

## SODIUM BICARBONATE POWDER USP #1

MSDS ID: AL0104

**1. PRODUCT AND COMPANY IDENTIFICATION**

PRODUCT NAME : SODIUM BICARBONATE POWDER USP #1  
MSDS ID : AL0104  
CHEMICAL NAME SYNONYMS : Baking soda; Bicarbonate of soda; Carbonic acid  
monosodium salt  
CAS NUMBER : 144-55-8  
CHEMICAL FAMILY : Alkaline Carbonate  
FORMULA : NaHCO<sub>3</sub>

DISTRIBUTED BY: 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

MANUFACTURED BY: FMC; Church &amp; Dwight Co.

**2. COMPOSITION/INFORMATION ON INGREDIENTS**

COMPONENT	CAS NUMBER	OSHA HAZARD	% BY WT.
Sodium Bicarbonate	144-55-8	NO	100 %

**3. HAZARDS IDENTIFICATION**

PHYSICAL STATE: Crystalline powder or granules.  
COLOR : White.  
ODOR : No odor.

\*\*\*EMERGENCY OVERVIEW\*\*\*: No significant hazards associated with this material.

## POTENTIAL HEALTH EFFECTS

ROUTES OF EXPOSURE:  
Eyes. Ingestion. Inhalation. Skin.

TARGET ORGANS:  
None Known.

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.

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**3. HAZARDS IDENTIFICATION (Cont.)**

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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.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE TO PRODUCT:

None known.

OTHER:

None known.

CANCER INFORMATION:

This product does not contain greater than 0.1% of the known or potential carcinogens listed in NTP, IARC, or OSHA.

POTENTIAL ENVIRONMENTAL EFFECTS:

See Section 12.

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**4. FIRST AID MEASURES**

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EYE CONTACT:

Immediately flush eyes thoroughly with plenty of water. Tilt head to avoid contaminating unaffected eye. If irritation occurs, get medical attention. Remove contact lens if worn.

SKIN CONTACT:

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:

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

INGESTION:

DO NOT induce vomiting. Give several glasses of water to drink to dilute. Never give anything by mouth to an unconscious person. If symptoms develop, get medical attention.

NOTE TO PHYSICIANS: Large doses may produce systemic alkalosis and expansion in extracellular fluid volume with edema.

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**5. FIRE FIGHTING MEASURES**

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FLASH POINT: N.A.

FLAMMABILITY LIMITS: LEL: N.A.

UEL: N.A.

AUTOIGNITION TEMPERATURE: N.A.

EXTINGUISHING MEDIA:

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### 5. FIRE FIGHTING MEASURES (Cont.)

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Not combustible. For fires in area use appropriate media. For example:  
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.

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### 6. ACCIDENTAL RELEASE MEASURES

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#### SPILL CLEAN-UP PROCEDURES:

Evacuate unprotected personnel from area. Maintain adequate ventilation. Follow personal protective equipment recommendations found in Section 8. 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.

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### 7. HANDLING AND STORAGE

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#### STORAGE:

Store in a cool, dry place. Keep away from incompatible materials.

#### 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.

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### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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#### 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.

#### 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.

#### EYE/FACE PROTECTION:

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**8. EXPOSURE CONTROLS/PERSONAL PROTECTION (Cont.)**

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Wear chemical safety goggles 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.

**OTHER PROTECTIVE EQUIPMENT:**

Eye-wash station. Safety shower. Protective clothing.

**GENERAL HYGIENE CONSIDERATIONS:**

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.

**EXPOSURE GUIDELINES:**

COMPONENT	-----OSHA-----	-----ACGIH-----		
	PEL	STEL/C	TWA	STEL/C
Sodium Bicarbonate	Not Estab.	Not Estab.	Not Estab.	Not Estab.

NOTE: \* Consider ACGIH TWA of 10 mg/m3 for particulates not otherwise classified.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

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BOILING POINT (DEG. F) : N.A.	SPECIFIC GRAVITY: 63-64 #/ft3
FREEZING POINT (DEG. F): N.A.	% VOLATILE (WT%): N.A.
MELTING POINT (DEG. F) : Decomposes	EVAPORATION RATE: N.A.
VAPOR PRESSURE (MM HG) : N.A.	(nBuAc=1)
VAPOR DENSITY (AIR=1) : N.A.	VOC (WT%) : 0
SOLUBILITY IN WATER : 8.6 g/100 ml	VOC (LBS/GAL) : 0
@20C	
pH : ~8.3 (1% sol'n)	

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**10. STABILITY AND REACTIVITY**

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**STABILITY:**

Stable under normal conditions.

**CONDITIONS TO AVOID:**

Avoid temperatures above 150 Deg. F.

**INCOMPATIBILITY:**

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.

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**10. STABILITY AND REACTIVITY (Cont.)**

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## HAZARDOUS POLYMERIZATION:

Will not occur under normal conditions.

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**11. TOXICOLOGICAL INFORMATION**

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LD50 ORAL : Rat: 7.3 g/kg  
Rat: 4300 mg/kg (20% slurry)  
Rat: 6000 mg/kg (50% slurry)  
LD50 SKIN : No Data  
LC50 INHALATION: Rat: > 4.74 mg/l

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**12. ECOLOGICAL INFORMATION**

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## 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:

No data available.

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**13. DISPOSAL CONSIDERATIONS**

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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.

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**14. TRANSPORT INFORMATION (Not meant to be all inclusive)**

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## DOT (Department of Transportation):

Proper Shipping Name : Not regulated by the DOT.  
Identification Number : N.A.  
Packing Group : N.A.

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**15. REGULATORY INFORMATION**

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## FEDERAL REGULATIONS:

## 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:

IMMEDIATE (ACUTE) HEALTH HAZARD : NO  
DELAYED (CHRONIC) HEALTH HAZARD : NO  
FIRE HAZARD : NO  
SUDDEN RELEASE OF PRESSURE HAZARD: NO

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15. REGULATORY INFORMATION (Cont.)

REACTIVE HAZARD : NO

SARA SECTION 302/304/313/HAP:
COMPONENT

RQ (LBS) (\*1) RQ (LBS) (\*2) TPQ (LBS) (\*3) SEC 313 (\*4) HAP (\*5)

Sodium Bicarbonate N.A. N.A. N.A. NO NO

FOOTNOTES

- \*1 = CERCLA Reportable Quantity
\*2 = SARA Reportable Quantity
\*3 = SARA EHS Threshold Planning Quantity
\*4 = SARA 313 Toxic Chemical/Category
\*5 = U.S. EPA Hazardous Air Pollutant

STATE REGULATIONS:

CALIFORNIA--The following components are listed under Prop 65:
Arsenic (2 ppm max)
Heavy Metals (5 ppm max)

WISCONSIN--The following components are listed as a Wisconsin HAP:
None.

16. OTHER INFORMATION

HMIS 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: NAO

REASON FOR REVISION: New format. Changes made throughout the MSDS.

\*\* \*\* \*
The data in this Material Safety Data Sheet relates only 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 a warranty or representation for which HYDRITE CHEMICAL CO. assumes legal responsibility. This information is provided solely for your consideration, investigation, and verification.
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