer: Not listed. regulated.

NTP Annual Report on Carcinogens:

Federal Drug Agency (FDA): Sodium bicarbonate is permitted for the following uses: Antibiotic manufacturing:

following uses: Antibiotic manufacturing; cake, pancake and ready-mixes; catalyst manufacture; chemical; dentifrices; explosives; fire extinguishers; food colors; food conditioner; papermaking; pharmaceuticals; photography; self-rising

flour; starches; sugar refining; textiles.

#### **International Listings**

AICS (Australian Inventory of Chemical Substances.

OSHA Carcinogen: Not listed.

· Canadian DSL (Domestic Substances List).

CONEG Model Legislation: Not listed.

- IECSC (Inventory of Existing Chemical Substances Produced or Imported in China).
- EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)
- Japanese ENCS (Existing & New chemical Substances) inventory
- Korean ECL (Existing Chemicals List)
- NZIoC (New Zealand Inventory of Chemicals)
- PICCS (Philippines Inventory of Chemicals and Chemical Substances)
- United States TSCA (Toxic Substances Control Act) inventory



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#### **Notice**

Judgments as to the suitability of information herein for purchaser's purposes are necessarily purchaser's responsibility. Therefore, although reasonable care has been taken in the preparation of such information, Natural Soda LLC extends no warranties, makes no representation, and assumes no responsibility as to the accuracy or suitability of such information for application to purchaser's intended purposes for consequences of its use.

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### Section 16: Other Information, Including Date of Preparation or Last Revision

This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard

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