



SODIUM BICARBONATE

Material Safety Data Sheet

Manufactured By:
NATURAL SODA, Inc.
 3200 RIO BLANCO COUNTY ROAD #31

1 CHEMICAL PRODUCT & COMPANY IDENTIFICATION

RIFLE, COLORADO 81650

PRODUCT NAME: Sodium Bicarbonate
MANUFACTURER:
 Natural Soda, Inc.
 3200 R. B. C. Rd. # 31
 Rifle, Colorado 81650

EMERGENCY PHONE NUMBER:
 24 Hour Information Service: 970-878-3674
 CHEMTREC: 800-424-9300
PREPARATION / REVISION DATE: April 01, 2003
 Supersedes April 27, 1998 Version

2 COMPOSITION / INFORMATION ON INGREDIENTS

NOTE: See Section 15 for Exposure Limits.

PRODUCT NAME: Sodium Bicarbonate

FORMULA: NaHCO₃

CHEMICAL NAME: Sodium Bicarbonate

SYNONYMS: Baking Soda, Bicarbonate of Soda

COMPONENTS:

Material:	Sodium Bicarbonate
CAS Number:	144-55-8
Percent:	99 %
Maximum Use:	100 mg / L

3 HAZARD IDENTIFICATIONS

EMERGENCY OVERVIEW: Sodium Bicarbonate is a white, granular solid. It will not burn in a fire; can be used as a dry powder-extinguishing agent.

PRIMARY ROUTES OF EXPOSURE: Inhalation (breathing); eye and skin contact.

SIGNS AND SYMPTOMS OF EXPOSURE:

INHALATION: Breathing dusts may cause coughing or difficulty in breathing.

EYE CONTACT: Direct eye contact may produce irritation, reddening or tearing.

SKIN CONTACT: Direct contact may produce irritation.

INGESTION: May cause nausea, vomiting and abdominal pain. Large doses can cause alkalosis.

4 EMERGENCY & FIRST AID PROCEDURES

EYES: Immediately rinse eyes with water. Remove any contact lenses, and continue flushing eyes with running water for at least 15 minutes. Get immediate medical attention.

SKIN: Wash affected areas with plenty of water, and soap if available, for several minutes. Seek medical attention if irritation develops or persists.

INHALATION: Remove from area to fresh air. Seek medical attention respiratory irritation develops or if breathing becomes difficult.

INGESTION: Give several large glasses of water. Seek medical attention immediately.

NOTE TO PHYSICIAN: Treat symptomatically. Large doses, particularly in patients with renal insufficiency, may produce systematic alkalosis and / or expansion in the extra-cellular fluid volume with edema.

5 FIRE FIGHTING MEASURES

GENERAL HAZARDS: This product will not burn, and can be used as a dry powder extinguishing medium.

UEL / LEL: Not Applicable

FLASH POINT: Not Applicable

AUTOIGNITION TEMPERATURE: Not Applicable

FLAMMABILITY CLASSIFICATION: Not Applicable

EXTINGUISHING MEDIA: Use material suitable for surrounding fire conditions.

6 ACCIDENTAL RELEASE MEASURES

ACTION TO TAKE FOR SPILLS OR LEAKS: For dry spills, sweep or shovel and place in containers for disposal in accordance with

applicable regulations (see Sections 13 and 15). Avoid contamination of bodies of water during cleanup.

7 HANDLING & STORAGE

GENERAL: Store in a cool, dry area. Good housekeeping should be maintained to minimize dust accumulation and generation.

HYGIENE PRACTICES: Avoid contact with eyes, skin and clothing.

Wash hands thoroughly with soap and water after handling and before eating, drinking, or smoking.

8 EXPOSURE CONTROL / PERSONAL PROTECTION

ENGINEERING CONTROLS: Use local exhaust ventilation to keep airborne levels below exposure limits (see Section 15).

EYE PROTECTION: Use vented goggles or safety glasses in excessively dusty conditions.

SKIN PROTECTION: Not required under normal conditions. Use gloves,

protective clothing if excessively dusty, or if skin is damaged.

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.

9 PHYSICAL & CHEMICAL PROPERTIES

SOLUBILITY IN WATER: 8.8 % at 20° C	pH VALUE: 1 % Solution = 8.2 – 8.5
APPEARANCE: White granular solid	FLASH POINT: Not Applicable
MOLECULAR WEIGHT: 84.01	SPECIFIC GRAVITY (H₂O = 4° C): 2.16
BOILING POINT: Decomposes	BULK DENSITY: 60 lbs / ft ³
MELTING POINT: N/A Decomposes without melting	VAPOR PRESSURE: Not Applicable

10 STABILITY & REACTIVITY DATA

STABILITY: Stable in dry air. In moist air forms sodium carbonate, and irritant.	HAZARDOUS DECOMPOSITION PRODUCTS: When heated to decomposition, sodium bicarbonate produces carbon dioxide.
INCOMPATIBILITY: Acids, aluminum and phosphoric pentoxide.	HAZARDOUS POLYMERIZATION: Will not occur.

11 TOXICOLOGICAL EFFECTS

EYES: Mid (rabbit) 100 mg / 30 sec.	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 Section 15 for additional information.
SKIN: Mid (human) 30 mg / 3 days – intermittent	
INGESTION: Oral LD ₅₀ (rat) 4220 mg / kg	
Oral LD ₅₀ (mouse) 3360 mg / kg	
Oral TD ₀₁ (man) 20 mg / kg / 5 days – intermittent	
Oral TD ₀₁ (infant) 1260 mg / kg	

12 ECOLOGICAL DATA

None Available

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 Section 15 for details on Regulatory information.
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14 TRANSPORT REGULATIONS

U.S. DEPARTMENT OF TRANSPORTATION (DOT) IDENTIFICATION NUMBER: Sodium Bicarbonate is not a DOT Hazardous Material.	U. N. number, and is not regulated under international rail, highway, water, or air transport regulations.
INTERNATIONAL TRANSPORTATION: Sodium Bicarbonate has no	TRANSPORTATION OF DANGEROUS GOODS (TDG): Not regulated.

15 REGULATORY INFORMATION

TSCA NUMBER: 144-55-8	CALIFORNIA PROPOSITION 65: Not applicable
RCRA (40 CFR 261): Not listed under any section.	FEDERAL DRUG AGENCY (FDA): Sodium Bicarbonate is permitted for the following uses: Antibiotic manufacturing; cake, pancake, and ready-mixes; catalyst manufacture; chemical; dentifrices; explosives; fire extinguishers; food colors; food conditioner; papermaking; pharmaceuticals; photography; self-rising flour; starches; sugar refining; textiles.
CERCLA (SUPERFUND): Not listed under any section.	WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEMS (WHMIS): Not a controlled product.
CLEAN WATER ACT (CWA): Not listed.	EU CLASSIFICATION: Not a Dangerous Substance.
SAFE WATER DRINKING ACT (SWDA): Not Listed.	SARA 111: Section 302 – No; 311 – Yes; 312 – Yes; 313 – No
OCCUPATIONAL EXPOSURE LIMITS:	
OSHA: Treat as Particulates not Otherwise Regulated.	
ACGIH: Treat as Particulates not Otherwise Classified.	
INTERNATIONAL AGENCY for RESEARCH on CANCER: Not listed.	
NTP ANNUAL REPORT ON CARCINOGENS: Not listed.	
OSHA CARCINOGEN: Not listed.	
CONEG MODEL LEGISLATION: Contains no heavy metals.	

16 OTHER INFORMATION

OTHER INFORMATION:

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) CLASSIFICATION: 4 = Severe, 3 = Serious, 2 = Moderate, 1 = Slight, 0 = Minimal	HAZARDOUS MATERIALS INFORMATION SYSTEM (HMIS): 4 = Extreme, 3 = High, 2 = Moderate, 1 = Slight, 0 = Insignificant
HEALTH = 0	BLUE (Acute Health) 0
FLAMMABILITY = 0	RED (Flammability) 0
REACTIVITY = 1	YELLOW (Reactivity) 1

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, Inc. 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.

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