



# FRANCIS DRILLING FLUIDS, LTD.

## MATERIAL SAFETY DATA SHEET

### I. PRODUCT IDENTIFICATION

Trade Name(s): Sodium Bicarbonate

Generic Name(s):

Chemical Name(s): Sodium Bicarbonate

Francis Drilling Fluids, LTD.  
P.O. Box 1694  
Crowley, LA 70527-1694

Emergency/Telephone No.: 800-960-6610  
337-783-8685  
Hazardous Materials No.: 800-255-3924  
Poison Control Center No.: 800-256-9822

### II. HAZARDOUS INGREDIENTS

Ingredient	CAS No.	%	Hazard
Carbonic Acid Monosodium Salt	144-55-8		

### III. NFPA/HMIS HAZARD IDENTIFICATION SYSTEM

0=LEAST	1=SLIGHT	2=MODERATE	3=HIGH	4 =EXTREME
Health: 0				
Fire: 0				
Reactivity: 0				

### IV. PHYSICAL DATA

Boiling Point (°F):	Specific Gravity (H <sub>2</sub> O=1): odorless
Vapor Pressure (mm. Hg):	Melting Point: Not Applicable Decomposes
Vapor Density (Air = 1):	Evaporation Rate:
Solubility in Water: 9.6g/100g water	pH: 8.5 (1% aqueous solution)
Density (lb/cu ft): 42-70 lbs	Odor: Odorless
Appearance: White granular solid	

### V. FIRE AND EXPLOSION DATA

Flash Point: Noncombustible	Flammable Limits: LEL: ND UEL: ND
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Special Fire Fighting Procedures: Because carbon dioxide gas may be present, wearing a NIOSH approved self contained breathing respirator may be required.

Unusual Fire and 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.

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

## VI. REACTIVITY

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.

Hazardous Polymerization: Will not occur.

Incompatibility: Hygroscopic; protect from moisture, keep away from heat, reacts with weak acids forming salt, water and carbon dioxide gas and releasing heat.

Hazardous Decomposition: 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.

## VII. HEALTH HAZARD INFORMATION

Routes of Exposure and Effects: Effects of single overexposure;

Skin: May cause mild skin irritation

Eyes: Causes mild eye irritation.

Inhalation: May cause cough and mild respiratory irritation.

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

Permissible Exposure Limits: (for air contaminants)

OSHA PEL (8hr. TWA): 15 mg/m<sup>3</sup> total dust; 5 mg/m<sup>3</sup> respirable fraction

ACGIH TLV: 10 mg/m<sup>3</sup> (TWA) total dust

Carcinogenicity: Not Listed as a Carcinogen or Potential Carcinogen

Listed By NTP: Not Listed

Listed By: IARC: Not Listed

Listed By OSHA: Not Listed

Acute Oral LD50: >4220 mg/kg (rats)

Acute Dermal LD50: ND

Aquatic Toxicology LC50: ND

Emergency and First Aid Procedures:

Skin: Wash thoroughly with soap and water.

Eyes: Irrigate eyes with water for at least 15 minutes. If condition persists, contact physician.

Ingestion: Drink large amounts of water. Do not induce vomiting.

Inhalation: Remove to fresh air. Administer oxygen if breathing is difficult. If difficulty persists, see physician.

Additional Health Hazard Information: 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 effect from available information. Existing Medical Conditions Possible Aggravated by Exposure; Skin irritation may be

aggravated in persons with existing skin lesions. Breathing of dust may aggravate persons with existing skin lesions. Breathing of dust may aggravate acute or chronic asthma and other chronic pulmonary disease.

Notes to Physicians: 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 his 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.

## VIII. HANDLING AND USE PRECAUTIONS

Steps to be Taken if Material is Released or Spilled: 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 appropriate container for disposal. Do not flush material to the 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.

Waste Disposal Methods: Dispose of in accordance with local, state and federal regulations.

Handling and Storage Precautions: 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.

## IX. INDUSTRIAL HYGIENE CONTROL MEASURES

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

Respirator: 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.

Eye Protection: Safety glasses with side shields

Gloves: Chemical resistant gloves and boots.

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

Protective equipment should be used during the following procedures:

Manufacture or formulation of this 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

## X. SPECIAL PRECAUTIONS

## XI. ENVIRONMENTAL/SAFETY REGULATION

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

**DEPARTMENT OF TRANSPORTATION**

Shipping Name: Not Regulated

Hazard Class: None

Hazardous Substance:None

Cautionary Labeling:None

NA=Not Applicable; ND=Not Determined or No Data

Date Prepared: June 15, 1995

File Name: sodiumbi

The data presented is true and correct to the best of our knowledge and belief; however, neither seller nor preparer make any warranties, express or implied, concerning the information presented. The user is cautioned to perform his own hazard evaluation and to rely upon his own determinations.

**SODIUM BICARBONATE**