SAFETY DATA SHEET
Sodium Bicarbonate

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name
Sodium Bicarbonate, USP

Other means of identification

Product Code(s)
144-55-8

Synonyms
Baking Soda, Bicarbonate of Soda

Recommended use of the chemical and restrictions on use

Recommended Use:
Leavening agent, cleaner ingredient, bath salt ingredient, water softener, diaper rinse ingredient, direct food additive

Restrictions on Use:
No information available

Manufacturer Address

Genesis Specialty Alkali, LLC
1735 Market Street
Philadelphia, PA 19103
Tel: +1 877-362-2248 or +1 215-845-4500
www.alkali.genesisenergy.com

Emergency telephone number

1 307 / 872 2452 (Plant - Green River, WY)
(303) 595-9048 (Medical - U.S. - Call Collect)

For leak, fire, spill, or accident emergencies, call:
1 800 / 424-9300 (CHEMTREC - U.S.A. & Canada)
1 703 / 527 3887 (CHEMTREC - All Other Countries - Collect)

2. HAZARDS IDENTIFICATION

OSHA Regulatory Status

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)
GHS Label elements, including precautionary statements

EMERGENCY OVERVIEW

The product contains no substances which at their given concentration, are considered to be hazardous to health.

Hazards not otherwise classified (HNOC)
No hazards not otherwise classified were identified.

Other Information
Product dust may cause mechanical eye irritation.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula
NaHCO₃

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No</th>
<th>Weight %</th>
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<tbody>
<tr>
<td>Sodium Bicarbonate</td>
<td>144-55-8</td>
<td>100</td>
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</tbody>
</table>

Synonyms are provided in Section 1.

4. FIRST AID MEASURES

Eye Contact
Flush eyes with water as a precaution. Get medical attention if irritation develops and persists.

Skin Contact
Wash skin with soap and water. Get medical attention if irritation develops and persists.

Inhalation
Remove person to fresh air. If signs/symptoms continue, get medical attention.

Ingestion
Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.

Most important symptoms and effects, both acute and delayed
None known.

Indication of immediate medical attention and special treatment needed, if necessary
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Specific Hazards Arising from the Chemical
None in particular. Not flammable

Hazardous Combustion Products
None.

Explosion data
Sensitivity to Mechanical Impact
Not sensitive.

Sensitivity to Static Discharge
Not sensitive.

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
6. ACCIDENTAL RELEASE MEASURES

Personal Precautions
Avoid dust formation.

Other
For further clean-up instructions, call Emergency Hotline number listed in Section 1 “Product and Company Identification” above.

Environmental Precautions
Prevent material from entering into soil, ditches, sewers, waterways, and/or groundwater. See Section 12, Ecological Information for more detailed information.

Methods for Containment
Vacuum or shovel waste into a drum and label contents for disposal.

Methods for cleaning up
Pick up and transfer to properly labeled containers. Keep in suitable and closed containers for disposal. Dispose of waste as indicated in Section 13.

7. HANDLING AND STORAGE

Handling
Use air conveying/mechanical systems for bulk transfer to storage. Provide appropriate exhaust ventilation at places where dust is formed. In case of insufficient ventilation, wear suitable respiratory equipment if release of airborne dust is expected.

Storage
Keep in a dry place. Keep away from incompatible products (acids). Do not store with strong smelling materials.

Incompatible products
Except under controlled conditions: Acids

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters
This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies Local nuisance dust standards apply

Appropriate engineering controls

Engineering measures
Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

Individual protection measures, such as personal protective equipment

Eye/Face Protection
Safety glasses with side-shields.

Skin and Body Protection
Wear suitable protective clothing. Protective shoes or boots.

Hand Protection
Protective gloves

Respiratory Protection
In case of inadequate ventilation wear respiratory protection.

Hygiene measures
Handle in accordance with good industrial hygiene and safety practice.

General information
If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance
Crystalline, Powder

Physical State
Solid

Color
White
Odor: odorless
Odor threshold: Not applicable
pH: 8.3 (1% solution) @ 25 °C
Melting point/freezing point: Not applicable
Boiling Point/Range: No information available
Flash point: Not applicable
Evaporation Rate: No information available
Flammability (solid, gas): No information available
Flammability Limit in Air:
  Upper flammability limit: No information available
  Lower flammability limit: No information available
Vapor pressure: Negligible
Vapor density: No information available
Density: No information available
Specific gravity: 2.22
Water solubility: 96 g/L @ 20 °C
Solubility in other solvents: No information available
Partition coefficient: Not applicable
Autoignition temperature: No information available
Decomposition temperature: No information available
Viscosity, kinematic: No information available
Viscosity, dynamic: No information available
 Explosive properties: No information available
Oxidizing properties: Non-oxidizing
Molecular weight: 84.01
Bulk density: 66 lb/cu ft

10. STABILITY AND REACTIVITY

Reactivity: None under normal use conditions.
Chemical Stability: Stable.
Possibility of Hazardous Reactions: None under normal processing.
Hazardous polymerization: Hazardous polymerization does not occur.
Conditions to avoid: Heat. Humid air. Avoid contact with acids except under controlled conditions. Keep away from strong odor.
Incompatible materials: Except under controlled conditions: Acids.
Hazardous Decomposition Products: Reacts with acids to release carbon dioxide gas and heat.

11. TOXICOLOGICAL INFORMATION

Product Information:
LD50 Oral > 5,000 mg/kg (rat)
LD50 Dermal No information available
LC50 Inhalation > 4.74 mg/L (rat) 4.5 hr
Eye Contact: Non-irritating.
Skin Contact: Non-irritating
Sensitization: Non-sensitizing.

Information on toxicological effects:
Symptoms: No information available.
Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic toxicity
No known effect.
Mutagenicity
Not mutagenic.
Carcinogenicity
Not recognized as carcinogenic by Research Agencies (IARC, NTP, OSHA, ACGIH).
Reproductive toxicity
No information available.
STOT - single exposure
No information available.
STOT - repeated exposure
No information available.
Aspiration hazard
No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

<table>
<thead>
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<th>Sodium Bicarbonate (144-55-8)</th>
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<tbody>
<tr>
<td><strong>Active Ingredient(s)</strong></td>
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<tr>
<td>Sodium bicarbonate</td>
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Persistence and degradability
Biodegradability does not pertain to inorganic substances.

Bioaccumulation
Does not bio-accumulate.

Mobility
Dissociates into ions.

Other Adverse Effects
None known.

13. DISPOSAL CONSIDERATIONS

Waste disposal methods
This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). Dispose of in accordance with local regulations.

Contaminated Packaging
Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION

DOT
NOT REGULATED

15. REGULATORY INFORMATION

U.S. Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories
- Acute health hazard: No
- Chronic health hazard: No
- Fire hazard: No
- Sudden release of pressure hazard: No
- Reactive Hazard: No
Clean Water Act
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations
This product does not contain any substances regulated by state right-to-know regulations.

International Inventories

<table>
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<tr>
<th>Component</th>
<th>TSCA (United States)</th>
<th>DSL (Canada)</th>
<th>EINECS/ELINCS (Europe)</th>
<th>ENCS (Japan)</th>
<th>China (IECSC)</th>
<th>KECL (Korea)</th>
<th>PICCS (Philippines)</th>
<th>AICS (Australia)</th>
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WHMIS Hazard Class
Non-controlled

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Special Hazards</th>
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<tr>
<th>HMIS</th>
<th>Health Hazards</th>
<th>Flammability</th>
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NFPA/HMIS Ratings Legend
Severe = 4; Serious = 3; Moderate = 2; Slight = 1; Minimal = 0

Product Certifications
This product meets the chemical testing specifications defined in the USP and Food Chemicals Codex (FCC), 9th Edition and is manufactured under GMP and in compliance with FSMA. The MUL (maximum use level) for sodium bicarbonate is 100 mg/L under NSF/ANSI Standard 60.

Revision date: 2017-09-26
Revision note Updated with new company name
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Prepared By:

Genesis Alkali, LLC

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End of Safety Data Sheet