HALLIBURTON

MATERIAL SAFETY DATA SHEET

Product Trade Name: BASO 4 LVENT

Revision Date: 23-Apr-2013 Revision Number: 10

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Trade Name: BASO 4 LVENT

Synonyms: None
Chemical Family: Blend
Internal ID Code HM000107

Product Use

Application: Scale Remover

Manufacturer's Name and Contact Details

Name and Address Halliburton Energy Services

645 - 7th Ave SW Suite 2200

Calgary, AB T2P 4G8 Canada

Emergency Telephone Number (281) 575-5000

Prepared By Chemical Compliance

Telephone: 1-580-251-4335

e-mail: fdunexchem@halliburton.com

2. HAZARD(S) IDENTIFICATION

WHIMIS Classification

WHMIS Hazard Class E Corrosive Material

D1B Toxic Materials D2A Very Toxic Materials

WHMIS Symbol(s)

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Summary of hazards of the product

Hazard Overview May cause eye, skin, and respiratory burns. May be harmful if swallowed.

1310-58-3

3. COMPOSITION/INFORMATION ON INGREDIENTS					
Substances	CAS Number	PERCENT (w/w)	HMIRC Registry Number	Filing Date	
Oxalic acid salt	Proprietary	5 - 10%			

4. FIRST AID MEASURES

Description of first aid measures

Potassium hydroxide

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.

0.1 - 1%

Eyes In case of contact, or suspected contact, immediately flush eyes with plenty of water

for at least 15 minutes and get medical attention immediately after flushing.

Skin In case of contact, immediately flush skin with plenty of soap and water for at least 15

minutes. Get medical attention. Remove contaminated clothing and launder before

reuse.

Ingestion Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek

medical attention. Never give anything by mouth to an unconscious person.

Most Important symptoms and effects, both acute and delayed

May cause eye, skin, and respiratory burns. May be harmful if swallowed.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically

5. FIRE FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media

Water fog, carbon dioxide, foam, dry chemical.

Extinguishing media which must not be used for safety reasons

None known.

Special hazards arising from the substance of mixture

Special Exposure Hazards

Use water spray to cool fire exposed surfaces. Closed containers may explode in fire. Decomposition in fire may produce toxic gases.

Advice for firefighters

Special Protective Equipment for Fire-Fighters

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

Hazardous combustion products

Oxides of nitrogen. Carbon monoxide and carbon dioxide.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions and emergency producedures

Protective Equipment

Use appropriate protective equipment. Wear self-contained breathing apparatus in enclosed areas.

Environmental Precautionary Measures

Prevent from entering sewers, waterways, or low areas.

Procedure for Cleaning / Absorption

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

Precautions for safe handling

Avoid contact with eyes, skin, or clothing. Avoid breathing vapors. Wash hands after use. Launder contaminated clothing before reuse.

Conditions for safe storage and Incompatible materials for storage

Store away from oxidizers. Store away from acids. Store in a cool well ventilated area. Keep from heat, sparks, and open flames. Keep container closed when not in use. Product has a shelf life of 24 months.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

- COMPANION - Expression - Entression - Entr					
Substances	CAS Number	ACGIH TLV-TWA	OSHA PEL-TWA		
Oxalic acid salt	Proprietary	Not applicable	Not applicable		
Potassium hydroxide	1310-58-3	2 mg/m ³	Not applicable		

Appropriate engineering controls

Engineering Controls Use in a well ventilated area.

Personal Protective Equipment (PPE)

Respiratory Protection Organic vapor respirator with a dust/mist filter. (A2P2/P3) **Hand Protection** Impervious rubber gloves. Nitrile gloves. Neoprene gloves.

Skin Protection Rubber apron.

Chemical goggles; also wear a face shield if splashing hazard exists. **Eye Protection Other Precautions** Eyewash fountains and safety showers must be easily accessible.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State: Liquid Color: Clear colorless to pale yellow Odor: Odorless Odor Threshold: No information available.

Property Values Remarks/ Method

12-13 (5%) pH:

pH Concentration of Solution: No information available. No information available

Melting Point/Range

Freezing Point/Range (C): Boiling Point/Range (C): No information available.

Flash Point/Range (C): 94 Flash Point Method:

TCC **Autoignition Temperature (C):** No information available. Flammability Limits in Air - Lower (%): No information available. No information available. Flammability Limits in Air - Upper (%): No information available. **Evaporation Rate (Butyl Acetate=1):**

Vapor Pressure @ 20 C (mmHg): 17.8 Vapor Density (Air=1): > 1

Specific Gravity @ 20 C (Water=1): 1.197 Solubility in Water (g/100ml): Soluble

9. PHYSICAL AND CHEMICAL PROPERTIES

Solubility in other solvents

Partition Coefficient/n-Octanol/Water:

Decomposition Temperature (C):

Viscosity

Explosive Properties

Oxidizing Properties

No information available
No information available
No information available
No information available

Other information

Molecular Weight (g/mole):No information available.VOC Content (%)No information available

10. STABILITY AND REACTIVITY

Conditions of Reactivity

Conditions to Avoid Keep away from heat, sparks and flame.

Hazardous Polymerization: Will Not Occur

Chemical Stability

Stable

Sensitivity to Static Discharge

Not available

Sensitivity to Mechanical Impact

Not available

Incompatible Materials

Strong oxidizers. Strong acids.

Hazardous Decomposition Products

Oxides of nitrogen. Carbon monoxide and carbon dioxide.

11. TOXICOLOGICAL INFORMATION

Routes of entry

Eye or skin contact, inhalation.

Information on Toxicological Effects

Acute effects from exposure

Inhalation Causes severe respiratory burns.

Eye Contact May cause eye burns. **Skin Contact** Causes severe burns.

Ingestion Causes burns of the mouth, throat and stomach. May be harmful if swallowed.

Chronic effects from exposure

Chronic Effects/Carcinogenicity

No data available to indicate product or components present at greater than 1% are chronic

health hazards.

Irritancy of product

Irritation Corrosive to eyes

Corrosive to skin

Sensitization of product

Sensitization Not confirmed to cause skin or respiratory sensitization.

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11. TOXICOLOGICAL INFORMATION

Mutagenicity

Mutagenic Effects Not regarded as mutagenic

Carcinogenicity

Carcinogenic Effects

No ingredient of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC, NTP, or OSHA.

Reproductive Toxicity

Reproductive Toxicity

This product does not contain any known or suspected reproductive hazards

Teratogenicity/embryotoxicity

Teratogenic Not a confirmed teratogen or embryotoxin.

Toxicologically synergistic material Not available

Acute Toxicity

Substances	LD50 Oral	LD50 Dermal	LC50 Inhalation
Oxalic acid salt	7500 mg/kg (Rat) >1000 mg/kg (Ruminants)	No data available	No data available
Potassium hydroxide	214 mg/kg (Rat)	No data available	No data available

12. ECOLOGICAL INFORMATION

Toxicity

Ecotoxicity Effects

Substances	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Oxalic acid salt	No information available	No information available	No information available	No information available
Potassium hydroxide	No information available	LC50: 80 mg/L (Gambusia	No information available	TLM96: 251,200 ppm
,		affinis)		(Mysidopsis bahia)

Persistence and degradability

No information available

Bioaccumulative potential

No information available

Mobility in soil

No information available

Results of PBT and vPvB assessment

No information available.

Other adverse effects

Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors

13. DISPOSAL CONSIDERATIONS

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

Canadian TDG

UN Number: UN3266

UN Proper Shipping Name: Corrosive Liquid, Basic, Inorganic, N.O.S.

Transport Hazard Class(es): , 8
Packing Group: , |||

EMS: EmS F-A, S-B

IATA/ICAO

UN Number: UN3266,

UN Proper Shipping Name: Corrosive Liquid, Basic, Inorganic, N.O.S.

Transport Hazard Class(es): , 8 Packing Group: , 8

IMDG/IMO

UN Number: UN3266,

UN Proper Shipping Name: Corrosive Liquid, Basic, Inorganic, N.O.S.

Transport Hazard Class(es): , 8 Packing Group: , III

EMS: EmS F-A, S-B

Special Precautions for User None

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

15. REGULATORY INFORMATION

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Canadian Regulations

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

WHMIS Hazard Class

E Corrosive Material
D1B Toxic Materials
D2A Veny Toxic Meters

D2A Very Toxic Materials

WHMIS Symbol(s)

US Regulations
US TSCA Inventory

All components listed on inventory or are exempt.

16. OTHER INFORMATION

Preparation Information

16. OTHER INFORMATION

Prepared By Chemical Compliance

Telephone: 1-580-251-4335

e-mail: fdunexchem@halliburton.com

Revision Date: 23-Apr-2013

The following sections have been revised since the last issue of this SDS

Not applicable Not applicable

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 Compliance at 1-580-251-4335.

Key or legend to abbreviations and acronyms

WHMIS: Workplace Hazardous Materials Information System

Key literature references and sources for data

www.ChemADVISOR.com/

Disclaimer Statement

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END OF MSDS