HALLIBURTON

MATERIAL SAFETY DATA SHEET

Product Trade Name: ALPHA SPACER OIL SURFACTANT

Revision Date: 02-Jan-2013

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: ALPHA SPACER OIL SURFACTANT

Synonyms: None

Chemical Family: Ethoxylated nonylphenol

Application: Surfactant

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
Ethoxylated nonylphenol		60 - 100%	Not applicable	Not applicable

3. HAZARDS IDENTIFICATION

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

4. 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.

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.

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.

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): 200 Flash Point/Range (C): 93

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** 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.

Health 2, Flammability 1, Reactivity 0 **NFPA Ratings: HMIS Ratings:** Health 2, 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

Wear appropriate respirator when opening containers. Avoid contact with eyes, skin, **Handling Precautions**

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. Product has a shelf life of 12 months.

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 Organic vapor respirator.

Hand Protection Impervious rubber 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.

PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid Color: White

Odor: Mild aromatic

9. PHYSICAL AND CHEMICAL PROPERTIES

pH: 5-10 Specific Gravity @ 20 C (Water=1): 0.986 Density @ 20 C (lbs./gallon): 8.21

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

Boiling Point/Range (F): 392 Boiling Point/Range (C): 200

Freezing Point/Range (F):

Freezing Point/Range (C):

Vapor Pressure @ 20 C (mmHg):

Vapor Density (Air=1):

Percent Volatiles:

Evaporation Rate (Butyl Acetate=1):

Not Determined

Not Determined

Not Determined

Solubility in Water (g/100ml): Soluble

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

Acrid fumes. Carbon monoxide and carbon dioxide.

Additional Guidelines Not Applicable

11. TOXICOLOGICAL INFORMATION

Principle Route of Exposure Eye or skin contact, inhalation.

Inhalation May cause respiratory irritation. Coughing, chest pains, and breathing difficulty may

occur.

Skin Contact May cause moderate skin irritation. May cause a rash and itching of the skin.

Eye Contact Causes severe eye irritation which may damage tissue.

Ingestion Not determined

Aggravated Medical Conditions Skin disorders. Lung disorders.

Chronic Effects/Carcinogenicity May contain ethylene oxide in the headspace of the drum. Ethylene oxide is a

cancer and reproductive hazard.

Other Information None known.

Toxicity Tests

Oral Toxicity: Not determined

Dermal Toxicity: Not determined

ALPHA SPACER OIL SURFACTANT Page 3 of 6 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 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 contains toxic chemical(s) listed below which is(are) subject to the

reporting requirements of Section 313 of Title III of SARA and 40 CFR Part 372:

Ethoxylated Nonylphenol (9016-45-9)

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 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.

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

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

Disclaimer StatementThis information is furnished without warranty, expressed or implied, as to accuracy

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

the user.

END OF MSDS