Section 1: Identification

Product Name: SODIUM BICARBONATE
Other Identification: Baking Soda, Bicarbonate of Soda, Sodium Hydrogen Carbonate
Manufacturer: Natural Soda LLC
3200 County Road 31
Rifle, Colorado 81650 USA
Phone Number: 1-970-878-3674
Intended Use: food and baking ingredient, specialty products, fire retardant, animal nutrition, pharmaceutical, household and personal care, mild cleaners, general industrial.

Section 2: Hazard(s) Identification

Classification of Substance
Classification (GHS-US): Not Classified
Label Elements
GHS-US Labeling: No applicable labeling
Unknown Acute Toxicity (GHS-US) Not available
Other Hazards
Inhalation: Breathing dusts may cause coughing or difficulty breathing.
Eye Contact: Direct eye contact may cause irritation, reddening or tearing.
Skin Contact: Direct contact may cause irritation.

Section 3: Composition / Information on Ingredients

Substance CAS#: 144-55-8
Common Name: Sodium Bicarbonate
Chemical Names: Sodium Bicarbonate, Bicarbonate of 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
General: None expected under normal conditions of use.
Eye Contact: Contact may cause irritation due to mechanical abrasion.
Skin: Contact with large amounts of dust may cause mechanical irritation.
Inhalation: Prolonged inhalation of dust may cause respiratory irritation.
Ingestion: Large doses may product systemic alkalosis and expansion in extracellular fluid volume with edema.
Indication of Any Immediate Medical Attention and Special Treatment Needed
If exposed or concerned, get medical advice and attention.

Section 5: Fire-fighting Measures

General: This product will not burn, and can be used a dry powder extinguishing medium.
Extinguishing Media
Suitable Extinguishing Media: Use material suitable for surrounding fire conditions.
Unsuitable Extinguishing Media: none.
Special Hazards Arising from the Substance
Fire Hazard: Not Flammable
Explosion Hazards: Not Explosive
Reactivity: Hazardous reactions will not occur under normal conditions.
Advice for Firefighters
No special precautions required.
General Measures: Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe.
Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.
Hazardous Combustion Products: CO₂ (displacement of breathable atmosphere).

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 practice. 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
Wear suitable personal protective equipment
Environmental Precautions
Avoid any mixture with an acid into sewer or drain (CO₂ gas formation)
For Emergency Personnel
Equip cleanup crew with proper protection.
Ventilate area.
Methods for Containment: vacuum or shovel into bags
SODIUM BICARBONATE  
Safety Data Sheet

### Section 7: Handling and Storage

<table>
<thead>
<tr>
<th>Precautions for Safe Handling</th>
<th>Conditions for Safe Storage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General:</strong> Avoid contact with eyes, skin and clothing. Wash hands thoroughly with soap and water after handling and before eating, drinking or smoking.</td>
<td><strong>General:</strong> Store in a cool, dry and well-ventilated location. Good housekeeping should be maintained to minimize dust accumulation and generation. <strong>Incompatibilities:</strong> Keep away from acids, water.</td>
</tr>
</tbody>
</table>

### Section 8: Exposure Controls / Personal Protection

<table>
<thead>
<tr>
<th>Control Parameters (Particles not otherwise classified)</th>
<th>Eye Protection: Use vented goggles or safety glasses in excessively dusty conditions</th>
<th>Skin Protection: Not required under normal conditions. Use gloves and protective clothing if excessively dusty, or if skin is damaged</th>
<th>Respiratory Protection: None required where adequate 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.</th>
</tr>
</thead>
<tbody>
<tr>
<td>US ACGIH (TWA): 3 mg/m³ Respirable Dust 10 mg/m³ Total Dust</td>
<td>Eye Protection: Use vented goggles or safety glasses in excessively dusty conditions</td>
<td>Skin Protection: Not required under normal conditions. Use gloves and protective clothing if excessively dusty, or if skin is damaged</td>
<td>Respiratory Protection: None required where adequate 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.</td>
</tr>
<tr>
<td>US OSHA PEL (TWA): 5 mg/m³ Respirable Dust 15 mg/m³ Total Dust</td>
<td>Eye Protection: Use vented goggles or safety glasses in excessively dusty conditions</td>
<td>Skin Protection: Not required under normal conditions. Use gloves and protective clothing if excessively dusty, or if skin is damaged</td>
<td>Respiratory Protection: None required where adequate 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.</td>
</tr>
</tbody>
</table>

### Section 9: Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Solubility in Water: 8.8% at 20°C</th>
<th>pH Value: 1% Solution = 8.0-8.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance: White granular solid</td>
<td>Flash Point: Not Applicable</td>
</tr>
<tr>
<td>Boiling Point: Decomposes on heating</td>
<td>Specific Gravity: (H₂O=1 @ 4°C): 2.16</td>
</tr>
<tr>
<td>Melting Point: Decomposes above 50°C without melting</td>
<td>Bulk Density: 60 lbs/ft³</td>
</tr>
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<td></td>
<td>Vapor Pressure: Not Applicable</td>
</tr>
</tbody>
</table>

### Section 10: Stability and Reactivity

<table>
<thead>
<tr>
<th>Reactivity: Hazardous reactions will not occur under normal circumstances.</th>
<th>Conditions to Avoid: Exposure to moisture or moist air. Temperatures above 150°F (65°C)</th>
</tr>
</thead>
</table>

### Section 11: Toxicological Information

**EYES:** Mid (rabbit) 100 mg/ 30 sec  
**SKIN:** Mid (human) 30 mg/ 3 days-intermittent  
**INGESTION:** Oral LD₆₀ (rat) 4220 mg/kg  
Oral LD₆₀ (mouse) 3360 mg/kg  
Oral LD₅₀ (man) 20 mg/kg/ 5 days-intermittent  
Oral LD₅₀ (infant) 1260 mg/kg  

**Symptoms after Ingestion:** Large doses may produce symptomatic alkalosis and expansion in extracellular fluid volume with edema.  
**Chronic Symptoms:** None expected under normal conditions of use  

**Skin Corrosion/Irritation:** Not classified  
**Serious Eye Damage/Irritation:** Not classified  
**Respiratory or skin sensitization:** Not classified  
**Germ cell mutagenicity:** Not classified  
**Teratogenicity:** Not classified  
**Carcinogenicity:** Not classified  
**Specific Target Organ Toxicity:** Not classified  
**Reproductive Toxicity:** Not classified  
**Aspiration Hazard:** Not classified  

**CARCINOGENICITY:** Sodium Bicarbonate is not listed as a carcinogen by the Environmental Protection Agency (EPA), the State of California, the National Toxicology Program, or the International Agency for Research on Cancer. See Regulatory Information Section for additional information.

### Section 12: Ecological Information

**Toxicity**  
- LC₅₀ Fish 1: 7100 mg/l (Bluegill)  
- LC₅₀ Fish 1: 8250-9000 mg/l (Exposure time 96h)  
- EC₅₀ Daphnia 1: 4100 mg/l  
- EC₅₀ Daphnia 1: 2350 mg/l (Exposure time 48h)  
- LC₅₀ Fish 2: 7700 mg/l (Rainbow trout)  

**Persistence and Degradability:** Not established  
**Bioaccumulative Potential:** Not established  
**Mobility in Soil:** Not available  
**Other Adverse Effects:** No other adverse effects are identified

### 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

<table>
<thead>
<tr>
<th>TSCA Number: 144-55-8</th>
<th>California Proposition 65: Not listed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCRA (40 CFR 261): Not listed under any section.</td>
<td>SARA III: Section 302-No: 311-Yes: 312-Yes: 313-No</td>
</tr>
<tr>
<td>Safe Drinking Water Act (SWDA): Not listed.</td>
<td>OSHA: Treat as particulates not otherwise regulated.</td>
</tr>
</tbody>
</table>

**International Agency for Research on Cancer: Not listed.**

**ACGIH:** Treat as particulates not otherwise regulated.

**NTP Annual Report on Carcinogens:**
- OSHA Carcinogen: Not listed.
- CONEG Model Legislation: Not listed.

**Federal Drug Agency (FDA):** Sodium bicarbonate is permitted for the following uses: Antibiotic manufacturing; cake, pancake and ready-mixes; catalyst manufacturer; 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).
- Canadian DSL (Domestic Substances List).
- IECSR (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

### 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.**

### References

- National Toxicology Program (NTP). 1991b. *Registry of toxic effects of chemical substances (RTECS)*.
- Registry of Toxic Effects of Chemical Substances Accession Number: VZ0950000.

### 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 29 CFR 1910.1200.

<table>
<thead>
<tr>
<th>Revision Date:</th>
<th>Prepared by:</th>
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</thead>
<tbody>
<tr>
<td>04/10/2015</td>
<td>Natural Soda LLC</td>
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<tr>
<td></td>
<td>3200 County Road 31</td>
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<tr>
<td></td>
<td>Rifle, Colorado  81650</td>
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<tr>
<td></td>
<td>Ph: 970-878-3674</td>
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</tbody>
</table>