

# MATERIAL SAFETY DATA SHEET



## SODA ASH

Drilling Fluids

### 1. Product and Company Identification

<b>Material name</b>	<b>SODA ASH</b>
<b>Chemical name</b>	Sodium carbonate
<b>Applications</b>	Alkalinity Control Agent
<b>Supplier</b>	Baker Hughes Drilling Fluids 2001 Rankin Rd. Houston, TX 77073 Emergency telephone number 713-439-8900

### 2. Composition / Information on Ingredients

The manufacturer lists no ingredients as hazardous according to OSHA 29 CFR 1910.1200.

### 3. Hazards Identification

<b>Emergency overview</b>	May cause severe irritation or burns to the eyes, skin, gastrointestinal tract, and respiratory system.
<b>Potential health effects</b>	
<b>Eyes</b>	Contact can cause moderate to severe irritation and possible injury to the eyes. Eye contact may result in corneal injury.
<b>Skin</b>	Contact causes severe skin irritation and possible burns.
<b>Inhalation</b>	Harmful if inhaled. Dusts of this product may cause irritation of the nose, throat, and respiratory tract. Inhalation of dust may cause shortness of breath, tightness of the chest, a sore throat and cough.
<b>Ingestion</b>	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
<b>Chronic effects</b>	Prolonged or repeated inhalation may cause nosebleeds, nasal congestion, erosion of the teeth, perforation of the nasal septum, chest pain and bronchitis.

### 4. First Aid Measures

<b>First aid procedures</b>	
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids. Get medical attention if irritation develops or persists.
<b>Skin contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists. Remove and isolate contaminated clothing and shoes. Launder contaminated clothing before reuse.
<b>Inhalation</b>	Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Call a physician if symptoms develop or persist.
<b>Ingestion</b>	DO NOT INDUCE VOMITING. Give victim water or milk. Get medical attention immediately.
<b>Notes to physician</b>	Treat symptomatically.
<b>General advice</b>	If you feel unwell, seek medical advice (show the label where possible).

### 5. Fire Fighting Measures

<b>Extinguishing media</b>	
<b>Suitable extinguishing media</b>	Use extinguishing agent suitable for type of surrounding fire. Dry chemical, CO <sub>2</sub> , water spray or regular foam.
<b>Protection of firefighters</b>	
<b>Protective equipment for firefighters</b>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Move containers from fire area if you can do it without risk. Cool containers with flooding quantities of water until well after fire is out.

### 6. Accidental Release Measures

<b>Personal precautions</b>	Wear appropriate protective equipment and clothing during clean-up. For recommended protective clothing and equipment, see section 8 "Exposure Controls and Personal Protection".
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<b>Evacuation procedures</b>	Keep unnecessary personnel away.
<b>Environmental precautions</b>	Do not contaminate surface water. Prevent further leakage or spillage if safe to do so.
<b>Methods for containment</b>	Stop the flow of material, if this is without risk.
<b>Methods for cleaning up</b>	Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid the generation of dusts during clean-up. Ventilate the contaminated area.

## 7. Handling and Storage

<b>Handling</b>	Wash hands after handling and before eating. Do not get this material in your eyes, on your skin, or on your clothing. Remove and wash contaminated clothing before re-use. Do not ingest. Avoid dust formation.
<b>Storage</b>	Keep containers tightly closed in a dry, cool and well-ventilated place.

## 8. Exposure Controls / Personal Protection

<b>Exposure guidelines</b>	<p>NUISANCE DUST:</p> <p>Exposure limit for respirable dust is 4 mg/m<sup>3</sup> (8hr TWA)</p> <p>Exposure limit for inhalable dust is 10 mg/m<sup>3</sup> (8hr TWA)</p>
<b>Engineering controls</b>	Good general ventilation should be sufficient to control airborne levels.
<b>Personal protective equipment</b>	
<b>Eye / face protection</b>	Wear dust goggles.
<b>Skin protection</b>	Use of protective coveralls and long sleeves is recommended. Rubber or plastic boots.
<b>Hand protection</b>	Protective gloves.
<b>Respiratory protection</b>	In case of insufficient ventilation wear suitable respiratory equipment. Half mask with a particle filter P2 (EN 143).
<b>General hygiene considerations</b>	Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and Chemical Properties

<b>Appearance / Color / Form</b>	Powder. White. Solid.
<b>Odor</b>	None.
<b>Clarity</b>	Not available
<b>Odor threshold</b>	Not available
<b>Physical state</b>	Solid
<b>pH</b>	7 - 9 11.5 , conc:1% (aqueous solution)
<b>Melting point</b>	Not available
<b>Freezing point</b>	Not available
<b>Boiling point</b>	752 °F (400 °C)
<b>Flash point</b>	Not applicable
<b>Evaporation rate</b>	1
<b>Flammability limits in air, lower, % by volume</b>	Not available
<b>Flammability limits in air, upper, % by volume</b>	Not available
<b>Vapor pressure</b>	0 HPa at 20 °C
<b>Vapor density</b>	Not available
<b>Specific gravity</b>	2.8823
<b>Relative density</b>	2.4 g/cm <sup>3</sup>
<b>Solubility</b>	Soluble in water.
<b>Octanol/H<sub>2</sub>O coeff</b>	1.7
<b>Auto-ignition temperature</b>	Not available
<b>Decomposition temperature</b>	752 °F (400 °C)
<b>Percent volatile</b>	5 % in water
<b>Molecular weight</b>	105.99 g/mol
<b>Molecular formula</b>	Na <sub>2</sub> CO <sub>3</sub>

## 10. Chemical Stability and Reactivity Information

<b>Chemical stability</b>	Stable at normal conditions.
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<b>Incompatible materials</b>	Ammonia + silver nitrate, 2,4-dinitrotoluene, 2,4,6-trinitrotoluene, sulfuric acid, sodium sulfide + water, lithium, phosphorus pentoxide, fluorine, and hydrogen peroxide. Corrosive to steel.
<b>Hazardous decomposition products</b>	At thermal decomposition temperatures, carbon monoxide and carbon dioxide. Sodium oxides.
<b>Possibility of hazardous reactions</b>	Will not occur.

## 11. Toxicological Information

<b>Carcinogenicity</b>	Did not cause cancer in long-term animal studies.
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## 12. Ecological Information

<b>Ecotoxicity</b>	This material is not expected to be harmful to aquatic life.
<b>Persistence / degradability</b>	Expected to be slow, but will ultimately degrade in the aquatic environment.
<b>Bioaccumulation / accumulation</b>	Not expected to bioaccumulate.
<b>Partition coefficient</b>	1.7
<b>Mobility in environmental media</b>	This product will disperse readily in bodies of water or in wet soil.

## 13. Disposal Considerations

<b>Disposal instructions</b>	Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.
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## 14. Transport Information

### Department of Transportation (DOT) Requirements

Not regulated as dangerous goods.

### IATA

Not regulated as dangerous goods.

### IMDG

Not regulated as dangerous goods.

## 15. Regulatory Information

### Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical No

CERCLA (Superfund) reportable quantity None

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 311 hazardous chemical No

Food and Drug Administration (FDA) Total food additive  
GRAS food additive

**Inventory status**

<b>Country(s) or region</b>	<b>Inventory name</b>	<b>On inventory (yes/no)*</b>
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (CCS)	Yes
Europe	European Inventory of New and Existing Chemicals (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Japanese Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Korean Inventory of Chemicals (KICS)	Yes
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

**16. Other Information****HMIS ratings**

Health: 1  
Flammability: 0  
Physical hazard: 0  
Personal protection: E

**NFPA ratings**

Health: 0  
Flammability: 0  
Instability: 0

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release

**EU preparer**

Melanie Thatcher - Tel +44 (0)1224 721597

**US preparer**

Cheryl Hood - (713)625-4888

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