HALLIBURTON

# MATERIAL SAFETY DATA SHEET

**Product Trade Name:** **GULF WESTEROSE ACID BLEND**

**Revision Date:** 02-Jan-2013

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Trade Name:** GULF WESTEROSE ACID BLEND
**Synonyms:** None
**Chemical Family:** Acid
**Application:** 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 | 10 - 30% | 10 ppm | 10 ppm |
| Hydrochloric acid | 7647-01-0 | 5 - 10% | 2 ppm | 5 ppm |
| Isopropanol | 67-63-0 | 10 - 30% | 200 ppm | 400 ppm |

## 3. HAZARDS IDENTIFICATION

**Hazard Overview**
May cause eye and skin burns. May cause respiratory irritation. May cause headache, dizziness, and other central nervous system effects. May be harmful if swallowed. Repeated overexposure may cause liver and kidney effects. Flammable.

## 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):** | 53 |
| **Flash Point/Range (C):** | 11 |
| **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** May be ignited by heat, sparks or flames. Use water spray to cool fire exposed surfaces. Closed containers may explode in fire. Decomposition in fire may produce toxic gases. May form explosive mixtures with strong alkalis. Reaction with steel and certain other metals generates flammable hydrogen gas. Do not allow runoff to enter waterways.

**Special Protective Equipment for Fire-Fighters** Full protective clothing and approved self-contained breathing apparatus required for fire fighting personnel.

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

## 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** Isolate spill and stop leak where safe. Remove ignition sources and work with non-sparking tools. 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 breathing vapors. Wash hands after use. Launder contaminated clothing before reuse. Ground and bond containers when transferring from one container to another.

**Storage Information** Store away from alkalis. Store away from oxidizers. Store in a cool well ventilated area. Keep from heat, sparks, and open flames. Keep container closed when not in use.

## 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 with a dust/mist filter.

**Hand Protection** Impervious rubber gloves.

**Skin Protection** Rubber apron. Rubber boots.

**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:** | Liquid |
| **Color:** | Clear colorless |
| **Odor:** | Pungent acrid |
| **pH:** | 0.8 |
| **Specific Gravity @ 20 C (Water=1):** | 1.03 |
| **Density @ 20 C (lbs./gallon):** | 8.58 |
| **Bulk Density @ 20 C (lbs/ft3):** | Not Determined |
| **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):** | Miscible |
| **Solubility in Solvents (g/100ml):** | Not Determined |
| **VOCs (lbs./gallon):** | Not Determined |
| **Viscosity, Dynamic @ 20 C (centipoise):** | Not Determined |
| **Viscosity, Kinematic @ 20 C (centistokes):** | Not Determined |
| **Partition Coefficient/n-Octanol/Water:** | Not Determined |
| **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. |
| **Hazardous Decomposition Products** | Flammable hydrogen gas. Chlorine. Hydrogen sulfide. 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. May cause central nervous system depression including headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness. |
| **Skin Contact** | Causes severe burns. |
| **Eye Contact** | Causes severe eye irritation May cause eye burns. |
| **Ingestion** | Causes burns of the mouth, throat and stomach. May cause central nervous system depression including headache, dizziness, drowsiness, muscular weakness, incoordination, slowed reaction time, fatigue blurred vision, slurred speech, giddiness, tremors and convulsions. |
| **Aggravated Medical Conditions** | Skin disorders. Eye ailments. |

**Chronic Effects/Carcinogenicity** Repeated overexposure may cause liver and kidney effects.

**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 / 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 Method** Disposal 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**

UN2924,Flammable Liquid, Corrosive, N.O.S.(Contains Isopropanol, Hydrochloric Acid), 3, (8), II, (11.7 C)
NAERG 132

**Canadian TDG**
Flammable Liquid, Corrosive, N.O.S.(Contains Isopropanol, Hydrochloric Acid), 3, (8), UN2924, II, (11.7 C)

**ADR**

UN2924,Flammable Liquid, Corrosive, N.O.S.(Contains Isopropanol, Hydrochloric Acid), 3, (8), II

## Air Transportation

**ICAO/IATA**

UN2924,Flammable Liquid, Corrosive, N.O.S., 3, (8), II
(Contains Isopropanol, Hydrochloric Acid)

## Sea Transportation

**IMDG**

UN2924,Flammable Liquid, Corrosive, N.O.S.(Contains Isopropanol, Hydrochloric Acid), 3, (8), II, (11.7 C)
EmS F-E, S-C

## Other Transportation Information

**Labels:** Flammable Liquid
Corrosive

# 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<br>Chronic Health Hazard<br>Fire 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:<br>Isopropanol//67-63-0 |
| **EPA CERCLA/Superfund Reportable Spill Quantity** | EPA Reportable Spill Quantity is 5827 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:<br><br>Ignitability D001<br>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** Product contains one or more components not listed on the inventory.

**WHMIS Hazard Class**
E Corrosive Material
B2 Flammable Liquids
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.

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*****END OF MSDS*****