

# MATERIAL SAFETY DATA SHEET

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

|                        |   |
|------------------------|---|
| <b>TRADE NAME:</b>     | SODA ASH  |
| <b>CHEMICAL CLASS:</b> | Sodium carbonate  |
| <b>APPLICATIONS:</b>   | Oil well drilling fluid additive. Calcium precipitation |

## 2. COMPOSITION, INFORMATION ON INGREDIENTS

| <b>INGREDIENT NAME:</b> | <b>CAS No.:</b> | <b>CONTENTS :EPA RQ:</b> | <b>TPQ</b> |
|-------------------------|-----------------|--------------------------|------------|
| Sodium carbonate        | 497-19-8        | 100 %                    | :          |

## 3. HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW:

CAUTION! MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION. Avoid contact with eyes, skin and clothing. Avoid breathing airborne product. Keep container closed. Use with adequate ventilation. Wash thoroughly after handling.

amber white powder. Slippery when wet. A nuisance dust.

### ACUTE EFFECTS:

#### HEALTH HAZARDS, GENERAL:

Particulates may cause mechanical irritation to the eyes, nose, throat and lungs. Particulate inhalation may lead to pulmonary fibrosis, chronic bronchitis, emphysema and bronchial asthma. Dermatitis and asthma may result from short contact periods.

**INHALATION:** May be irritating to the respiratory tract if inhaled.

**INGESTION:** May cause gastric distress, nausea and vomiting if ingested.

**SKIN:** May be irritating to the skin.

**EYES:** May be irritating to the eyes.

### CHRONIC EFFECTS:

#### CARCINOGENICITY:

IARC: Not listed. OSHA: Not regulated. NTP: Not listed.

#### ROUTE OF ENTRY:

Inhalation. Skin and/or eye contact.

#### TARGET ORGANS:

Respiratory system, lungs. Skin. Eyes.

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## 4. FIRST AID MEASURES

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**GENERAL:** Persons seeking medical attention should carry a copy of this MSDS with them.

**INHALATION:** Move the exposed person to fresh air at once. Perform artificial respiration if breathing has stopped. Get medical attention.

**INGESTION:** Drink a couple of glasses water or milk. Do not give victim anything to drink if he is unconscious. Get medical attention.

**SKIN:** Wash skin thoroughly with soap and water. Remove contaminated clothing. Get medical attention if any discomfort continues.

**EYES:** Promptly wash eyes with lots of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

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## 5. FIRE FIGHTING MEASURES

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**AUTO IGNITION TEMP. (°F):**

N/  
D

**FLAMMABILITY LIMIT -**

**LOWER(%):**

N/  
D

**FLAMMABILITY LIMIT -**

**UPPER(%):**

N/  
D

**EXTINGUISHING MEDIA:**

Carbon dioxide (CO<sub>2</sub>). Dry chemicals. Foam. Water spray, fog or mist.

**SPECIAL FIRE FIGHTING PROCEDURES:**

No specific fire fighting procedure given.

**UNUSUAL FIRE & EXPLOSION HAZARDS:**

No unusual fire or explosion hazards noted.

**HAZARDOUS COMBUSTION PRODUCTS:**

Irritating gases/vapors/fumes. Oxides of: Carbon. and Sodium.

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## 6. ACCIDENTAL RELEASE MEASURES

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**PERSONAL PRECAUTIONS:**

Wear proper personal protective equipment (see MSDS Section 8).

**SPILL CLEAN-UP PROCEDURES:**

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Carefully sweep up and put in closed containers. Avoid making dust. Do not contaminate drainage or waterways. Repackage or recycle if possible.

### 7. HANDLING AND STORAGE

#### HANDLING PRECAUTIONS:

Avoid handling causing generation of dust. Wear full protective clothing for prolonged exposure and/or high concentrations. Eye wash and emergency shower must be available at the work place. Wash hands often and change clothing when needed. Provide good ventilation. Mechanical ventilation or local exhaust ventilation is required.

#### STORAGE PRECAUTIONS:

Store at moderate temperatures in dry, well ventilated area. Keep in original container.

### 8. EXPOSURE CONTROLS, PERSONAL PROTECTION

| INGREDIENT NAME: | CAS No.: | OSHA PEL: |       | ACGIH TLV: |       | OTHER:            |       |
|------------------|----------|-----------|-------|------------|-------|-------------------|-------|
|                  |          | TWA:      | STEL: | TWA:       | STEL: | TWA:              | STEL: |
| Sodium carbonate | 497-19-8 | 5         |       | 3          |       | mg/m <sup>3</sup> | 3     |
|                  |          |           |       |            |       | resp.d            | ust   |

#### INGREDIENT COMMENTS:

Exposure limits are for Particulates Not Otherwise Classified (PNOC).

#### PROTECTIVE EQUIPMENT:



#### ENGINEERING CONTROLS:

Use appropriate engineering controls such as, exhaust ventilation and process enclosure, to reduce air contamination and keep worker exposure below the applicable limits.

**VENTILATION:** Supply natural or mechanical ventilation adequate to exhaust airborne product and keep exposures below the applicable limits.

**RESPIRATORS:** Use at least a NIOSH-approved N95 half-mask disposable or reuseable particulate respirator. In work environments containing oil mist/aerosol use at least a NIOSH-approved P95 half-mask disposable or reuseable particulate respirator.

#### PROTECTIVE GLOVES:

Use suitable protective gloves if risk of skin contact.

#### EYE PROTECTION:

Wear dust resistant safety goggles where there is danger of eye contact.

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**PROTECTIVE CLOTHING:**

Wear appropriate clothing to prevent repeated or prolonged skin contact.

**HYGIENIC WORK PRACTICES:**

Wash promptly with soap and water if skin becomes contaminated. Change work clothing daily if there is any possibility of contamination.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

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|---|--|
| <b>APPEARANCE/PHYSICAL STATE:</b>         | Powder, dust.                              |
| <b>COLOR:</b>                             | White.                                     |
| <b>ODOR:</b>                              | Odorless or no characteristic odor.        |
| <b>SOLUBILITY DESCRIPTION:</b>            | Soluble in water.                          |
| <b>MELT./FREEZ. POINT (°F, interval):</b> | 1564                                       |
| <b>DENSITY/SPECIFIC GRAVITY (g/ml):</b>   | 2.509      TEMPERATURE (°F): 68<br>48      |
| <b>BULK DENSITY:</b>                      | lb/ft <sup>3</sup> ; 769 kg/m <sup>3</sup> |
| <b>VAPOR DENSITY (air=1):</b>             | N/A  |
| <b>VAPOR PRESSURE:</b>                    | N/A      TEMPERATURE (°F):                 |
| <b>pH-VALUE, DILUTED SOLUTION:</b>        | 11.4      CONCENTRATION (%M): 1%           |

**10. STABILITY AND REACTIVITY**

**STABILITY:** Normally stable.

**CONDITIONS TO AVOID:**

Reacts with hydrated lime to form sodium hydroxide.

**HAZARDOUS POLYMERIZATION:**

Will not polymerize.

**POLYMERIZATION DESCRIPTION:**

Not relevant.

**MATERIALS TO AVOID:**

Strong acids.

**HAZARDOUS DECOMPOSITION PRODUCTS:**

No specific hazardous decomposition products noted.

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## 11. TOXICOLOGICAL INFORMATION

**Component:****Sodium carbonate****TOXICOLOGICAL DATA:**

|                             |                      |                                      |       |         |                              |
|-----------------------------|----------------------|--------------------------------------|-------|---------|------------------------------|
| Corrosive effects.          | Eye irritation test. | 24 hours.                            | Eye.  | Rabbit. | 100 mg - Moderate Irritation |
| Corrosive effects.          |                      | 24 hours.                            | Skin. | Rabbit. | 500 mg - Mild Irritation     |
| <b>TOXIC DOSE - LD 50:</b>  |                      | 4090 mg/kg (oral rat)                |       |         |                              |
| <b>TOXIC CONC. - LC 50:</b> |                      | 1200 mg/m <sup>3</sup> /2h (inh-mus) |       |         |                              |

## 12. ECOLOGICAL INFORMATION

**ACUTE AQUATIC TOXICITY:**

This product is approved for use under the U.S. Environmental Protection Agency (EPA) Region IX (California) General NPDES Permit which regulates offshore discharges of drilling fluids. Contact M-I's Environmental Affairs Department for more information.

This product passes the mysid shrimp toxicity test required by the U.S. Environmental Protection Agency (EPA) Region VI (Gulf of Mexico) NPDES Permit, which regulates offshore discharge of drilling fluids, when tested in a standard drilling fluid. Contact M-I's Environmental Affairs Department for more information.

## 13. DISPOSAL CONSIDERATIONS

**WASTE MANAGEMENT:**

This product does not meet the criteria of a hazardous waste if discarded in its purchased form. Under RCRA, it is the responsibility of the user of the product to determine at the time of disposal, whether the product meets RCRA criteria for hazardous waste. This is because product uses, transformations, mixtures, processes, etc, may render the resulting materials hazardous.

**DISPOSAL METHODS:**

Recover and reclaim or recycle, if practical. Should this product become a waste, dispose of in a permitted industrial landfill. Ensure that containers are empty by RCRA criteria prior to disposal in a permitted industrial landfill.

## 14. TRANSPORT INFORMATION

**PRODUCT RQ:** N/A

U.S. DOT: Not regulated.  
U.S. DOT CLASS:

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**CANADIAN TRANSPORT:****TDGR CLASS:** Not regulated.**SEA TRANSPORT:****IMDG CLASS:** Not regulated.**AIR TRANSPORT:****ICAO CLASS:** Not regulated.

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**15. REGULATORY INFORMATION**

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**REGULATORY STATUS OF INGREDIENTS:**

| <b>NAME:</b>     | <b>CAS No:</b> | <b>TSCA:</b>       | <b>CERCLA:</b> | <b>SARA</b> | <b>SARA</b>       | <b>DSL(CAN):</b> |
|------------------|----------------|--------------------|----------------|-------------|-------------------|------------------|
| Sodium carbonate | 497-19-8       | <b>302:</b><br>Yes | No             | No          | <b>313:</b><br>No | Yes              |

**US FEDERAL REGULATIONS:****WASTE CLASSIFICATION:****REGULATORY STATUS:**

Not a hazardous waste by U.S. RCRA criteria. See Section 13.

This Product or its components, if a mixture, is subject to following regulations (Not meant to be all inclusive - selected regulations represented):

SECTION 313: This product does not contain toxic chemical subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR Part 372.

SARA 311 Categories:  
1: Immediate (Acute) Health Effects.

The components of this product are listed on or are exempt from the following international chemical registries:

TSCA (U.S.) EINECS  
(Europe) DSL (Canada)

**STATE REGULATIONS:**

**STATE REGULATORY STATUS:** This product or its components, if a mixture, is subject to following regulations (Not meant to be all inclusive - selected regulations represented):

None.

PROPOSITION 65: This product does not contain chemicals considered by the State of California's Safe Drinking Water and Toxic Enforcement Act of 1986 as causing cancer or reproductive toxicity, and for which warnings are now required.

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### CANADIAN REGULATIONS: LABELS FOR SUPPLY:



### REGULATORY STATUS:

This Material Safety Data Sheet has been prepared in compliance with the Controlled Product Regulations.  
Canadian WHMIS Classification: D2B - Other Toxic Effects: Toxic Material

### 16. OTHER INFORMATION

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#### NPCA HMIS HAZARD INDEX: FLAMMABILITY: REACTIVITY: NPCA HMIS PERS. PROTECT. INDEX:

1 Slight Hazard  
1 Slight Hazard  
0 Minimal Hazard

E - Safety Glasses, Gloves, Dust Respirator

#### USER NOTES:

N/A = Not applicable N/D = Not determined

#### INFORMATION SOURCES:

OSHA Permissible Exposure Limits, 29 CFR 1910, Subpart Z, Section 1910.1000, Air Contaminants.  
ACGIH Threshold Limit Values and Biological Exposure Indices for Chemical Substances and Physical Agents (latest edition).  
Sax's Dangerous Properties of Industrial Materials, 9th ed., Lewis, R.J. Sr., (ed.), VNR, New York, New York, (1997).  
Product information provided by the commercial vendor(s).

#### PREPARED BY:

Sam Hoskin/bb

#### REVISION No./Repl. MSDS of:

2/January 27, 1998

#### MSDS STATUS:

Approved.

#### DATE:

June 16, 2000

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#### DISCLAIMER:

MSDS furnished independent of product sale. While every effort has been made to accurately describe this product, some of the data are obtained from sources beyond our direct supervision. We cannot make any assertions as to its reliability or completeness; therefore, user may rely on it only at user's risk. We have made no effort to censor or conceal deleterious aspects of this product. Since we cannot

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anticipate or control the conditions under which this information and product may be used, we make no guarantee that the precautions we have suggested will be adequate for all individuals and/or situations. It is the obligation of each user of this product to comply with the requirements of all applicable laws regarding use and disposal of this product. Additional information will be furnished upon request to assist the user; however, no warranty, either expressed or implied, nor liability of any nature with respect to this product or to the data herein is made or incurred hereunder.

