SAFETY DATA SHEET

SODIUM BICARBONATE INDUSTRIAL
Product ID: AL010502
Revised: 03-24-2014
Replaces: 02-09-2010

1. IDENTIFICATION

Product Name: SODIUM BICARBONATE INDUSTRIAL
Synonyms: Baking soda; Bicarbonate of soda; Carbonic acid monosodium salt
CAS Number: 144-55-8
Recommended Use: No data available.
Restrictions on Use: No data available.

Hydrite Chemical Co.
300 N. Patrick Blvd.
Brookfield, WI 53008-0948
(262) 792-1450

EMERGENCY RESPONSE NUMBERS:
24 Hour Emergency #: (414) 277-1311
CHEMTREC Emergency #: (800) 424-9300

2. HAZARD(S) IDENTIFICATION

GHS Classification: This product is not classified as defined by OSHA 29 CFR 1910.1200.
Hazards Not Otherwise Classified: None known.

Percentage of Components with Unknown Acute Toxicity:
Dermal: 100.0 %
Inhalation Vapor: 100.0 %
Inhalation Dust/Mist: 100.0 %

3. COMPOSITION/INFORMATION ON INGREDIENTS

This material is considered not hazardous as defined by OSHA 29 CFR 1910.1200.

While this material is not classified as hazardous under OSHA regulations, this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

4. FIRST-AID MEASURES

Eye Contact: If in eyes: Flush affected eye with plenty of water to remove chemical, regardless of hazard. Tilt head to avoid contaminating unaffected eye. If irritation occurs, get medical attention. Remove contact lenses if worn.

Skin Contact: If on skin: Flush skin with plenty of water while removing contaminated clothing and shoes. Do not reuse clothing or shoes until cleaned. If irritation develops or persists, get medical attention. Wash with soap and water.

Inhalation: If inhaled: Remove to fresh air. Get medical attention if breathing becomes difficult or respiratory irritation occurs.

Ingestion: If swallowed: No hazard expected under normal use. Do not induce vomiting. Seek medical attention if symptoms develop.

Note to Physicians:
Large doses may produce systemic alkalosis and expansion in extracellular fluid volume with edema. Treatment is symptomatic and supportive.
Most Important Symptoms/Effects:

Eye Contact: Non-irritating to the eyes.

Skin Contact: Non-irritating to the skin.

Skin Absorption: No evidence of harmful effects based on available information.

Inhalation: No evidence of adverse effects based on available information.

Ingestion: Practically non-toxic. Small amounts (1-2 tablespoonfuls) swallowed during normal handling operations are not likely to cause injury as long as the stomach is not overly full; swallowing larger amounts may cause injury.

5. FIRE-FIGHTING MEASURES

Extinguishing Media: Not combustible. For fires in area use appropriate media. For example: Water. Water fog. Carbon dioxide. Dry chemical.

Fire Fighting Methods: Evacuate area of unprotected personnel. Wear protective clothing including NIOSH-Approved self-contained breathing apparatus.

Fire and Explosion Hazards: None known.

Hazardous Combustion Products: Carbon dioxide. Sodium oxide.

6. ACCIDENTAL RELEASE MEASURES

Spill Clean-Up Procedures: Maintain adequate ventilation. Follow personal protective equipment recommendations found in Section 8. Vacuum or sweep up material into containers and dispose of properly. Flush remaining area with water to remove trace residue and dispose of properly. Avoid direct discharge to sewers and surface waters. Notify authorities if entry occurs.

7. HANDLING AND STORAGE

Handling: Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Do not swallow. Avoid breathing vapors, mists, or dust. Do not eat, drink, or smoke in work area. Wash thoroughly after handling.


8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA Exposure Guidelines:

<table>
<thead>
<tr>
<th>Component</th>
<th>Limits</th>
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<td>No components found.</td>
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ACGIH Exposure Guidelines:

<table>
<thead>
<tr>
<th>Component</th>
<th>Limits</th>
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<tbody>
<tr>
<td>No components found.</td>
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</table>

Note:

* Recommend exposure limits for Particulates Not Otherwise Regulated/Particulates (Insoluble or Poorly Soluble) Not Otherwise Specified: 15 mg/m3 (Total Dust), 5 mg/m3 (Respirable Fraction)(OSHA); 3 mg/m3 (Respirable particles), 10 mg/m3 (Inhalable particles)(ACGIH).

Engineering Controls: General room ventilation is required. Use local exhaust to control dust or mist. Maintain adequate ventilation. Do not use in closed or confined spaces. Avoid creating dust or mist.

Eye/Face Protection: Wear safety glasses with side shields while handling this product.
Skin Protection: Material is not considered a skin contact hazard; however, it is advised that personnel minimize skin contact. For dry material: General purpose gloves. For solutions: Impervious.

Respiratory Protection: Respiratory protection may be required to avoid overexposure when handling this product. If dust or mist is present, wear: NIOSH-Approved respirator for dusts and mists. DO NOT exceed limits established by the respirator manufacturer. All respiratory protection programs must comply with OSHA 29 CFR 1910.134 and ANSI Z88.2 requirements and must be followed whenever workplace conditions require a respirator’s use.


General Hygiene Conditions: Wash with soap and water before meal times and at the end of each work shift. Good manufacturing practices require gross amounts of any chemical be removed from skin as soon as practical, especially before eating or smoking.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Crystalline powder or granules.
Color: White.
Odor: No odor.
Odor Threshold: N.D.
P H: 8.3 (1% soln)
Freezing Point (deg. F): N.A.
Melting Point (deg. F): Decomposes
Initial Boiling Point or Boiling Range: N.A.
Flash Point: N.A.
Flash Point Method: N.A.
Evaporation Rate (nBuAc = 1): N.A.
Flammability (solid, gas): N.D.
Lower Explosion Limit: N.A.
Upper Explosion Limit: N.A.
Vapor Pressure (mm Hg): N.A.
Vapor Density (air=1): N.A.
Specific Gravity or Relative Density: 2.20
Solubility in Water: 8.6 g/100 ml @20C
Partition Coefficient (n-octanol/water): N.D.
Autoignition Temperature: N.A.
Decomposition Temperature: N.D.
Viscosity: N.D.
% Volatile (wt%): N.A.
VOC (wt%): 0
VOC (lbs/gal): 0
Fire Point: N.D.

10. STABILITY AND REACTIVITY

Reactivity: No data available.
Chemical Stability: Stable under normal conditions.
Possibility of Hazardous Reactions: Hazardous polymerization will not occur under normal conditions.
Conditions to Avoid: Avoid temperatures above 150 F (65 C).
Incompatible Materials: Acids. Lime dust (calcium oxide) in the presence of moisture may yield free caustic.
Hazardous Decomposition Products: Reacts with acids to release carbon dioxide and heat. Heating above 100C may cause dangerous levels of carbon dioxide gas to be present in confined spaces. Yields sodium oxide if exposed to temperatures above 850C. Avoid inhalation, eye and skin contact with sodium oxide. Dangerous reaction with monoammonium phosphate or a sodium-potassium alloy.
11. TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Component</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Bicarbonate</td>
<td>Rat: 4220 mg/kg</td>
<td>No Data</td>
<td>No Data</td>
</tr>
</tbody>
</table>

Routes of Exposure: Eyes. Ingestion. Inhalation. Skin.

Eye Contact: Non-irritating to the eyes.

Skin Contact: Non-irritating to the skin.

Skin Absorption: No evidence of harmful effects based on available information.

Inhalation: No evidence of adverse effects based on available information.

Ingestion: Practically non-toxic. Small amounts (1-2 tablespoonsfuls) swallowed during normal handling operations are not likely to cause injury as long as the stomach is not overly full; swallowing larger amounts may cause injury.

Medical Conditions Aggravated by Exposure to Product: None known.

Other: None known.

Cancer Information: This product does not contain 0.1% or more of the known or potential carcinogens listed in NTP, IARC, or OSHA.

12. ECOLOGICAL INFORMATION

Ecotoxicological Information: Aquatic Toxicity: Daphnids EC50 = 4100 mg/l; Bluegill LC50 = 7100 mg/l; Rainbow Trout LC50 = 7700 mg/l. 48 hr LC50 = 2000 mg/L (Culex sp. larvae or mosquito).

Chemical Fate Information: This product is not expected to persist in the environment. This product is not expected to bioaccumulate. This material is inorganic and not subject to biodegradation.

13. DISPOSAL CONSIDERATIONS

Hazardous Waste Number: N.A.

Disposal Method: Dispose of in accordance with all local, state and federal regulations. Bury in a secured landfill. Empty containers may be incinerated or discarded as general trash. Chemical additions to, processing of, or otherwise altering this material may make this waste management information incomplete, inaccurate, or otherwise inappropriate. Furthermore, state and local waste disposal requirements may be more restrictive or otherwise different from federal laws and regulations.

14. TRANSPORT INFORMATION

DOT (Department of Transportation): Not regulated by the DOT.

15. REGULATORY INFORMATION

TSCA Inventory Status: This product or all components of this product are listed on the EPA/TSCA Inventory of Chemical Substances.

SARA Title III Section 311/312 Category Hazards:

<table>
<thead>
<tr>
<th>Immediate (Acute)</th>
<th>Delayed (Chronic)</th>
<th>Fire Hazard</th>
<th>Pressure Release</th>
<th>Reactive</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
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</tbody>
</table>

Regulated Components:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS Number</th>
<th>CERCLA RQ</th>
<th>SARA EHS</th>
<th>SARA 313</th>
<th>U.S. HAP</th>
<th>WI HAP</th>
<th>Prop</th>
</tr>
</thead>
</table>

Page: 4 of 5
SODIUM BICARBONATE INDUSTRIAL
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No components found.

*Prop 65 - May Contain the Following Trace Components:
No data available.

16. OTHER INFORMATION

Hazard Rating System
Health: 0
Flammability: 0
Reactivity: 0
* = Chronic Health Hazard

NFPA Rating System
Health: 0
Flammability: 0
Reactivity: 0
Special Hazard: None

MSDS Abbreviations
N.A. = Not Applicable
N.D. = Not Determined
HAP = Hazardous Air Pollutant
VOC = Volatile Organic Compound
C = Ceiling Limit
N.E./Not Estab. = Not Established

MSDS Prepared by: CSH

Reason for Revision: New format. Changes made throughout the SDS.

Revised: 03-24-2014
Replaces: 02-09-2010

The data in this Safety Data Sheet relates to the specific material designated and does not relate to its use in combination with any other material or process. The data contained is believed to be correct. However, since conditions of use are outside our control it should not be taken as warranty or representation for which HYDRITE CHEMICAL CO. assumes legal responsibility. This information is provided solely for your consideration, investigation, and verification.