

1. PRODUCT AND COMPANY IDENTIFICATION

- 1.1 Product Name:** CSES-5000
1.2 Product Code:
1.3 CAS-NO.: Not Assigned
1.4 Relevant Identified Uses of the Product: Oil/Gas Well viscosity modifier
1.5 Details of the supplier of the safety data sheet:
ChemiSol LLC
11 Park Place
Mansfield, TX 76063
Telephone: (214)-449-7807
1.6 Emergency telephone number: Chemtrec (800) 424-9300

2. HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture:**
GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
Skin Corrosion/Irritation (Category 1B)
Serious Eye Damage/Eye Irritation (Category 1)
2.2 Hazards Summary: Alkaline; damaging to eyes and skin; spilled material is slippery
2.3 GHS Label elements, including precautionary statements

2.3.1 Pictogram



2.3.2 Signal Word: Danger

2.3.3 Hazard Statements

H315 Causes severe skin burns and eye damage

Precautionary Statements

- P260 Do not breathe dusts, mists or vapors.
P264 Wash exposed skin thoroughly after handling.
P280 Wear eye protection, face protection, protective clothing, protective gloves.
P301+P330+P331 If SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 If ON SKIN: Take off immediately all contaminated clothing.
Rinse skin with water/shower.
P304+P340 If INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 +P338 If in eyes: rinse cautiously with water for several minutes.
Remove contact lenses if present and easy to do. Continue rinsing.
P310 Immediately call a POISON Center or doctor/physician
P363 Wash contaminated clothing before reuse
P405 Store locked up

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2.3.4 Disposal

P501 Dispose of contents/containers to approved disposal site in accord with local, regional, or international regulations.

3. COMPOSITION INFORMATION ON INGREDIENTS

<u>Substances</u>	<u>CAS #</u>	<u>Weight %</u>
Water	7732-18-5	65-85%
Sodium Silicate	1344-09-8	15-20%
Sodium Hydroxide	1310-185-5	5-10%
2- Ethoxyethanol	110-80-5	<2%
Other Ingredients, proprietary, non-hazardous		<2%

4. FIRST AID MEASURES

Description of first aid measures

General Advice	Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of the dangerous area.
In case of skin contact	Take off contaminated clothing and shoes immediately. Wash with soap and plenty of water. Consult a physician if needed.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If inhaled	If breathed in, move person into fresh air and consult a physician.
If swallowed	Do not induce vomiting. Call a physician or Poison Control Center immediately.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Reacts with (some) metals releasing highly flammable gases/vapors (hydrogen) Thermal decomposition generates corrosive vapors.

5.3 Advice for firefighters

None

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up.

Soak up with inert absorbent material and dispose. Keep in suitable closed containers for disposal.

7. HANDLING AND STORAGE

7.1 Precautions for safe storage

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Keep only in the original container in a cool, well ventilated place away from incompatible materials such as strong acids and metals.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed and protect from excessive heat. Store between 5-30 °C. Incompatible materials include strong acids and metals.

7.3 Specific end use(s)

Oil/Gas Well service cleaner.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Sodium Hydroxide (1310-73-2)		
USA ACGIH	ACGIH Ceiling (mg/m ³)	2 mg/m ³
USA OSHA	OSHA PEL (TWA) (mg/m ³)	2 mg/m ³
2- Ethoxyethanol (110-80-5)		
USA ACGIH	ACGIH Ceiling (ppm)	5 ppm
USA OSHA	OSHA PEL (TWA) (mg/m ³)	740 mg/m ³

8.2 Exposure Controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Use personal protective equipment as outlined:

8.2.1 Eye/Face Protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

8.2.2 Skin Protection

Wear suitable protective clothing and gloves. Handle with plastic or rubber gloves. For example, EN374-3, level 6 breakthrough time (>480 min) Wear suitable overalls.

8.2.3 Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. Otherwise, respiratory protection is not normally required.

8.3 Control of environmental exposure

The primary hazard is the alkalinity. Avoid release into the environment.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state	liquid
Color	Light red

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Odor	None
pH	12.2-14
Evaporation rate	No data available
Melting (Freezing) Point	No data available
Boiling Point	100 °C
Flash Point	No data available
Auto-ignition temperature	No data available
Flammability	No data available
Density	1.09 g/mL at room temperature
Solubility	Soluble in water
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

9.2 Other Information

No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity

Reacts with (some) metals releasing highly flammable gases/vapors (hydrogen). Thermal decomposition generates corrosive vapors.

10.2 Chemical stability

Product stable under normal conditions.

10.3 Possibility of hazardous reactions

Can react violently in contact with strong oxidizers and acids.

10.4 Conditions to avoid

Incompatible materials, direct sunlight, extremely high or low temperatures.

10.5 Incompatible materials

Strong acids, metals, strong oxidizers

10.6 Hazardous decomposition products

Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes

11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects:

11.1 Acute toxicity	
11.1.1 Ingestion	Symptoms of acute toxicity are due to high alkalinity. Oral LD50 (rat) 3400 mg/kg based on sodium silicate
11.1.2 Inhalation	Mist is irritant to the respiratory tract. Symptoms of acute toxicity are due to high alkalinity. Inhalation LC50 (rat) >2.06 g/m ³
11.1.3 Skin Contact	Material will cause irritation. Dermal LD50 (rat) >5,000 mg/kg

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11.1.4 Eye Contact	Not known
11.1.5 Skin Corrosion/Irritation	Caustic burns/corrosion to skin
11.1.6 Serious Eye Damage/Irritation	Causes serious eye damage
11.1.7 Sensitization	Not known
11.1.8 Mutagenicity	Not known
11.1.9 Carcinogenicity	Not known
11.2 Reproductive Toxicity	
11.2.1 STOT- Single Exposure	Not known
11.2.2 STOT- Repeated Exposure	Not known
11.2.3 Aspiration Hazard	Not known

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT assessment

No data available.

12.6 Other adverse effects

The alkalinity of this material may have a local effect on ecosystems sensitive to changes in pH.

13. DISPOSAL CONSIDERATIONS

Waste disposal recommendations

Dispose of contents/containers in accordance with local/regional/national/international regulations.

14. TRANSPORT INFORMATION

14.1 UN Number Information

UN 3266, Corrosive liquid, basic, inorganic, n.o.s.

14.2 Proper Shipping Name

Not applicable

14.3 Transport Hazard Class(es)

Class 8 Corrosives

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14.4 Packing Group

Group III

14.5 Environmental Hazards

Not classified as a marine pollutant.

14.6 Special Precautions for user

Unsuitable containers: Aluminum

14.7 Transport by Sea

DOT Vessel Stowage Location: A- The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.

DOT Vessel Stowage Other: 52- Stow "separated from" acids

14.8 Transport by Air

DOT Quantity Limitations Passenger aircraft/rail: 5L

DOT Quantity Limitations Passenger Cargo: 60 L

15. REGULATORY INFORMATION

15.1 US Regulations:

U.S. SARA Reporting Requirements: The components of this product are not subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act.

U.S. SARA 311/312: Acute Health: Yes; Chronic Health: No; Fire: No; Reactivity: No

U.S. CERCLA Reportable Quantity: Sodium Hydroxide 1000 lb (final RQ)

U.S. TSCA Inventory Status: The components of this product are listed on the TSCA Inventory or are exempted from listing.

Other U.S. Federal Regulations: None known

California Safe Drinking Water and Toxic Enforcement Act (Proposition 66): This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: 2-Ethoxyethanol California prop. 65: This product contains the following ingredients for which the State of California has found to cause reproductive harm (female) which would require a warning under the statute: 2-Ethoxyethanol California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: 2-Ethoxyethanol Pennsylvania RTK: 2-Ethoxyethanol Massachusetts RTK: 2-Ethoxyethanol TSCA 8(b) inventory: 2-Ethoxyethanol SARA 313 toxic chemical notification and release reporting: 2-Ethoxyethanol CERCLA: Hazardous substances.: 2-Ethoxyethanol

16. OTHER INFORMATION

None