HALLIBURTON

MATERIAL SAFETY DATA SHEET

Product Trade Name: HALAD® 14 FS CEMENT ADDITIVE

Revision Date: 02-Jan-2013

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: HALAD® 14 FS CEMENT ADDITIVE

Synonyms: None

Chemical Family: Organic hydrocarbon 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

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2. COMPOSITION/INFORMATION ON INGREDIENTS

Substances	CAS Number	PERCENT	ACGIH TLV-TWA	OSHA PEL-TWA
Mineral oil		30 - 60%	5 mg/m ³	5 mg/m ³

3. HAZARDS IDENTIFICATION

Hazard Overview May cause eye, skin, and respiratory irritation. May cause headache, dizziness, and

other central nervous system effects. May be harmful if swallowed.

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 Get medical attention! If vomiting occurs, keep head lower than hips to prevent

aspiration.

Notes to Physician Not Applicable

FIRE FIGHTING MEASURES

Flash Point/Range (F): 255 Flash Point/Range (C): 123 **Flash Point Method: TCC**

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 Use water spray to cool fire exposed surfaces. Decomposition in fire may produce

toxic gases.

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

fire fighting personnel.

Fire-Fighters

Health 1, Flammability 1, Reactivity 0

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

ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures Use appropriate protective equipment.

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.

Scoop up and remove.

HANDLING AND STORAGE

Handling Precautions Avoid contact with eyes, skin, or clothing. Avoid breathing vapors.

Storage Information Store away from oxidizers. Store in a cool well ventilated area. Keep container

closed when not in use.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls Use in a well ventilated area. Local exhaust ventilation should be used in areas

without good cross ventilation.

Respiratory Protection Not normally needed. But if significant exposures are possible then the following

> respirator is recommended: Organic vapor respirator.

Hand Protection Impervious rubber gloves.

Skin Protection Rubber apron.

Eye Protection Chemical goggles; also wear a face shield if splashing hazard exists.

Other Precautions Eyewash fountains and safety showers must be easily accessible.

PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

9. PHYSICAL AND CHEMICAL PROPERTIES

Color: White

Odor: Mild kerosene PH: Not Determined

Specific Gravity @ 20 C (Water=1): 1.066

Density @ 20 C (lbs./gallon): 8.88

Bulk Density @ 20 C (lbs/ft3): Not Determined

Boiling Point/Range (F): 490 Boiling Point/Range (C): 254 Freezing Point/Range (F): 15 Freezing Point/Range (C): -9 Vapor Pressure @ 20 C (mmHg): 0.9 Vapor Density (Air=1): > 8 **Percent Volatiles:** 60 **Evaporation Rate (Butyl Acetate=1):** < 0.01 Solubility in Water (g/100ml): 40

Solubility in Solvents (g/100ml):

VOCs (lbs./gallon):

Viscosity, Dynamic @ 20 C (centipoise):

Viscosity, Kinematic @ 20 C (centistokes):

Partition Coefficient/n-Octanol/Water:

Molecular Weight (g/mole):

Not Determined

Not Determined

10. STABILITY AND REACTIVITY

Stability Data: Stable

Hazardous Polymerization: Will Not Occur

Conditions to Avoid None anticipated

Incompatibility (Materials to

Avoid)

Strong oxidizers.

Hazardous Decomposition

Products

Carbon monoxide and carbon dioxide.

Additional Guidelines Not Applicable

11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure Eye or skin contact, inhalation.

Inhalation May cause central nervous system depression including headache, dizziness,

drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and

unconsciousness.

Skin Contact May cause mild skin irritation. May cause an allergic skin reaction.

Eye Contact May cause eye irritation.

Ingestion Irritation of the mouth, throat, and stomach. Aspiration into the lungs may cause

chemical pneumonitis including coughing, difficulty breathing, wheezing, coughing up

blood and pneumonia, which can be fatal.

Aggravated Medical Conditions None known.

Chronic Effects/Carcinogenicity No data available to indicate product or components present at greater than 1% are

chronic health hazards.

Other Information None known.

Toxicity Tests

Oral Toxicity: Not determined

Dermal Toxicity: Not determined

Inhalation Toxicity: Not determined

Primary Irritation Effect: Not determined

Carcinogenicity Not determined

Genotoxicity: Not determined

Reproductive /

Not determined

Developmental Toxicity:

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 InformationNot determinedOther InformationNot applicable

13. DISPOSAL CONSIDERATIONS

Disposal MethodDisposal should be made in accordance with 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 Transportation 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

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 NOT meet the criteria of a hazardous waste as

defined by the US EPA.

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

MA Right-to-Know Law One or more components listed.

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.

WHMIS Hazard Class D2B Toxic Materials

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 questions about the Material Safety Data Sheet for this or other Halliburton

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

Disclaimer Statement

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END OF MSDS