

Safety Data Sheet

1. IDENTIFICATION

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| Product Identifier: | Sodium Bicarbonate |
| Product Code(s): | S1096, S1119, S1137, CP-1007 |
| Synonyms: | Sodium Hydrogen Carbonate; Sodium Carbonate Monobasic; Bicarbonate of Soda; Baking Soda |
| Recommended Use: | For manufacturing, industrial, and laboratory use only. Use as a laboratory reagent. |
| Uses Advised Against: | Not for food, drug, or household use. |
| Supplier: | Rocky Mountain Reagents, Inc. 4621 Technology Drive, Golden, CO 80403 Phone: (303) 762-0800 Fax: (303) 762-1240 |
| Emergency Phone Number: | (800) 255-3924 (CHEM-TEL) |

2. HAZARDS IDENTIFICATION

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| Hazard Classifications: | Eye Damage/Irritation: Category 2B |
| Signal Word: | WARNING |
| Hazard Statements: | Causes eye irritation. |
| Pictograms: | Not applicable. |
| Precautionary Statements: | |
| Prevention: | Wash thoroughly after handling. |
| Response: | If in eyes: Rinse cautiously for water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention. |
| Storage: | Not applicable. |
| Disposal: | Not applicable. |
| Hazards Not Otherwise Classified: | May be hazardous to aquatic organisms. Avoid release to the environment. |
| Toxicity Statement: | Not applicable. |

3. COMPOSITION AND INFORMATION ON INGREDIENTS

| Component | Common Name / Synonyms | CAS# | Chemical Formula | % by Weight |
|--------------------|---------------------------|----------|--------------------|-------------|
| Sodium Bicarbonate | Sodium Hydrogen Carbonate | 144-55-8 | NaHCO ₃ | ≥ 99.0 |

Trade Secret Statement: Not applicable.

4. FIRST AID MEASURES

First Aid Procedures:

- Inhalation:** Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Call a physician if symptoms occur.
- Ingestion:** Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, keep head low so that vomit does not enter lungs. Never give anything by mouth to an unconscious person. Call a physician or poison control center if symptoms occur.
- Skin Contact:** Wash skin with soap and plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if symptoms occur.
- Eye Contact:** Check for and remove contact lenses, if present and easy to do. Immediately flush eyes with gentle but large stream of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention if symptoms occur.
- General Advice:** Poison information centers in each state can provide additional assistance for scheduled poisons. Ensure that those providing first aid and medical personnel are aware of the material(s) involved and take precautions to protect themselves.
- Symptoms and Effects:** Inhalation may cause irritation, coughing, and sneezing. Ingestion may cause nausea and vomiting. Skin contact may cause irritation. Eye contact may cause irritation.
- Immediate Medical Care/
Special Treatment:** Call a doctor or poison control center if you feel unwell or are concerned. Treat symptomatically.

5. FIREFIGHTING MEASURES

- Suitable Extinguishing Media:** Water spray, dry powder, alcohol resistant foam, carbon dioxide.
- Unsuitable Extinguishing Media:** Do not use a solid (straight) water stream, as it may scatter and spread fire.
- Hazardous Combustion Products:** Sodium oxides, carbon oxides.
- Specific Hazards:** Excessive thermal conditions may cause decomposition and yield hazardous combustion products listed above.
- Special Protective Equipment/
Precautions for Firefighters:** As in any fire, wear MSHA/NIOSH-approved (or equivalent), self-contained, positive-pressure or pressure-demand breathing apparatus and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

- Personal Precautions and Protective Equipment:** Isolate hazard area and keep unnecessary and unprotected personnel away from the area of the leak or spill. Keep upwind. Wear appropriate personal protective equipment (see Section 8). Avoid contact with eyes, skin, and clothing.

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| Emergency Procedures: | In case of chemical emergency, or if unsure how to address an accidental release, consult a professional (see Section 1). |
| Methods for Containment: | Prevent entry into waterways, sewer, basements, or confined areas. Avoid generation of product as dust. Product should not be released to the environment. Contain and recover solid when possible. |
| Methods for Cleanup: | Sweep or collect spill with an inert material (e.g. vermiculite, dry sand, earth, cloth, or fleece) and place in a non-combustible container for reclamation or disposal. Do not flush to sewer. Clean contaminated surface thoroughly. Residues from spills can be diluted with water. Never return spills in original containers for reuse. Clean up in accordance with all applicable regulations. |

7. HANDLING AND STORAGE

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| Handling: | Wear personal protective equipment (see Section 8). Use only in well-ventilated areas. Provide sufficient air exchange and/or exhaust in work rooms. Avoid contact with skin, eyes, and clothing. Avoid generation of dust. Do not breathe product dust. Limit exposure to moisture. Do not ingest. When using, do not eat, drink, or smoke. Keep away from incompatible materials (see Section 10). Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling. Containers of this material may be hazardous when empty, as they retain product residues. Observe all warnings and precautions listed for this product. |
| Storage: | Store in a cool, dry, ventilated area. Store in a segregated and approved area away from heat and incompatible materials (see Section 10). Store in original container. Keep containers tightly closed and upright. Keep away from food, drink, and animal foodstuffs. Keep out of the reach of children. Comply with all national, state, and local codes pertaining to the storage, handling, dispensing, and disposal of this product. |

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

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| Exposure Limits: | No information found. |
| Engineering Controls: | Ensure adequate ventilation. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. |
| Personal Protective Measures: | |
| Eye/Face Protection: | Wear safety glasses with side shields or goggles. Maintain approved eye wash station and accessible rinse facilities in work area. |
| Skin Protection: | Wear appropriate chemical resistant clothing (with long sleeves) and appropriate chemical resistant gloves. |
| Respiratory Protection: | An air-purifying, NIOSH-approved respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Use a positive-pressure, air-supplied respirator if there is any potential for an uncontrolled release, if exposure levels are unknown, or if any other circumstances exist where air-purifying respirators may not provide adequate protection. |

**Specific Requirements
for Personal Protective
Equipment:**

Ensure that glove material is compatible with this product. This information is available from glove manufacturers.

9. PHYSICAL AND CHEMICAL PROPERTIES

Unless otherwise indicated, all properties are given at 25 °C and standard pressure.

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| Appearance: | White, opaque, crystalline solid. |
| Odor: | Odorless. |
| Odor Threshold: | No information found. |
| Formula Weight: | 84.01 |
| pH: | 8.3 (0.1 M aqueous) |
| Melting/Freezing Point: | 270 °C |
| Boiling Point/Range: | No information found. |
| Decomposition Temperature: | No information found. |
| Flash Point: | Not applicable. |
| Auto-ignition Temperature: | Not applicable. |
| Flammability: | Not flammable. |
| Flammability/Explosive Limits: | Not applicable. |
| Solubility: | 69 g/L aqueous |
| Vapor Pressure: | No information found. |
| Vapor Density: | No information found. |
| Specific Gravity: | 2.159 (Water = 1) |
| Evaporation Rate: | No information found. |
| Viscosity: | No information found. |
| Partition Coefficient (n-octanol/water): | No information found. |

10. STABILITY AND REACTIVITY

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| Reactivity Data: | No information found. |
| Chemical Stability: | Stable under normal conditions. Hygroscopic. |
| Conditions to Avoid: | Excessive heat, moisture, incompatible materials. |
| Incompatible Materials: | Strong acids, strong oxidizers. |
| Hazardous Decomposition Products: | Sodium oxides, carbon oxides. |
| Possibility of Hazardous Reactions: | May react vigorously or violently with the incompatible materials listed above. Excessive thermal conditions may yield hazardous decomposition products listed above. |
| Hazardous Polymerization: | Will not occur. |

11. TOXICOLOGICAL INFORMATION

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| Routes of Exposure: | Inhalation, ingestion, skin contact, eye contact. |
| Acute Effects: | May be harmful if swallowed. May cause irritation if inhaled or exposed to the skin or eyes. May cause gastrointestinal system effects. |
| Chronic Effects: | No information found. |
| Toxicological Data: | LD ₅₀ Oral, Rat: 4220 mg/kg Causes mild eye irritation based on animal data. |
| Symptoms of Exposure: | Irritation, coughing, sneezing, nausea, vomiting. |
| Carcinogenic Effects: | This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. |

12. ECOLOGICAL INFORMATION

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| Ecotoxicological Data: | EC ₅₀ , Water Flea (<i>Daphnia magna</i>): 2350 mg/L 48 h |
| Persistence and Degradability: | No information found. |
| Environmental Effects: | May be harmful to aquatic organisms. May adversely affect the pH of aquatic ecosystems. Avoid release to the environment. |

13. DISPOSAL INFORMATION

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| Disposal Instructions: | Dispose of this material and its container to an approved waste collection point. Minimize exposure to product waste (see Section 8). Do not dispose unused waste down drains or into sewers. All wastes must be handled in accordance with local, state, and federal regulations. |
| Contaminated Packaging: | Because containers retain product residue, follow label warnings even after container is emptied. Offer rinsed packaging material to local recycling facilities. |
| Waste Codes: | No information found. |

14. TRANSPORT INFORMATION

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| DOT: | Not regulated. |
| Environmental Hazard Regulations: | No information found. |
| Other Transport Precautions: | No information found. |

15. REGULATORY INFORMATION

U.S. Federal Regulations:

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| OSHA: | This product is not considered a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. |
| TSCA Inventory: | All components of this product are on the U.S. TSCA Inventory. |

U.S. EPCRA (SARA Title III):

Section 302: No information found.

Sections 311/312:

| Hazard Category | List (Yes/No) |
|----------------------------------|---------------|
| Section 311 – Hazardous Chemical | No |
| Immediate Hazard | No |
| Delayed Hazard | No |
| Fire Hazard | No |
| Pressure Hazard | No |
| Reactivity Hazard | No |

Section 313: No information found.

CERCLA Reportable Quantities: No information found.

International Inventories:

| Country or Region | Inventory Name | On Inventory (Yes/No)* |
|-------------------|--|------------------------|
| Australia | Australian Inventory of Chemical Substances (AICS) | Yes |
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | Yes |
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | Yes |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | Yes |
| Korea | Existing Chemicals List (ECL) | Yes |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | Yes |

*A "Yes" indicates that the listed component(s) of this product comply with the inventory requirements administered by the governing country or region.

16. OTHER INFORMATION

Disclaimer:

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Issue Date: June 6, 2016

Reason for Revision: Update of Section 2, 4, 11, 15 over 05/19/2016 version.