HALLIBURTON

MATERIAL SAFETY DATA SHEET

Product Trade Name: HALAD® 923

Revision Date: 04-Jan-2011

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: HALAD® 923

Synonyms: None Chemical Family: Blend

Application: Fluid Loss Additive

Manufacturer/Supplier Halliburton Energy Services

P.O. Box 1431

Duncan, Oklahoma 73536-0431

Emergency Telephone: (281) 575-5000

Prepared By Chemical Compliance

Telephone: 1-580-251-4335

e-mail: fdunexchem@halliburton.com

2. COMPOSITION/INFORMATION ON INGREDIENTS

Substances	CAS Number	PERCENT	ACGIH TLV-TWA	OSHA PEL-TWA
Sulfonated organic salt		30 - 60%	Not applicable	Not applicable
condensate				
Hydroxyethyl cellulose	9004-62-0	60 - 100%	10 mg/m ³	15 mg/m ³

3. HAZARDS IDENTIFICATION

Hazard Overview May cause allergic respiratory reaction. Airborne dust may be explosive. May cause

eye, skin, and respiratory irritation.

4. FIRST AID MEASURES

Inhalation If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation

develops or if breathing becomes difficult.

Skin Wash with soap and water. Get medical attention if irritation persists.

Eyes In case of contact, immediately flush eyes with plenty of water for at least 15 minutes

and get medical attention if irritation persists.

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.

Notes to Physician Not Applicable

FIRE FIGHTING MEASURES

Flash Point/Range (F): Not Determined Flash Point/Range (C): Not Determined **Flash Point Method:** Not Determined **Autoignition Temperature (F):** Not Determined **Autoignition Temperature (C):** Not Determined Flammability Limits in Air - Lower (%): Not Determined Flammability Limits in Air - Upper (%): Not Determined

Fire Extinguishing Media Water fog, carbon dioxide, foam, dry chemical.

Special Exposure Hazards Organic dust in the presence of an ignition source can be explosive in high

concentrations. Good housekeeping practices are required to minimize this

potential. Decomposition in fire may produce toxic gases.

Fire-Fighters

Special Protective Equipment for Full protective clothing and approved self-contained breathing apparatus required for

fire fighting personnel.

NFPA Ratings: Health 1, Flammability 0, Reactivity 0 Health 1, Flammability 0, Reactivity 0 **HMIS Ratings:**

ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures Use appropriate protective equipment. Avoid creating and breathing dust.

Environmental Precautionary

Measures

Prevent from entering sewers, waterways, or low areas.

Procedure for Cleaning /

Absorption

Scoop up and remove.

HANDLING AND STORAGE

Handling Precautions Slippery when wet. Avoid contact with eyes, skin, or clothing. Avoid creating or

inhaling dust.

Store away from oxidizers. Store in a cool, dry location. **Storage Information**

EXPOSURE CONTROLS/PERSONAL PROTECTION

Use in a well ventilated area. Localized ventilation should be used to control dust **Engineering Controls**

levels.

Respiratory Protection Dust/mist respirator. (95%)

Hand Protection Normal work gloves.

Normal work coveralls. **Skin Protection**

Wear safety glasses or goggles to protect against exposure. **Eye Protection**

Other Precautions None known.

PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid Color: Off white Odor: Odorless

PHYSICAL AND CHEMICAL PROPERTIES

pH: Not Determined

Specific Gravity @ 20 C (Water=1): 1.365

Density @ 20 C (lbs./gallon): Not Determined

30 Bulk Density @ 20 C (lbs/ft3):

Boiling Point/Range (F): Not Determined **Boiling Point/Range (C):** Not Determined Freezing Point/Range (F): Not Determined Freezing Point/Range (C): Not Determined Vapor Pressure @ 20 C (mmHg): Not Determined Vapor Density (Air=1): Not Determined **Percent Volatiles:** Not Determined **Evaporation Rate (Butyl Acetate=1):** Not Determined Solubility in Water (g/100ml): Partially soluble Solubility in Solvents (g/100ml): Not Determined Not Determined VOCs (lbs./gallon): Viscosity, Dynamic @ 20 C (centipoise): Not Determined Viscosity, Kinematic @ 20 C (centistrokes): Not Determined

Stable

Molecular Weight (g/mole):

10. STABILITY AND REACTIVITY

Partition Coefficient/n-Octanol/Water:

Will Not Occur **Hazardous Polymerization:**

Conditions to Avoid None anticipated

Incompatibility (Materials to

Avoid)

Stability Data:

Strong oxidizers.

Hazardous Decomposition

Products

Carbon monoxide and carbon dioxide.

Not Determined

Not Determined

Additional Guidelines Not Applicable

TOXICOLOGICAL INFORMATION 11.

Principle Route of Exposure Eye or skin contact, inhalation.

Inhalation May cause respiratory irritation. May cause allergic respiratory reaction.

Skin Contact May cause mild skin irritation.

Eve Contact May cause mild eye irritation.

Ingestion None known

Aggravated Medical Conditions None known.

No data available to indicate any components present at greater than 0.1% may **Chronic Effects/Carcinogenicity**

present a carcinogenic hazard.

Other Information None known.

Toxicity Tests

Not determined **Oral Toxicity: Dermal Toxicity:** Not determined Inhalation Toxicity: Not determined

Primary Irritation Effect: Not determined

Carcinogenicity Not determined

Genotoxicity: Not determined

Reproductive /

Developmental Toxicity:

Not determined

12. ECOLOGICAL INFORMATION

Mobility (Water/Soil/Air) Not determined

Persistence/Degradability Not determined

Bio-accumulation Not determined

Ecotoxicological Information

Acute Fish Toxicity: Not determined Acute Crustaceans Toxicity: Not determined Acute Algae Toxicity: Not determined

Chemical Fate Information Not determined

Other Information Not applicable

13. DISPOSAL CONSIDERATIONS

Disposal MethodBury in a licensed landfill according to federal, state, and local regulations.

Contaminated Packaging Follow all applicable national or local regulations.

14. TRANSPORT INFORMATION

Land Transportation

DOT

Not restricted

Canadian TDG

Not restricted

ADR

Not restricted

Air Transportation

ICAO/IATA

Not restricted

Sea Transportation

IMDG

Not restricted

Other Shipping Information

Labels: 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

None

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

California Proposition 65

Not applicable.

EPA RCRA Hazardous Waste

Classification

If product becomes a waste, it does NOT meet the criteria of a hazardous waste as

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

defined by the US EPA.

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MA Right-to-Know Law

NJ Right-to-Know Law

Does not apply.

PA Right-to-Know Law

Does not apply.

Canadian Regulations

Canadian DSL Inventory Product contains one or more components not listed on inventory.

WHMIS Hazard Class Un-Controlled

16. OTHER INFORMATION

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

Not applicable

Additional Information For additional information on the use of this product, contact your local Halliburton

representative.

For guestions about the Material Safety Data Sheet for this or other Halliburton

products, contact Chemical Compliance at 1-580-251-4335.

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or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of

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END OF MSDS