

SAFETY DATA SHEET

ALCHEK

Product Trade Name:**Revision Date:** 25-Mar-2015**Revision Number:** 14

1. Identification

1.1. Product Identifier

Product Trade Name: ALCHEK
Synonyms: None
Chemical Family: Organic acid
Internal ID Code HM000052

1.2 Recommended use and restrictions on use

Application: Scale Inhibitor
Uses Advised Against No information available

1.3 Manufacturer's Name and Contact Details

Manufacturer/Supplier Halliburton Energy Services
P.O. Box 1431
Duncan, Oklahoma 73536-0431
Emergency Telephone: (281) 575-5000

Prepared By Chemical Stewardship
Telephone: 1-580-251-4335
e-mail: fdunexchem@halliburton.com

1.4. Emergency telephone number

Emergency Telephone Number (281) 575-5000

2. Hazard(s) Identification

2.1 Classification in accordance with paragraph (d) of §1910.1200

Skin Corrosion / Irritation	Category 1 - H314
Serious Eye Damage / Eye Irritation	Category 1 - H318

2.2. Label Elements

Hazard Pictograms



Signal Word Danger

Hazard Statements H314 - Causes severe skin burns and eye damage
H318 - Causes serious eye damage

Precautionary Statements

Prevention	P264 - Wash face, hands and any exposed skin thoroughly after handling P280 - Wear protective gloves/protective clothing/eye protection/face protection P260 - Do not breathe dust/fume/gas/mist/vapors/spray P280 - Wear protective gloves/protective clothing P280 - Wear eye protection/face protection
Response	P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower 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 P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Storage	P405 - Store locked up
Disposal	P501 - Dispose of contents/container in accordance with local/regional/national/international regulations

Contains Substances
Hydroxyacetic acid

CAS Number
79-14-1

2.3 Hazards not otherwise classified

None known

3. Composition/information on Ingredients

Substances	CAS Number	PERCENT (w/w)	GHS Classification - US
Hydroxyacetic acid	79-14-1	60 - 100%	Acute Tox. 4 (H332) Skin Corr. 1B (H314) Eye Irrit. 2A (H319) Aquatic Acute 3 (H402)

The exact percentage (concentration) of the composition has been withheld as proprietary.

4. First-Aid Measures

4.1. Description of first aid measures

Inhalation	If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get medical attention.
Eyes	Immediately flush eyes with large amounts of water for at least 30 minutes. Seek prompt medical attention.
Skin	In case of contact, immediately flush skin with plenty of soap and water for at least 30 minutes and remove contaminated clothing, shoes and leather goods immediately. Get medical attention immediately.
Ingestion	Do NOT induce vomiting. Give nothing by mouth. Obtain immediate medical attention.

4.2 Most important symptoms/effects, acute and delayed

May cause skin burns. May cause eye burns. May cause respiratory irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Notes to Physician

Treat symptomatically.

5. Fire-fighting measures

5.1. Extinguishing media

Suitable Extinguishing Media

Water fog, carbon dioxide, foam, dry chemical.

Extinguishing media which must not be used for safety reasons

None known.

5.2 Specific hazards arising from the substance or mixture

Special Exposure Hazards

Reacts with metals to generate flammable hydrogen gas. Decomposition in fire may produce toxic gases.

5.3 Special protective equipment and precautions for fire-fighters

Special Protective Equipment for Fire-Fighters

Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use appropriate protective equipment. Avoid contact with skin, eyes and clothing. Avoid breathing vapors. Ensure adequate ventilation. Evacuate all persons from the area.

See Section 8 for additional information

6.2. Environmental precautions

Prevent from entering sewers, waterways, or low areas. Consult local authorities.

6.3. Methods and material for containment and cleaning up

Isolate spill and stop leak where safe. Contain spill with sand or other inert materials. Neutralize to pH of 6-8. Scoop up and remove.

7. Handling and storage

7.1. Precautions for Safe Handling

Handling Precautions

Avoid contact with eyes, skin, or clothing. Avoid breathing vapors. Ensure adequate ventilation. Wash hands after use. Launder contaminated clothing before reuse. Use appropriate protective equipment.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Information

Store away from alkalis. Store in a cool well ventilated area. Keep container closed when not in use. Product has a shelf life of 36 months.

8. Exposure Controls/Personal Protection

8.1 Occupational Exposure Limits

Substances	CAS Number	OSHA PEL-TWA	ACGIH TLV-TWA
Hydroxyacetic acid	79-14-1	Not applicable	3 ppm

8.2 Appropriate engineering controls

Engineering Controls	Use in a well ventilated area. Local exhaust ventilation should be used in areas without good cross ventilation.
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8.3 Individual protection measures, such as personal protective equipment

Respiratory Protection	Organic vapor/acid gas respirator.
Hand Protection	Impervious rubber gloves.
Skin Protection	Full protective chemical resistant clothing.
Eye Protection	Chemical goggles; also wear a face shield if splashing hazard exists.
Other Precautions	Eyewash fountains and safety showers must be easily accessible.

9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Physical State: Liquid	Color: Clear amber
Odor: Mild burnt sugar	Odor No information available
	Threshold:

<u>Property</u>	<u>Values</u>
<u>Remarks/ - Method</u>	
pH:	0.5
Freezing Point/Range	No information available.
Melting Point/Range	No data available
Boiling Point/Range	112 °C / 234 °F
Flash Point	No data available
Flammability (solid, gas)	No data available
upper flammability limit	No data available
lower flammability limit	No data available
Evaporation rate	No data available
Vapor Pressure	No data available
Vapor Density	No data available
Specific Gravity	1.25
Water Solubility	Miscible with water
Solubility in other solvents	No data available
Partition coefficient: n-octanol/water	0.0776
Autoignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available
Explosive Properties	No information available
Oxidizing Properties	No information available

9.2. Other information

Molecular Weight	76.05
VOC Content (%)	No data available

10. Stability and Reactivity

10.1. Reactivity

Not expected to be reactive.

10.2. Chemical Stability

Stable

10.3. Possibility of Hazardous Reactions

Will Not Occur

10.4. Conditions to Avoid

None anticipated

10.5. Incompatible Materials

Strong oxidizers. Strong alkalis. Sulfuric acid. Ammonium compounds. Amines. Isocyanates. Contact with metals.

10.6. Hazardous Decomposition Products

Flammable hydrogen gas. Carbon monoxide and carbon dioxide.

11. Toxicological Information

11.1 Information on likely routes of exposure

Principle Route of Exposure Eye or skin contact, inhalation.

11.2 Symptoms related to the physical, chemical and toxicological characteristics

Acute Toxicity

Inhalation

May cause respiratory irritation.

Eye Contact

Causes eye burns.

Skin Contact

Causes severe burns.

Ingestion

Causes burns of the mouth, throat and stomach. May cause abdominal pain, vomiting, nausea, and diarrhea.

Chronic Effects/Carcinogenicity Prolonged, excessive exposure may cause erosion of the teeth.

11.3 Toxicity data

Toxicology data for the components

Substances	CAS Number	LD50 Oral	LD50 Dermal	LC50 Inhalation
Hydroxyacetic acid	79-14-1	1950 mg/kg (Rat) >2000 mg/kg (Rat)	No data available	7.7 mg/L (Rat) 4h > 5.2 mg/L (Rat) 4h

Test species: Rat

Substances	CAS Number	Skin corrosion/irritation
Hydroxyacetic acid	79-14-1	Causes severe skin burns (similar substances)

Substances	CAS Number	Eye damage/irritation
Hydroxyacetic acid	79-14-1	Irritating to eyes. (Rabbit) (similar substances)

Substances	CAS Number	Skin Sensitization
Hydroxyacetic acid	79-14-1	Did not cause sensitization on laboratory animals (guinea pig) (similar substances)

Substances	CAS Number	Respiratory Sensitization
Hydroxyacetic acid	79-14-1	No data of sufficient quality are available.

Substances	CAS Number	Mutagenic Effects
Hydroxyacetic acid	79-14-1	In vitro tests did not show mutagenic effects In vivo tests did not show mutagenic effects. (similar substances)

Substances	CAS Number	Carcinogenic Effects
Hydroxyacetic acid	79-14-1	Not regarded as carcinogenic.

Substances	CAS Number	Reproductive toxicity
Hydroxyacetic acid	79-14-1	Adverse developmental effects were only observed at maternally toxic doses. (similar substances)

Substances	CAS Number	STOT - single exposure
Hydroxyacetic acid	79-14-1	Not applicable due to corrosivity of the substance.

Substances	CAS Number	STOT - repeated exposure
Hydroxyacetic acid	79-14-1	No significant toxicity observed in animal studies at concentration requiring classification.

Substances	CAS Number	Aspiration hazard
Hydroxyacetic acid	79-14-1	Not applicable

12. Ecological Information

12.1. Toxicity

Ecotoxicity Effects

Product Ecotoxicity Data

No data available

Substance Ecotoxicity Data

Substances	CAS Number	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Toxicity to Invertebrates
Hydroxyacetic acid	79-14-1	EC50 (72h) 22.5 mg/L (Pseudokirchnerella subcapitata) EC50 (72h) 190 mg/L (Skeletonema costatum)	LC50 (96h) > 5000 mg/L (Danio rerio) LC50 (96h) 164 mg/L (Pimephales promelas)	EC50 (3h) > 100 mg/L (activated sludge)	EC50 (48h) 141 mg/L (Daphnia magna) EC50(48h) 226 mg/L (Acartia tonsa)

12.2. Persistence and degradability

Readily biodegradable

Substances	CAS Number	Persistence and Degradability
Hydroxyacetic acid	79-14-1	(89.6% @ 7d)

12.3. Bioaccumulative potential

Substances	CAS Number	Log Pow
Hydroxyacetic acid	79-14-1	Log Kow < 1.4

12.4. Mobility in soil

No information available

12.5 Other adverse effects

No information available

13. Disposal Considerations

13.1. Waste treatment methods

Disposal Method

Disposal should be made in accordance with federal, state, and local regulations.

Contaminated Packaging

Follow all applicable national or local regulations.

14. Transport Information

US DOT

UN Number: UN3265
UN Proper Shipping Name: Corrosive Liquid, Acidic, Organic, N.O.S. (Contains Glycolic Acid)
Transport Hazard Class(es): 8
Packing Group: II
Environmental Hazards: Not applicable
NAERG: NAERG 153

US DOT Bulk**DOT (Bulk)** Not applicable**Canadian TDG**

UN Number: UN3265
UN Proper Shipping Name: Corrosive Liquid, Acidic, Organic, N.O.S. (Contains Glycolic Acid)
Transport Hazard Class(es): 8
Packing Group: II
Environmental Hazards: Not applicable

IMDG/IMO

UN Number: UN3265
UN Proper Shipping Name: Corrosive Liquid, Acidic, Organic, N.O.S. (Contains Glycolic Acid)
Transport Hazard Class(es): 8
Packing Group: II
Environmental Hazards: Not applicable
EMS: EmS F-A, S-B

IATA/ICAO

UN Number: UN3265
UN Proper Shipping Name: Corrosive Liquid, Acidic, Organic, N.O.S. (Contains Glycolic Acid)
Transport Hazard Class(es): 8
Packing Group: II
Environmental Hazards: Not applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable

Special Precautions for User: None

15. Regulatory Information**US Regulations**

US TSCA Inventory All components listed on inventory or are exempt.

EPA SARA Title III Extremely Hazardous Substances Not applicable

EPA SARA (311,312) Hazard Class Acute Health Hazard

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.

EPA RCRA Hazardous Waste Classification If product becomes a waste, it does meet the criteria of a hazardous waste as defined by the US EPA, because of:

Corrosivity D002

California Proposition 65 All components listed do not apply to the California Proposition 65 Regulation.

MA Right-to-Know Law Does not apply.

NJ Right-to-Know Law Does not apply.

PA Right-to-Know Law Does not apply.

Canadian Regulations

Canadian DSL Inventory All components listed on inventory or are exempt.

16. Other information

Preparation Information

Prepared By Chemical Stewardship
Telephone: 1-580-251-4335
e-mail: fdunexchem@halliburton.com

Revision Date: 25-Mar-2015

Reason for Revision Update to Format SECTION: 2

Additional information

For additional information on the use of this product, contact your local Halliburton representative.

For questions about the Safety Data Sheet for this or other Halliburton products, contact Chemical Stewardship at 1-580-251-4335.

Key or legend to abbreviations and acronyms

bw – body weight
CAS – Chemical Abstracts Service
EC50 – Effective Concentration 50%
ErC50 – Effective Concentration growth rate 50%
LC50 – Lethal Concentration 50%
LD50 – Lethal Dose 50%
LL50 – Lethal Loading 50%
mg/kg – milligram/kilogram
mg/L – milligram/liter
NIOSH – National Institute for Occupational Safety and Health
NTP – National Toxicology Program
OEL – Occupational Exposure Limit
PEL – Permissible Exposure Limit
ppm – parts per million
STEL – Short Term Exposure Limit
TWA – Time-Weighted Average
UN – United Nations
h - hour
mg/m³ - milligram/cubic meter
mm - millimeter
mmHg - millimeter mercury
w/w - weight/weight
d - day

Key literature references and sources for data

www.ChemADVISOR.com/

Disclaimer Statement

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End of Safety Data Sheet