



# MATERIAL SAFETY DATA SHEET

## SECTION I: IDENTIFICATION OF PRODUCT

**PRODUCT NAME:** Bicarbonate of Soda

**PRODUCT USE:** Oil Well Fluid Additive **CAS No.** 144-55-8

**CHEMICAL FAMILY:** Inorganic Salt (Bicarbonate salt) NaHCO<sub>3</sub>

### WORK PLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)

**WHMIS CLASSIFICATION:** Not a controlled product under WHMIS

**WORK PLACE HAZARD:** N/A

### TRANSPORTATION OF DANGEROUS GOODS (TDG)

**SHIPPING NAME:** Not Dangerous Goods

**TDG CLASSIFICATION:** N/A

**UN NUMBER (PIN):** N/A

**PACKING GROUP:** N/A

## SECTION II: HAZARDOUS INGREDIENTS

<u>INGREDIENT</u>	<u>PERCENT</u>	<u>CAS NUMBER</u>	<u>LD<sub>(50)</sub> Oral-Rat</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Bicarbonate of Soda	100 %	144-55-8	>4.2 g/kg Mild irritant	15mg/m <sup>3</sup> TWA total dust 5mg/m <sup>3</sup> TWA respirable dust	10mg/m <sup>3</sup> TWA

## SECTION III: TOXICOLOGICAL PROPERTIES

**ROUTE OF ENTRY:**  SKIN  EYE CONTACT  INHALATION  INGESTION

**EFFECTS OF OVEREXPOSURE:** Repeated exposure may lead to contact dermatitis. Prolonged contact with dusts or vapours may cause conjunctivitis.

**EYE CONTACT:** Causes mild eye irritation.

**SKIN CONTACT:** May cause mild skin irritation. Application of large amounts to the skin may cause alkalosis. Skin irritation may be aggravated in persons with existing skin lesions.

**INGESTION:** 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.

**INHALATION:** May cause cough and mild respiratory irritation. Breathing of dust may aggravate acute or chronic asthma and other chronic pulmonary disease.

## SECTION IV: FIRST AID MEASURES



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<b>SKIN CONTACT:</b>	Immediately wash skin with plenty of soap and water, while removing contaminated clothing and shoes. Wash clothing separately before reuse.
<b>EYE CONTACT:</b>	Hold eyelids open and flush with water for at least 15 minutes. Get medical attention.
<b>INGESTION:</b>	If patient is conscious and alert, give 2-3 glasses of water or milk to drink. If available, give one tablespoon of Syrup or Ipecac to induce vomiting. Alternatively, induce vomiting by touching back of throat with finger. Do not make an unconscious person vomit. Get medical attention.
<b>INHALATION:</b>	Remove patient from immediate source of exposure and assure that the individual is breathing. If not breathing, use cardiac-pulmonary resuscitation/artificial respiration. Get medical attention.
<b>NOTES TO PHYSICIAN:</b>	No specific antidote is available. Treat symptomatically. Consider the possibility that overexposure to other materials 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 V: PHYSICAL DATA

<b>APPEARANCE AND ODOUR:</b>	White odourless powder
<b>SPECIFIC GRAVITY:</b>	2.16 g/cc
<b>BOILING POINT (°C):</b>	Decomposes
<b>MELTING POINT (°C):</b>	N/A
<b>pH:</b>	8.5 (1% solution)
<b>SOLUBILITY IN WATER:</b>	9.6 g/100 g
<b>PERCENT VOLATILE BY VOLUME:</b>	N/A
<b>EVAPORATION RATE:</b>	N/A
<b>VAPOUR PRESSURE (mm Hg):</b>	N/A
<b>BULK DENSITY (kg/m<sup>3</sup>):</b>	675-1123 kg/m <sup>3</sup>

## SECTION VI: FIRE AND EXPLOSION HAZARD DATA

<b>FLASH POINT:</b>	Not Flammable
<b>FLAMMABLE LIMITS:</b>	N/A
<b>EXTINGUISHING MEDIA:</b>	Use appropriate media to extinguish source of fire.
<b>SPECIAL FIRE FIGHTING PROCEDURES:</b>	Self-contained respirators required for fire fighting personnel.
<b>UNUSUAL FIRE/EXPLOSION HAZARDS:</b>	If extremely large quantities, significant levels of CO <sub>2</sub> may be generated. (CO <sub>2</sub> is an asphyxiate at levels >5%).

## SECTION VII: REACTIVITY DATA

**STABILITY:**                      **Stable [XX]**                      **Unstable [ ]**



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<b>STABILITY:</b>	At ambient temperatures/atmospheric pressure, tends to evolve CO <sub>2</sub> slowly and absorb moisture. At elevated temperatures CO <sub>2</sub> and water are evolved.
<b>INCOMPATIBILITY (CONDITIONS TO AVOID):</b>	Moisture and Heat sensitive.
<b>CONDITIONS OF REACTIVITY:</b>	Decomposes weak acids releasing heat and forming salt, water and CO <sub>2</sub> .
<b>HAZARDOUS DECOMPOSITION PRODUCTS:</b>	When temperature is raised >87°C, CO <sub>2</sub> gas will be released. The resulting dust may be irritating to the eyes, skin and respiratory tract.
<b>HAZARDOUS POLYMERIZATION:</b>	Will Not Occur [XX]                      May Occur [ ]

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## VIII: PREVENTIVE MEASURES

### SPECIAL PROTECTION INFORMATION

<b>RESPIRATORY PROTECTION:</b>	Suggest NIOSH/MESA approved dust mask
<b>VENTILATION:</b>	10 changes per hour suggested
<b>PROTECTIVE GLOVES:</b>	Suggest plastic or rubber
<b>EYE PROTECTION:</b>	Suggest goggles with side shields
<b>OTHER PROTECTIVE EQUIPMENT:</b>	Chemical resistant boots, sink, safety shower, eyewash fountain oxygen.

### PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Material is generally regarded as safe for humans and animals. Store in a cool, dry place in tightly closed containers away from acids. Long-term storage may result in caking.

### STEPS TO BE TAKEN IN CASE THE MATERIAL IS SPILLED OR RELEASED

To the extent possible, clean up spilled material using shovels. Scoop up loose material and place it in appropriate containers. If spilled on the ground, the affected area should be scraped clean and the material placed in an appropriate container for disposal. Wear appropriate protective clothing and equipment during cleanup activities.

### WASTE DISPOSAL METHOD

Dispose of in accordance with local, provincial, and federal regulations.

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## SECTION IX: PREPARATION

THE INFORMATION CONTAINED HEREIN IS GIVEN IN GOOD FAITH, BUT NO WARRANTY, EXPRESSED OR IMPLIED, IS MADE.

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