HALLIBURTON

MATERIAL SAFETY DATA SHEET

Product Trade Name: ACETIC ACID 10%

Revision Date: 03-Jan-2013

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: ACETIC ACID 10%

Synonyms: None Chemical Family: Organic acid

Application: Organic acid

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	5-10%	10 ppm	10 ppm

3. HAZARDS IDENTIFICATION

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

Combustible.

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 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): Not Determined Flash Point/Range (C): Not Determined Flash Point Method: Not Determined

Autoignition Temperature (F): 800 **Autoignition Temperature (C):** 426 Flammability Limits in Air - Lower (%): 5.4 Flammability Limits in Air - Upper (%): 16

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

Special Exposure Hazards Decomposition in fire may produce toxic gases. Reaction with steel and certain other

metals generates flammable hydrogen gas.

Fire-Fighters

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

fire fighting personnel.

NFPA Ratings: Health 3, Flammability 2, Reactivity 0 **HMIS Ratings:** Health 3, Flammability 2, 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

Avoid contact with eyes, skin, or clothing. Avoid breathing vapors. Wash hands after **Handling Precautions**

use. Launder contaminated clothing before reuse.

Storage Information Store away from alkalis. Keep container closed when not in use. Store in a cool well

ventilated area.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls Use in a well ventilated area.

Respiratory Protection Organic vapor/acid gas respirator with a dust/mist filter.

Hand Protection Impervious rubber gloves.

Skin Protection Rubber apron.

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

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

PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid Color: Clear Odor: Vinegar pH: < 2

9. PHYSICAL AND CHEMICAL PROPERTIES

 Specific Gravity @ 20 C (Water=1):
 1.05

 Density @ 20 C (lbs./gallon):
 8.7465

Bulk Density @ 20 C (lbs/ft3):

Not Determined

Boiling Point/Range (F): 244
Boiling Point/Range (C): 117
Freezing Point/Range (F): 62
Freezing Point/Range (C): 16
Vapor Pressure @ 20 C (mmHg): 11.7

Vapor Density (Air=1): Not Determined

Percent Volatiles: 100

Evaporation Rate (Butyl Acetate=1): 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:

Not Determined

Not Determined

Molecular Weight (g/mole): 60.6

10. STABILITY AND REACTIVITY

Stability Data: Stable

Hazardous Polymerization: Will Not Occur

Conditions to Avoid None anticipated

Incompatibility (Materials to

Avoid)

Strong alkalis. 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 Causes severe respiratory irritation.

Skin Contact May cause severe skin irritation.

Eye Contact May cause severe eye irritation.

Ingestion Irritation of the mouth, throat, and stomach. May cause abdominal pain, vomiting,

nausea, and diarrhea.

Aggravated Medical Conditions Skin disorders.

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: LD50: 3310 mg/kg (Rat)

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 Readily 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

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

EPA Reportable Spill Quantity is 5716 Gallons 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

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 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