SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: SODA ASH
Chemical Family: Mineral
Application: Drilling Fluid Additive
Manufacturer/Supplier: Wyo-Ben, Inc.
1345 Discovery Drive
Billings, MT  59102 USA
Telephone: 800.548.7055
Facsimile: 406.656.0748
Emergency Phone Number CHEMTREC® 800.424.9300

SECTION 2 — HAZARD IDENTIFICATION COMPOSITION

Hazard Classification: Eye Damage/Irritation (Category 2A)
Signal Word: Warning
Hazard statements: Causes serious eye irritation
Hazard Symbol: Exclamation Mark
Precautionary Statements
Prevention: Wash skin thoroughly after handling.
            Wear eye protection / face protection.
Response: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Hazard Not Otherwise Classified: No other hazards not otherwise classified have been identified.

SECTION 3 — COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Substances</th>
<th>CAS Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium carbonate</td>
<td>497-19-8</td>
<td>100</td>
</tr>
</tbody>
</table>

SECTION 4 — FIRST AID MEASURES

General information: No special measures required.
Inhalation: If inhaled, remove to a dust free area. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

Skin: Brush off loose particles from skin. Immediately rinse with water. Seek medical attention if irritation develops and persists.

Eyes: Remove contact lenses if worn. Flush eyes with plenty of water and seek medical attention if irritation persists.

Ingestion: Rinse out mouth and then drink plenty of water. Do not induce vomiting; immediately seek medical attention.

Most important symptoms and effects, both acute and delayed:

Severe eye irritation. Nose, throat and lung irritation (sore throat, nose bleeds). Cough at high concentrations. Nausea, abdominal pain, vomiting and diarrhea when ingested.

Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5 — FIRE FIGHTING MEASURES

Fire Extinguishing Media: All standard firefighting media. Use firefighting measures that suit the environment and circumstances.

Unsuitable Fire Extinguishing Media: None

Special Exposure Hazards: Formation of toxic gases is possible during heating or in case of fire. Fumes of sodium oxide and carbon oxides.


SECTION 6 — ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures: Avoid dust formation. Use respiratory protective device against the effects of fumes, dust and aerosols. Ensure adequate ventilation. Wear protective equipment. Keep unprotected persons away.

Environmental Precautionary Measures: Do not allow to enter sewers, surface or ground water. Damp down dust with water spray.

Procedure for Cleaning/Absorption: Collect using appropriate dustless, mechanical method. Dispose of in accordance with all local, state and federal regulations. Use appropriate containers for disposal.

SECTION 7 — HANDLING AND STORAGE

Handling Precautions: Ensure adequate ventilation. Prevent formation of dust. Any deposit of dust that cannot be avoided must be regularly removed. Avoid contact with skin and eyes.

Storage Information: Protect from humidity and water. Store away from foodstuffs.

Incompatibilities: Do not store with acids. Will generate carbon dioxide (CO₂) when exposed to acids.

Additional Information: Use good industrial hygiene in storage and work areas to prevent accumulation of dust. Close container when not in use. Do not reuse empty container.
SECTION 8 — EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: No further data; see item 7.

Control parameters

Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Personal Protective Equipment: Standard industrial hygiene measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed.

Respiratory Protection: Do not inhale dust, mist or smoke. Respiratory protection not required under normal conditions of use. Use suitable NIOSH approved respiratory protective device in case of insufficient ventilation. For spills, respiratory protection is advisable.

Hand Protection: Chemically resistant protective work gloves. The glove material has to be impermeable and resistant to the product.

Skin Protection: Avoid close or long term contact with the skin. Wash hands before breaks and at the end of work. Wear clothing appropriate for the work environment. Dusty clothing should be laundered before reuse. Use precautionary measures to avoid creating dust when removing or laundering clothing.

Body Protection: Not required under normal conditions of use. Protection may be required for spills.

Eye Protection: Avoid contact with eyes. Wear safety glasses with side shields, goggles or full face mask to protect against exposure.

Other Precautions: No further relevant information available.

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Granular Solid

Color: White

Odor: Odorless

Odor Threshold: Not determined

pH: 11.3 – 11.6 (1% aqueous solution)

Specific Gravity @ 20 C (Water=1): 2.45 – 2.55

Density @ 20 C (lbs/gallon / g/cm³): 21.113 / 2.53

Bulk Density @ 20 C (lbs/ft³): 60 - 70

Melting Point (*F/°C): 1564 / 851.1

Boiling Point/Range (*F/°C): Not determined

Freezing Point/Range (*F/°C): Not applicable

Vapor Pressure @ 20 C (mmHg): Not applicable

Vapor Density (Air=1): Not applicable

Percent Volatiles: Not applicable

Evaporation Rate (Butyl Acetate=1): Not applicable

Solubility in Water: Soluble
Solubility in Solvents (g/100ml): Not applicable
VOCs (lbs/gallon): Not applicable
Viscosity, Dynamic @ 20 C (centipoise): Not applicable
Viscosity, Kinematic @ 20 C (centistokes): Not applicable
Partition Coefficient/n-Octanol/Water: Not applicable
Flash Point/Range (F/C): Not applicable – non-combustible
Flash Point Method: Not applicable – non-combustible
Autoignition Temperature (F/C): Not applicable – non-combustible
Flammability Limits in Air – Upper/Lower (%): Not applicable – non-combustible

SECTION 10 — STABILITY AND REACTIVITY

Reactivity: Decomposes by reaction with strong acids.
Chemical Stability: Stable under recommend storage conditions.
Hazardous Polymerization: Will Not Occur
Hazardous Reactions: Strong exothermic reaction with acids. Reacts with halogenated compounds.
Conditions to Avoid: Avoid contact with acids
Hazardous Decomposition Products: With strong acids: Carbon dioxide. Thermal decomposition may produce oxides of sodium and carbon.

SECTION 11 — TOXICOLOGICAL INFORMATION

Probable Route of Exposure: Inhalation, Eye or skin contact
Primary Irritant Effect:
Skin Contact: Slight irritant effect on skin and mucous membranes.
Eye Contact: Serious irritation effect.
Sensitization: No sensitizing effects known.
Acute toxicity:
Oral: LD50/Rat/ 2,800 mg/kg
Dermal: LD50/Rabbit/>2,000 mg/kg
Acute effects: Severely irritating to eyes
Skin Corrosion/Irritation: Rabbit/Not classified as irritating to skin (OECD 404) Unpublished.
Respiratory or Skin Sensitization: No data available.
Mutagenicity: Not considered to be genotoxic.
Carcinogenicity: Not listed as a known, probable, potential or suspected carcinogen by IARC, NTP or OSHA.
Reproductive Toxicity: No data available.
STOT Single Exposure: This substance is not classified as specific target organ toxicant, single exposure.

STOT Repeated Exposure: This substance is not classified as specific target organ toxicant, repeated exposure.

Aspiration Toxicity: No data available.

### SECTION 12 — ECOLOGICAL INFORMATION

**Acute Toxicity**

**Fish:** LC50/Lepomis macrochirus (Bluegill Sunfish)/96 hr/ 300 mg/L

**Invertebrates:** EC50/Ceriodaphnia dubia (Water Flea)/48 hr/200 – 227 mg/L

**Persistence and Degradability**

**Biodegradability:** Not applicable. Inorganic substance.

**Photo-degradation:** Hydrolyzes in water to form carbonic acid/bicarbonate/carbonate

**Bio-accumulation**

**Bioconcentration Factor (BCF):** Not applicable. Inorganic substance.

No relevant information available

**Mobility in Soil:** Not significant

**Ecotoxicity Assessment**

**Acute aquatic toxicity:** Not harmful to aquatic life (LC/EC50 > 100 mg/L)

**Chronic aquatic toxicity:** Not classified due to data which are conclusive although insufficient for Classification

### SECTION 13 — DISPOSAL CONSIDERATIONS

**Disposal Method:** Small amounts may be diluted with plenty of water and washed away. Dispose of larger amounts in accordance with Local Authority requirements. The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.

**Contaminated Packaging:** Follow all applicable local, state of federal regulations.

### SECTION 14 — TRANSPORT INFORMATION

**UN-Number**

**DOT, ADN, IMDG, IATA:** Not Regulated

**UN proper shipping name**

**DOT, ADN, IMDG, IATA:** Not Regulated

**Transport hazard class(es)**

SODA ASH
DOT, ADR, ADN, IMDG, IATA Class: Not Regulated

Packing group
DOT, IMDG, IATA: Not Regulated

Environmental hazards:
Marine pollutant: No

Special precautions for user Not applicable.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

UN "Model Regulation": -

SECTION 15 — REGULATORY INFORMATION

US Regulations

US TSCA Inventory Listed.
EPA SARA Title III Extremely Hazardous Substances Not listed
EPA SARA (313) Chemicals This product does not contain a toxic chemical for routine annual “Toxic Chemical Release Reporting” under Section 313 (40 CFR 372).
EPA CERCLA/Superfund Reportable Spill Quantity Not applicable
California Proposition 65 Not listed

Canadian Regulations

Canadian DSL Inventory Not Listed.

SECTION 16 — OTHER INFORMATION

Prepared 03/18/2015
Last Revision 09/1/2015

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