

BICARBONATE of SODA

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name BICARBONATE of SODA
Product Identifier Sodium Bicarbonate
Product Family Calcium Sequester
Supplier Mudco Services Ltd., Suite 920, 540 - 5th Avenue SW, Calgary, Alberta, T2P 0M2, (403) 269-5359, www.mudco.com
Emergency Contact Information ChemTrec, (800) 424-9300, 24/7
Use Drilling Fluid Additive

2. HAZARDS IDENTIFICATION

Potential Health Effects

Inhalation May cause cough and some respiratory irritation.
Skin Contact Repeated or prolonged exposure can irritate the skin.
Eye Contact May cause mild irritation.
Ingestion Mild toxic by ingestion. May cause nausea, vomiting and abdominal pain. Doses over 5 kg/kg body weight can cause alkalosis and expansion in extracellular fluid volume with edema.
Effects of Long-Term (Chronic) Exposure Repeated exposure may lead to dermatitis. Prolonged contact with dusts or vapours may cause conjunctivitis.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Concentration %	Other Identifiers
Sodium bicarbonate	144-55-8	99.8	

4. FIRST AID MEASURES

First Aid Procedures

Inhalation Move victim to fresh air. Call a Poison Centre or doctor if the victim feels unwell.
Skin Contact Immediately wash gently and thoroughly with lukewarm, gently flowing water and non-abrasive soap for 15-20 minutes. If irritation or pain persists, see a doctor.
Eye Contact Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. If a contact lens is present, DO NOT delay flushing or attempt to remove the lens. If irritation or pain persists, see a doctor.
Ingestion If conscious give 2 to 4 glasses of water to drink but DO NOT induce vomiting. NEVER give anything by mouth if victim is rapidly losing consciousness, or is unconscious or convulsing. Immediately call a Poison Centre or doctor.

5. FIRE FIGHTING MEASURES

Flammable Properties Does not burn.
Suitable Extinguishing Media Not combustible. This product is used as a dry powder extinguishing agent suitable for all classes of fire.

Specific Hazards Arising from the Chemical	If extremely large quantities are involved, significant levels of carbon dioxide may be generated making necessary the use of self-contained breathing apparatus. (Carbon dioxide is an asphyxiant at levels >5%). Soda ash, another decomposition product existing at temperatures >115°C, is a respiratory and skin irritant.
Protective Equipment and Precautions for Firefighters	Chemical protective clothing (e.g. chemical splash suit) and positive pressure SCBA may be necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Use the Personal Protective Equipment recommended in Section 8 of this MSDS.
Environmental Precautions	It is good practice to prevent releases into the environment. Do not allow into any sewer, on the ground or into any waterway.
Methods for Containment and Clean-up	Use appropriate safety equipment. Small spills, sweep up and put into approved DOT containers for disposal or re-use. Large spills, do not allow to enter waterways, sweep or shovel into approved DOT containers for re-use or disposal.
Other Information	Loses carbon dioxide at 270°C.

7. HANDLING AND STORAGE

Handling	Avoid ingestion. Practice reasonable caution and personal cleanliness. Avoid skin and eye contact.
Storage	Keep in a cool, dry place, in tightly closed containers away from acids. Long-term storage may result in caking.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guideline Comments	ACGIH® = American Conference of Governmental Industrial Hygienists. TLV® = Threshold Limit Value. TWA = Time-Weighted Average. 10 mg/m ³ (total dust); 5 mg/m ³ (respirable dust).
Engineering Controls	Use general room dilution or local exhaust ventilation when excessive dust is expected in the work environment.
Personal Protective Equipment (PPE)	
Eye/Face Protection	Wear chemical safety goggles.
Skin Protection	Wear chemical protective clothing e.g. gloves, aprons, boots.
Respiratory Protection	Wear a NIOSH approved air-purifying respirator with an appropriate cartridge.
General Hygiene Considerations	It is good practice to: avoid breathing product; avoid skin and eye contact and wash hands after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Appearance	White Granules.
Particle Size	Not available
Odour	Odourless
Odour Threshold	Not available
Molecular Formula	Not applicable
Molecular Weight	Not available
Boiling Point	Not available
Decomposition Temperature	Not available
Melting Point	Not available
Freezing Point	Not applicable
Relative Density (water = 1)	2.16

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Bulk Density	Not available
Solubility in Water	Moderately soluble (1-10%)
Solubility in Other Liquids	Not applicable
pH	Not applicable
Partition Coefficient, n-Octanol/Water	Not applicable
Viscosity-Kinematic	Not applicable
Surface Tension	Not applicable
Vapour Pressure	Not applicable
Vapour Pressure at 50 deg C	Not applicable
Saturated Vapour Concentration	Not applicable
Critical Temperature	Not applicable
Vapour Density (air = 1)	Not applicable
Evaporation Rate	Not applicable
Flash Point	Not applicable

10. STABILITY AND REACTIVITY

Chemical Stability	Normally stable.
Conditions to Avoid	The resulting dust may be irritating to the eyes, skin and respiratory tract.
Incompatible Materials	Reacts with acids to release carbon dioxide gas and heat.
Hazardous Decomposition Products	When heated to decomposition, carbon dioxide is released.
Possibility of Hazardous Reactions	Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Inhalation Rat: not determined

Oral LD50 4,220 mg/kg (rat)

Skin Irritation/Corrosion

Animal tests show mild irritation.

Effects of Long-Term (Chronic) Exposure

Repeated exposure may lead to contact dermatitis. Prolonged contact with dusts or vapours may cause conjunctivitis.

Carcinogenicity

IARC: Group 3 – Not classifiable as to its carcinogenicity to humans. ACGIH®: A4 – Not classifiable as a human carcinogen. NTP: Not specifically listed. OSHA: Not specifically listed.

No information was located for: Effects of Short-Term (Acute) Exposure, Teratogenicity / Embryotoxicity, Reproductive Toxicity, Mutagenicity, Toxicologically Synergistic Materials

12. ECOLOGICAL INFORMATION

Ecotoxicity Not Available

13. DISPOSAL CONSIDERATIONS

Contact local environmental authorities for approved disposal or recycling methods in your jurisdiction. Containers should NOT be re-used. Containers should be disposed of in accordance with government regulations.

14. TRANSPORT INFORMATION

Shipping Information

Not regulated under Canadian TDG Regulations.

Other Transport Information

Special Shipping Information Not applicable

15. REGULATORY INFORMATION

Canada

WHMIS Classification

Not a WHMIS controlled product.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by the Controlled Products Regulations.

16. OTHER INFORMATION

NFPA Rating Health - 1 Flammability - 0 Instability - 0

MSDS Prepared By Bri-Chem Supply Ltd

Phone No. (403) 252-5904

Date of Preparation March 05, 2016

Disclaimer This Health and Safety information is correct to the best of our knowledge and belief at the date of its publication, but we cannot accept liability for any loss, injury or damage which may result from its use. We shall ensure, so far as is reasonably practicable, that any revision of this Data Sheet is sent to all customers to whom we have directly supplied this substance, but must point out that it is the responsibility of any intermediate supplier to ensure that such revision is passed to the ultimate user. The information given in the Data Sheet is designed only as guidance for safe handling, storage, and the use of the substance. It is not a specification nor does it guarantee any specific properties. All chemicals should be handled only by competent personnel, within a controlled environment. Should further information be required, this can be obtained through the sales office whose address is at the top of this data sheet.