

Humco Holding Group, Inc.
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Texarkana, TX 75501
800-662-3435

Item# 0395-2685

SODIUM BICARBONATE

Date Prepared 08/14/2007

SECTION 1 PRODUCT IDENTIFICATION & EMERGENCY INFORMATION

Product Name: Sodium Bicarbonate

Formula: NaHCO₃

Formula Wt.: 84.00

Synonyms: Baking soda; bicarbonate of soda; sodium acid carbonate; sodium hydrogen carbonate; carbonic acid; monosodium salt

CAS No. & Name: 144-55-8 carbonic acid, monosodium salt

Emergency Telephone Numbers:

Humco Holding Group 800-662-3435

Chemtrec 800-424-9300

SECTION 2 INGREDIENTS/SUMMARY OF HAZARDS

Ingredients	CAS No.	OSHA Hazardous (H)/	
		Non-Hazardous (NH)	Percent
Sodium Bicarbonate	144-55-8	NH	100

HAZARD RATING SYSTEMS: This information is for people trained in: National Fire Protection Association (NFPA 704) Identification of the Fire Hazards of Materials

	NFPA 704	KEY	
Health	0		4 = Severe
Flammability	0		3 = Serious
Reactivity	0		2 = Moderate
			1 = Slight
			0 = None

SARA Title III Hazard Classification:

Immediate (acute) Health	No
Delayed (Chronic) Health	No
Fire	No
Sudden Release of Pressure	No
Reactive	No

SECTION 3 PHYSICAL DATA

Bulk Density: 42 - 70 lbs./cu. ft.

Melting Point: N/A - Decomposes

Odor & Appearance : White granular solid/odorless.

Solubility in Water @ 20°C: 9.6 g/100 g water

Decomposition Point: Loses CO₂ @ 270°C (518°F)

pH (1% Aqueous Solution): 8.5

SECTION 4 FIRE & EXPLOSION HAZARD DATA

Flash Point : Non-combustible

Flammable Limits in Air: N/A

Autoignition Temperature: N/A

Extinguishing Media: Not combustible. This product is used as a dry powder extinguishing agent suitable for all classes of fires.

Special Fire Fighting Procedures: Because Carbon Dioxide gas may be present, wearing a NIOSH approved self-contained breathing respirator may be required.

Unusual Fire & Explosion Hazards: If extremely large quantities are involved in a fire, significant levels of Carbon Dioxide may be generated. (Carbon Dioxide is an asphyxiant at levels > 5%) Soda ash, another decomposition product existing at temperatures >200°F, is a respiratory and skin irritant.

SECTION 5**REACTIVITY DATA**

Stability: At ambient temperatures and atmospheric pressure, this product tends to absorb moisture and evolve carbon dioxide slowly. At elevated temperatures, carbon dioxide and water are evolved.

Conditions to Avoid: Hygroscopic; protect from moisture. Keep away from heat.

Materials to avoid: Reacts with weak acids forming salt, water and carbon dioxide gas and releasing heat.

Hazardous Decomposition Products: When temperature is raised to 190°F or higher, carbon dioxide gas will be released to the atmosphere. The resulting dust may be irritating to the eyes, skin and respiratory tract.

Hazardous Polymerization: Will not occur.

SECTION 6 HEALTH HAZARD DATA/FIRST AID PROCEDURES

Exposure Limits: (None specifically established for this product.)

Chemical Name(s)	ACGIH (TLV)	OSHA (TWA)
Particulates	10 mg/m ³	15 mg/m ³
Not Otherwise	(TWA)	total dust
Classified	total dust	5 mg/m ³
		respirable fraction

Toxicology Data:

Oral LD50 (rats):	>4220 mg/kg body weight	(1)
Dermal LD50 (rabbits):	No information available	
Inhalation LC50 (rats):	No information available	
Skin Effects (rabbits):	Mild irritant	(1)
Eye Effects (rabbits):	Mild irritant	(1)

Carcinogenicity: This product does not contain any ingredient designated by IARC, NTP, ACGIH or OSHA as a probable human carcinogen.

SECTION 6 HEALTH HAZARD DATA/FIRST AID PROCEDURES CONT'd

Effects of Single Overexposure:

Swallowing: Mildly toxic by ingestion. May cause nausea, vomiting and abdominal pains. Doses over 5 g/kg body weight can cause alkalosis and expansion in extracellular fluid volume with edema.

Skin Absorption: Application of large amounts to the skin may cause alkalosis.

Inhalation: May cause cough and mild respiratory irritation.

Skin Contact: May cause mild skin irritation.

Eye Contact: Causes mild eye irritation.

Effects of Repeated Overexposure: Repeated exposure may lead to contact dermatitis. Prolonged contact with dusts may cause conjunctivitis.

Other Effects of Overexposure: No evidence of additional adverse effects from available information.

Existing Medical Conditions Possibly Aggravated by Exposure: Skin irritation may be aggravated in persons with existing skin lesions. Breathing of dust may aggravate acute or chronic asthma and other chronic pulmonary disease.

Emergency and First Aid Procedures: Remove the patient from the immediate source of exposure and assure that the individual is breathing. If not, breathing, use cardiopulmonary resuscitation or artificial respiration. Get Medical Attention.

Ingestion: If patient is conscious and alert, give two or more glasses of water to drink. If appreciable quantities are swallowed, induce vomiting by giving 1 tablespoon of Syrup of Ipecac. If vomiting has not occurred in 20 minutes, the same dose of Syrup of Ipecac may be repeated one additional time. Alternatively, induce vomiting by touching the back of the throat with a finger. Do not induce vomiting or give anything by mouth to an unconscious person. Get Medical Attention.

Skin Contact: Immediately wash skin with soap and plenty of water removing contaminated clothing and shoes. Wash contaminated clothing and shoes separately before reuse. Get Medical Attention.

Inhalation: Remove patient to fresh air. If not breathing administer cardiopulmonary resuscitation or artificial respiration. If breathing is difficult or irritation develops, administer oxygen. Get Medical Attention.

SECTION 6 HEALTH HAZARD DATA/FIRST AID PROCEDURES CONT'd

Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes using an eyewash fountain, if available. Lift upper and lower lids and rinse well under them. Get Medical Attention, preferably an ophthalmologist, if irritation occurs.

Notes to Physician: All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

Large doses, particularly in patients with renal insufficiency, may produce systemic alkalosis and/or expansion in the extracellular fluid volume with edema.

SECTION 7 PRECAUTIONS FOR SAFE HANDLING AND USE

Precautions if Material is Spilled or Released: To the extent possible, clean up spillage using shovels, sweeping, or vacuuming. Avoid dust generation. Place in appropriate containers for disposal. Flush area with water. If spilled on the ground, the affected area should be scraped clean and the material placed in an appropriate container for disposal. Do not flush material to public sewer systems or any waterways. Wear appropriate protective clothing and equipment during clean up activities. Ensure adequate decontamination of tools and equipment.

Large spills should be handled according to a predetermined plan. For assistance in developing a plan, contact the Technical Service Department, 1-800-662-3435 ext. 712.

Waste Disposal Methods: Dispose of in accordance with State, Local and Federal Regulations.

Precautions to be Taken in Handling and Storing: Material is generally regarded as safe (GRAS) for humans and animals. Containers should be stored in a cool, dry, area away from sources of heat or flame. Store away from acids. Long-term storage may result in caking.

SECTION 8 SPECIAL PROTECTION INFORMATION

Protective Equipment Should be Used During the Following Procedures:

- * Manufacture or formulation of the product
- * Repair and maintenance of contaminated equipment
- * Clean up of leaks and spills
- * Any activity that may result in exposures to concentrations that exceed exposure limits.

Respiratory Protection: In dusting conditions, use a NIOSH/MSHA approved dust mask if concentration exceeds suggested exposure limits. Use positive pressure supplied air or self-contained breathing apparatus for emergency or other conditions where a higher level of protection is required.

Ventilation: Provide adequate ventilation. Use local exhaust as needed to maintain airborne exposure below control limits.

Protective Clothing: Work clothing. Chemical resistant gloves & boots.

Eye Protection: Safety glasses with side shields.

Other Protective Equipment: Maintain a sink, safety shower and eyewash fountain in the work area. Have oxygen readily available.

SECTION 9 REGULATORY STATUS

TSCA Inventory Status: This product is listed on the TSCA inventory.

Transportation Status: Not regulated.

SARA Title III

Section 302 Extremely Hazardous Substance List: Not Listed

Section 313 Toxic Chemicals: Not Listed

Reportable Quantity (RQ) under US EPA CERCLA: Not Listed

RCRA Hazardous Waste: Not Listed

State/International Right-to-Know Regulations: Not Listed