HALLIBURTON

MATERIAL SAFETY DATA SHEET

Product Trade Name: DWFS COMPONENT B

Revision Date: 02-Jan-2013

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: DWFS COMPONENT B

Synonyms: None Chemical Family: Organic acid

Application: Organic acid Flow Enhancer

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
Acetic acid	64-19-7	30 - 60%	10 ppm	10 ppm
Silica gel	112926-00-8	30 - 60%	10 mg/m ³	80 mg/m ³ %SiO2

3. HAZARDS IDENTIFICATION

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

swallowed. Combustible.

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

5. FIRE FIGHTING MEASURES

Flash Point/Range (F): 120 Flash Point/Range (C): 48

Flash Point Method: Not Determined

Autoignition Temperature (F): 876
Autoignition Temperature (C): 468
Flammability Limits in Air - Lower (%): 4
Flammability Limits in Air - Upper (%): 19.9

Fire Extinguishing Media Carbon Dioxide, Dry Chemicals, Foam.

Special Exposure Hazards Decomposition in fire may produce toxic gases. Do not allow runoff to enter

waterways.

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

fire fighting personnel.

Fire-Fighters

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

6. 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

Contain spill with sand or other inert materials. Neutralize to pH of 6-8. Scoop up

and remove.

7. HANDLING AND STORAGE

Handling Precautions Avoid contact with eyes, skin, or clothing. Avoid creating or inhaling dust. Wash

hands after use. Launder contaminated clothing before reuse.

Storage Information Store away from alkalis. 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

Engineering Controls

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

without good cross ventilation.

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

Physical State: Solid Color: White

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Odor: Acrid

pH: Not Determined

Specific Gravity @ 20 C (Water=1): 1.62

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

Bulk Density @ 20 C (lbs/ft3): 32

Boiling Point/Range (F):

Boiling Point/Range (C):

Freezing Point/Range (F):

Freezing Point/Range (C):

Not Determined

Not Determined

Not Determined

Not Determined

Vapor Pressure @ 20 C (mmHg): 11.4

Vapor Density (Air=1): Not Determined

Percent Volatiles: 100

Evaporation Rate (Butyl Acetate=1): Not Determined

Solubility in Water (g/100ml): 50

Solubility in Solvents (g/100ml):

VOCs (lbs./gallon):

Viscosity, Dynamic @ 20 C (centipoise):

Viscosity, Kinematic @ 20 C (centistokes):

Not Determined

Not Determined

Partition Coefficient/n-Octanol/Water: -0.17

Molecular Weight (g/mole): Not Determined

10. STABILITY AND REACTIVITY

Stability Data: Stable

Hazardous Polymerization: Will Not Occur

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

Incompatibility (Materials to

Avoid)

Strong oxidizers. Strong alkalis. Aldehydes.

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 Causes severe respiratory irritation.

Skin Contact May cause skin burns.

Eye Contact May cause eye burns.

Ingestion Causes burns of the mouth, throat and stomach.

Aggravated Medical Conditions Skin disorders.

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

Other Information None known.

Toxicity Tests

Oral Toxicity: LD50: 3310 mg/kg (Rat)

Dermal Toxicity: Not determined

Not determined **Inhalation Toxicity:**

Primary Irritation Effect: Not determined

Carcinogenicity Not determined

Genotoxicity: Not determined

Reproductive /

Not determined **Developmental Toxicity:**

ECOLOGICAL INFORMATION

Mobility (Water/Soil/Air) Not determined

Persistence/Degradability Biodegradable

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

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.

TRANSPORT INFORMATION

Land Transportation

DOT

UN2789, Acetic Acid, Glacial, Mixture, 8, (3), II, (48.9 C) NAERG 132

Canadian TDG

Acetic Acid, Glacial, Mixture, 8, (3), UN2789, II, (48.9 C)

ADR

UN2789, Acetic Acid, Glacial, Mixture, 8, (3), II

Air Transportation

ICAO/IATA

UN2789, Acetic Acid, Glacial, Mixture, 8, (3), II

Sea Transportation

IMDG

UN2789, Acetic Acid, Glacial, Mixture, 8, (3), II, (48.9 C) EmS F-E, S-C

Other Transportation Information

Labels: Corrosive

Flammable Liquid

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

Fire 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

EPA Reportable Spill Quantity is 10000 Pounds based on Acetic acid (CAS: 64-19-

7).

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 Ignitability D001

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 One or more components listed.

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

Canadian Regulations

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

WHMIS Hazard Class

B3 Combustible Liquids

E Corrosive Material

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