

SODIUM BICARBONATE

Safety Data Sheet

Revision Date: May 18, 2016

Review Date: May 15, 2023

SECTION 1: IDENTIFICATION

PRODUCT IDENTIFIER: **SODIUM BICARBONATE**
OTHER MEANS OF IDENTIFICATION: **Baking Soda; Bicarbonate of Soda**
RECOMMENDED USE: **Oilwell drilling fluid and cement additive**
RESTRICTIONS ON USE: **None known**
SUPPLIER IDENTIFIER: Prairie Mud Service
738 6th Street
Estevan, SK S4A 1A4

EMERGENCY PHONE NUMBER: (306) 634-3411

SECTION 2: HAZARD IDENTIFICATION

CLASSIFICATION: Not hazardous per part 2 of the HPR.
LABEL SYMBOLS: Not applicable
SIGNAL WORD: Not applicable
CLASSIFICATION INFORMATION: Not applicable
OTHER HAZARDS: None known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS NUMBER	CONCENTRATION
Sodium bicarbonate	144-55-8	100

SECTION 4: FIRST AID MEASURES

SKIN CONTACT: Remove contaminated clothing and wash affected area thoroughly with water and soap. If irritation occurs and persists, obtain medical attention.

EYE CONTACT: Immediately flush with gently flowing warm water until irritation ceases. Obtain medical attention if irritation persists.

INGESTION: Obtain medical attention if symptoms develop.

INHALATION: Move to area free from dust. If victim is not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. If breathing difficulties or distress continues obtain medical attention.

MOST IMPORTANT SYMPTOMS / EFFECTS: No known acute or chronic health effects.

IMMEDIATE MEDICAL ATTENTION / SPECIAL TREATMENT: Treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA: Use media appropriate for packaging and surrounding materials.

UNSUITABLE EXTINGUISHING MEDIA: None.

SPECIFIC FIRE HAZARDS: Noncombustible. Sodium bicarbonate starts to decompose at 50°C.

HAZARDOUS COMBUSTION PRODUCTS: Toxic sodium oxide fumes can be generated by thermal decomposition at elevated temperatures. Decomposition releases carbon dioxide, sodium carbonate and water at temperatures above 50°C.

SPECIAL PROTECTIVE EQUIPMENT & PRECAUTIONS: Self-contained breathing apparatus required for fire-fighting personnel.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Wear appropriate safety gear including eye and respiratory protection.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN UP

Collect dry material by sweeping and shoveling. Collect uncontaminated material for repackaging. Collect contaminated material in an approved container for disposal. Flush spill area thoroughly with water.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

Avoid contact with eyes or prolonged skin contact. Avoid breathing dust. Use good personal hygiene and housekeeping. Launder contaminated clothing before reuse.

CONDITIONS FOR SAFE STORAGE & INCOMPATIBILITIES

Store in a cool, dry, well-ventilated place away from acids. Extended storage can result in a hardening of the material.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS:	Not established. Local nuisance dust levels apply.
ENGINEERING CONTROLS:	Use only with adequate ventilation. If user operations generate dust use process enclosure, local exhaust ventilation or other engineering controls to keep worker exposure below limits.
	PERSONAL PROTECTIVE MEASURES
RESPIRATORY PROTECTION:	In case of inadequate ventilation wear respiratory protection.
PROTECTIVE GLOVES:	Personal preference.
EYE PROTECTION:	Safety glasses with side-shields.
OTHER PROTECTIVE EQUIPMENT (SPECIFY):	Protective clothing as required to prevent contact. Ensure eye-wash station and emergency shower are available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	White powder
ODOUR:	Odourless
ODOUR THRESHOLD:	Not applicable
pH:	8.3 (1% aqueous solution @ 25°C)
MELTING POINT / FREEZING POINT:	Not available
BOILING POINT / RANGE:	Not available
FLASH POINT:	Not applicable
EVAPORATION RATE:	Not applicable
FLAMMABILITY:	Not applicable
FLAMMABILITY / EXPLOSIVE LIMITS:	Not applicable
VAPOUR PRESSURE:	Not applicable
VAPOUR DENSITY:	Not applicable
RELATIVE DENSITY:	2.22
SOLUBILITY:	96 g/L H ₂ O @ 20°C
PARTITION COEFFICIENT:	Not available
AUTO-IGNITION TEMPERATURE:	Not applicable
DECOMPOSITION TEMPERATURE:	Not applicable
VISCOSITY:	Not available

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY:	None under normal use conditions.
CHEMICAL STABILITY:	Stable.
POSSIBILITY OF HAZARDOUS REACTIONS:	None under normal conditions of use.
CONDITIONS TO AVOID:	Exposure to air or moisture over prolonged periods.
INCOMPATIBLE MATERIALS:	Acids.
HAZARDOUS DECOMPOSITION PRODUCTS:	Sodium oxides. Carbon oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

PRODUCT TOXICITY:	LD50 (Oral, rat) > 5000 mg/kg LD50 (Dermal): No information available LC50 (Inhal, rat) > 4.74 mg/L/4.5hr
SKIN CONTACT:	Non-irritating to intact skin. Minor irritation may occur on abraded skin.
EYE CONTACT:	Dust and concentrated solutions may cause mild eye irritation.
INGESTION:	No effects expected from ingestion of small quantities.
INHALATION:	Dust may cause irritation including coughing and sneezing.
CARCINOGENICITY:	Not listed by NTP, IARC, OSHA or ACGIH.
TERATOGENICITY:	No evidence of teratogenicity.
REPRODUCTIVE TOXICITY:	No evidence of reproductive toxicity.
MUTAGENICITY:	Not mutagenic.
CHRONIC TOXICITY:	No information available.
TARGET ORGAN EFFECTS:	None.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY:	LC50 (bluegill sunfish) = 7100 mg/L/96hr LC50 (rainbow trout) = 7700 mg/L/96hr EC50 (daphnia magna) = 4100 mg/L/48hr
PERSISTENCE AND DEGRADABILITY:	Not applicable to inorganic substances.
BIOACCUMULATIVE POTENTIAL:	Does not bioaccumulate.
MOBILITY IN SOIL:	Dissociates into ions.
OTHER ADVERSE EFFECTS:	None know.

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of in accordance with federal, provincial and local regulations. It is the responsibility of the end-user to determine if material meets the criteria of hazardous waste at the time of disposal. This product may be suitable for landfill disposal; check with local operator.

SECTION 14: TRANSPORTATION INFORMATION

TDG	Not regulated
DOT	Not regulated
IATA	Not regulated
IMDG	Not regulated
UN NUMBER:	Not applicable



PROPER SHIPPING NAME:	Not applicable
CLASS:	Not applicable
PACKING GROUP:	Not applicable
IMDG HAZARDS:	Not a marine pollutant
BULK TRANSPORT:	Not regulated
SPECIAL PRECAUTIONS:	None

SECTION 15: REGULATORY INFORMATION

DSL:	Listed
WHMIS CLASS:	None
TSCA:	Listed

SECTION 16: OTHER INFORMATION

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This product's health and safety information is provided to assist our customers in assessing compliance with Health, Safety and Environmental regulations. The information contained herein is based on data available to us, and is believed to be accurate, although no guarantee or warranty is provided or implied by the company in this respect. Since the use of this product is within the exclusive control of the user, it is the user's responsibility to determine the conditions which include but are not limited to the safe use, storage, disposal, and transportation. Such conditions must comply with all governmental regulations.