



# Sodium Bicarbonate

## Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

Revision Date: 01/27/2017 Date of Issue: 01/27/2017

Version: 2.0

### SECTION 1: IDENTIFICATION

#### Product Identifier

**Product Form:** Substance

**Product Name:** Sodium Bicarbonate

**CAS No:** 144-55-8

**Formula:** NaHCO<sub>3</sub>

**Synonyms:** Baking Soda

#### Intended Use of the Product

Food Ingredient, Pharmaceutical, Household and Personal Care Product, Water Treatment, General Industrial Use.

#### Name, Address, and Telephone of the Responsible Party

##### **Company**

Church & Dwight

500 Charles Ewing Blvd

Ewing Township, NJ 08628

T 1-800-524-1328

[www.churchdwight.com](http://www.churchdwight.com)

#### Emergency Telephone Number

**Emergency Number** : For Medical Emergency: 1-888-234-1828 (USA and Canada), 952-853-1925 (Outside USA and Canada); For Chemical Emergency (CHEMTREC): 1-800-424-9300 (USA and Canada), 1-703-741-5970 (Outside USA and Canada)

### SECTION 2: HAZARDS IDENTIFICATION

#### Classification of the Substance or Mixture

##### **GHS-US/CA Classification**

Not classified

#### Label Elements

##### **GHS-US/CA Labeling**

No labeling applicable

#### Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

#### Unknown Acute Toxicity (GHS-US/CA)

No data available

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### Substance

Name : Sodium Bicarbonate

CAS No : 144-55-8

EC no : 205-633-8

| Name               | Product Identifier | % * | GHS Ingredient Classification |
|--------------------|--------------------|-----|-------------------------------|
| Sodium bicarbonate | (CAS No) 144-55-8  | 100 | Not classified                |

Full text of H-phrases: see section 16

\*Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%).

### SECTION 4: FIRST AID MEASURES

#### Description of First-aid Measures

**General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

**Inhalation:** When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

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**Skin Contact:** Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.

**Eye Contact:** Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

**Ingestion:** Rinse mouth. Do not induce vomiting. Obtain medical attention.

### **Most Important Symptoms and Effects Both Acute and Delayed**

**General:** Not expected to present a significant hazard under anticipated conditions of normal use.

**Inhalation:** Prolonged exposure may cause irritation.

**Skin Contact:** Prolonged exposure may cause skin irritation.

**Eye Contact:** May cause slight irritation to eyes.

**Ingestion:** Large doses may produce systemic alkalosis and expansion in extracellular fluid volume with edema.

**Chronic Symptoms:** None expected under normal conditions of use.

### **Indication of Any Immediate Medical Attention and Special Treatment Needed**

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

## SECTION 5: FIRE-FIGHTING MEASURES

### **Extinguishing Media**

**Suitable Extinguishing Media:** Water spray, dry chemical, foam, carbon dioxide.

**Unsuitable Extinguishing Media:** Do not use a heavy water stream. Use of heavy stream of water may spread fire.

### **Special Hazards Arising From the Substance or Mixture**

**Fire Hazard:** Not considered flammable but may burn at high temperatures.

**Explosion Hazard:** Product is not explosive.

**Reactivity:** Hazardous reactions will not occur under normal conditions.

### **Advice for Firefighters**

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire.

**Firefighting Instructions:** Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed containers.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

**Hazardous Combustion Products:** Carbon oxides (CO, CO<sub>2</sub>). Sodium oxides.

### **Reference to Other Sections**

Refer to Section 9 for flammability properties.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### **Personal Precautions, Protective Equipment and Emergency Procedures**

**General Measures:** Avoid prolonged contact with eyes, skin and clothing. Avoid breathing dust.

#### **For Non-Emergency Personnel**

**Protective Equipment:** Use appropriate personal protective equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel.

#### **For Emergency Personnel**

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedures:** Ventilate area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

### **Environmental Precautions**

Avoid release to the environment. Prevent entry to sewers and public waters.

### **Methods and Materials for Containment and Cleaning Up**

**For Containment:** Contain and collect as any solid. Contain solid spills with appropriate barriers and prevent migration and entry into sewers or streams.

**Methods for Cleaning Up:** Clean up spills immediately and dispose of waste safely. Recover the product by vacuuming, shoveling or sweeping. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

### **Reference to Other Sections**

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

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### SECTION 7: HANDLING AND STORAGE

#### Precautions for Safe Handling

**Precautions for Safe Handling:** Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid prolonged contact with eyes, skin and clothing. Avoid breathing dust.

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures.

#### Conditions for Safe Storage, Including Any Incompatibilities

**Technical Measures:** Comply with applicable regulations.

**Storage Conditions:** Keep container closed when not in use. Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

**Incompatible Materials:** Strong acids, strong bases, strong oxidizers. Water. Lime.

**Storage Temperature:** < 65 °C (< 150 °F)

#### Specific End Use(s)

Food Ingredient, Pharmaceutical, Household and Personal Care Product, Water Treatment, General Industrial Use.

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

| <b>Particulates not otherwise classified (PNOC)</b> |                                     |  |
|---|-------------------------------------|--|
| <b>USA ACGIH</b>                                    | ACGIH TWA (mg/m <sup>3</sup> )      | 3 mg/m <sup>3</sup> Respirable fraction<br>10 mg/m <sup>3</sup> Total Dust   |
| <b>USA OSHA</b>                                     | OSHA PEL (TWA) (mg/m <sup>3</sup> ) | 5 mg/m <sup>3</sup> Respirable fraction<br>15 mg/m <sup>3</sup> Total Dust   |
| <b>Alberta</b>                                      | OEL TWA (mg/m <sup>3</sup> )        | 10 mg/m <sup>3</sup> (total)<br>3 mg/m <sup>3</sup> (respirable)   |
| <b>British Columbia</b>                             | OEL TWA (mg/m <sup>3</sup> )        | 10 mg/m <sup>3</sup> (nuisance dust-total dust)<br>3 mg/m <sup>3</sup> (nuisance dust-respirable fraction)   |
| <b>Manitoba</b>                                     | OEL TWA (mg/m <sup>3</sup> )        | 10 mg/m <sup>3</sup> (inhalable particles, recommended)<br>3 mg/m <sup>3</sup> (respirable particles, recommended)   |
| <b>New Brunswick</b>                                | OEL TWA (mg/m <sup>3</sup> )        | 3 mg/m <sup>3</sup> (particulate matter containing no Asbestos and <1% Crystalline silica, respirable fraction)<br>10 mg/m <sup>3</sup> (particulate matter containing no Asbestos and <1% Crystalline silica, inhalable fraction) |
| <b>Newfoundland &amp; Labrador</b>                  | OEL TWA (mg/m <sup>3</sup> )        | 10 mg/m <sup>3</sup> (inhalable particles, recommended)<br>3 mg/m <sup>3</sup> (respirable particles, recommended)   |
| <b>Nova Scotia</b>                                  | OEL TWA (mg/m <sup>3</sup> )        | 10 mg/m <sup>3</sup> (inhalable particles, recommended)<br>3 mg/m <sup>3</sup> (respirable particles, recommended)   |
| <b>Nunavut</b>                                      | OEL STEL (mg/m <sup>3</sup> )       | 20 mg/m <sup>3</sup> (insoluble or poorly soluble-inhalable fraction)<br>6 mg/m <sup>3</sup> (insoluble or poorly soluble-respirable fraction)   |
| <b>Nunavut</b>                                      | OEL TWA (mg/m <sup>3</sup> )        | 10 mg/m <sup>3</sup> (insoluble or poorly soluble-inhalable fraction)<br>3 mg/m <sup>3</sup> (insoluble or poorly soluble-respirable fraction)   |
| <b>Northwest Territories</b>                        | OEL STEL (mg/m <sup>3</sup> )       | 20 mg/m <sup>3</sup> (insoluble or poorly soluble-inhalable fraction)<br>6 mg/m <sup>3</sup> (insoluble or poorly soluble-respirable fraction)   |
| <b>Northwest Territories</b>                        | OEL TWA (mg/m <sup>3</sup> )        | 10 mg/m <sup>3</sup> (insoluble or poorly soluble-inhalable fraction)<br>3 mg/m <sup>3</sup> (insoluble or poorly soluble-respirable fraction)   |
| <b>Ontario</b>                                      | OEL TWA (mg/m <sup>3</sup> )        | 10 mg/m <sup>3</sup> (inhalable)<br>3 mg/m <sup>3</sup> (respirable)   |
| <b>Prince Edward Island</b>                         | OEL TWA (mg/m <sup>3</sup> )        | 10 mg/m <sup>3</sup> (inhalable particles, recommended)<br>3 mg/m <sup>3</sup> (respirable particles, recommended)   |
| <b>Québec</b>                                       | VEMP (mg/m <sup>3</sup> )           | 10 mg/m <sup>3</sup> (including dust, inert or nuisance particulates-total dust)   |
| <b>Saskatchewan</b>                                 | OEL STEL (mg/m <sup>3</sup> )       | 20 mg/m <sup>3</sup> (insoluble or poorly soluble-inhalable fraction)<br>6 mg/m <sup>3</sup> (insoluble or poorly soluble-respirable fraction)   |

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|              |                              |  |
|--------------|------------------------------|--|
| Saskatchewan | OEL TWA (mg/m <sup>3</sup> ) | 10 mg/m <sup>3</sup> (insoluble or poorly soluble-inhalable fraction)<br>3 mg/m <sup>3</sup> (insoluble or poorly soluble-respirable fraction) |
|--------------|------------------------------|--|

### Exposure Controls

**Appropriate Engineering Controls:** For occupational/workplace settings: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed.

**Personal Protective Equipment:** For occupational/workplace settings and bulk quantities: Gloves. Protective clothing. Protective goggles.



**Materials for Protective Clothing:** For occupational/workplace settings: Chemically resistant materials and fabrics.

**Hand Protection:** For occupational/workplace settings: Wear protective gloves.

**Eye Protection:** For occupational/workplace settings: Chemical safety goggles.

**Skin and Body Protection:** Wear suitable protective clothing.

**Respiratory Protection:** If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

**Other Information:** When using, do not eat, drink or smoke.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### Information on Basic Physical and Chemical Properties

|  |  |
|--|--|
| Physical State                         | : Solid  |
| Appearance                             | : White, crystalline powder                      |
| Odor                                   | : None   |
| Odor Threshold                         | : Not available                                  |
| pH                                     | : 8.2 (1% Solution)                              |
| Evaporation Rate                       | : Not available                                  |
| Melting Point                          | : Not available                                  |
| Freezing Point                         | : Not available                                  |
| Boiling Point                          | : Not available                                  |
| Flash Point                            | : Not available                                  |
| Auto-ignition Temperature              | : Not available                                  |
| Decomposition Temperature              | : Not available                                  |
| Flammability (solid, gas)              | : Not available                                  |
| Lower Flammable Limit                  | : Not available                                  |
| Upper Flammable Limit                  | : Not available                                  |
| Vapor Pressure                         | : Not available                                  |
| Relative Vapor Density at 20°C         | : Not available                                  |
| Relative Density                       | : Not available                                  |
| Specific Gravity / Density             | : 62 lb/ft <sup>3</sup> (993 kg/m <sup>3</sup> ) |
| Specific Gravity                       | : Not available                                  |
| Solubility                             | : Water: 8.6 g/100ml @ 20 °C (68 °F)             |
| Partition Coefficient: N-Octanol/Water | : Not available                                  |
| Viscosity                              | : Not available                                  |

## SECTION 10: STABILITY AND REACTIVITY

**Reactivity:** Hazardous reactions will not occur under normal conditions.

**Chemical Stability:** Stable under recommended handling and storage conditions (see section 7).

**Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.

**Conditions to Avoid:** Direct sunlight, extremely high or low temperatures, and incompatible materials.

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**Incompatible Materials:** Strong acids, strong bases, strong oxidizers. Water. Lime.

**Hazardous Decomposition Products:** None known. At high temperature may liberate toxic gases.

## SECTION 11: TOXICOLOGICAL INFORMATION

### Information on Toxicological Effects - Product

**Acute Toxicity (Oral):** Not classified

**Acute Toxicity (Dermal):** Not classified

**Acute Toxicity (Inhalation):** Not classified

**LD50 and LC50 Data:** Not available

**Skin Corrosion/Irritation:** Not classified

**pH:** 8.2 (1% Solution)

**Eye Damage/Irritation:** Not classified

**pH:** 8.2 (1% Solution)

**Respiratory or Skin Sensitization:** Not classified

**Germ Cell Mutagenicity:** Not classified

**Carcinogenicity:** Not classified

**Specific Target Organ Toxicity (Repeated Exposure):** Not classified

**Reproductive Toxicity:** Not classified

**Specific Target Organ Toxicity (Single Exposure):** Not classified

**Aspiration Hazard:** Not classified

**Symptoms/Injuries After Inhalation:** Prolonged exposure may cause irritation.

**Symptoms/Injuries After Skin Contact:** Prolonged exposure may cause skin irritation.

**Symptoms/Injuries After Eye Contact:** May cause slight irritation to eyes.

**Symptoms/Injuries After Ingestion:** Large doses may produce systemic alkalosis and expansion in extracellular fluid volume with edema.

**Chronic Symptoms:** None expected under normal conditions of use.

### Information on Toxicological Effects - Ingredient(s)

**LD50 and LC50 Data:**

| Sodium bicarbonate (144-55-8) |            |
|-------------------------------|------------|
| LD50 Oral Rat                 | 7334 mg/kg |

## SECTION 12: ECOLOGICAL INFORMATION

### Toxicity

**Ecology - General:** Not classified.

| Sodium bicarbonate (144-55-8) |                         |
|-------------------------------|-------------------------|
| LC50 Fish 1                   | 7100 mg/l Bluegill      |
| EC50 Daphnia 1                | 4100 mg/l Daphnids      |
| LC50 Fish 2                   | 7700 mg/l Rainbow Trout |

### Persistence and Degradability

| Sodium Bicarbonate (144-55-8) |                  |
|-------------------------------|------------------|
| Persistence and Degradability | Not established. |

### Bioaccumulative Potential

| Sodium Bicarbonate (144-55-8) |                  |
|-------------------------------|------------------|
| Bioaccumulative Potential     | Not established. |

**Mobility in Soil** Not available

### Other Adverse Effects

**Other Information:** Avoid release to the environment.

## SECTION 13: DISPOSAL CONSIDERATIONS

**Waste Disposal Recommendations:** Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

**Ecology - Waste Materials:** Avoid release to the environment.

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### SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

**In Accordance with DOT** Not regulated for transport

**In Accordance with IMDG** Not regulated for transport

**In Accordance with IATA** Not regulated for transport

**In Accordance with TDG** Not regulated for transport

### SECTION 15: REGULATORY INFORMATION

#### US Federal and International Regulations

##### **Sodium bicarbonate (144-55-8)**

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on the Canadian DSL (Domestic Substances List)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on the Korean ECL (Existing Chemicals List)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Listed on CICR (Turkish Inventory and Control of Chemicals)

#### US State Regulations

Neither this product nor its chemical components appear on any US state lists.

#### Canadian Regulations

##### **Sodium bicarbonate (144-55-8)**

Listed on the Canadian DSL (Domestic Substances List)

### SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

**Revision Date** : 01/27/2017

**Other Information** : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations (HPR).

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