



## Material Safety Data Sheet

# I-7L

HEALTH	2
FLAMMABILITY	1
PHYSICAL HAZARD	0
PERSONAL PROTECTION	B

### 1. Product and Company Identification

<b>Material name</b>	<b>I-7L</b>
<b>Version #</b>	10
<b>Issue date</b>	October-10-2012
<b>Revision date</b>	December-12-2012
<b>Supersedes date</b>	October-10-2012
<b>CAS #</b>	Mixture
<b>Product use</b>	Iron Control Agent
<b>Manufacturer information</b>	Weatherford® International Ltd. 2000 St. James Place Houston, TX 77056 United States Email: <a href="mailto:productsafety.compliance@weatherford.com">productsafety.compliance@weatherford.com</a> Weatherford Information Line: 713-836-4000

<b>Supplier information</b>	Universal Well Services, Inc. 18360 Technology Drive Meadville, PA 16335 US
<b>Supplier emergency telephone number(s)</b>	CHEMTREC (800)424-9300/(703)527-3887

### 2. Hazards Identification

<b>Emergency overview</b>	WARNING  Irritating to eyes and skin. May cause irritation of respiratory tract. This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
<b>OSHA regulatory status</b>	This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).
<b>Potential health effects</b>	
<b>Routes of exposure</b>	Eye contact. Skin contact.
<b>Eyes</b>	Irritating to eyes. Avoid contact with eyes.
<b>Skin</b>	Irritating to skin. Avoid contact with the skin.
<b>Inhalation</b>	May cause irritation of respiratory tract. Avoid breathing dust/fume/gas/mist/vapors/spray.
<b>Ingestion</b>	Irritating to mouth, throat, and stomach. Do not ingest.
<b>Target organs</b>	Eyes. Skin. Respiratory system.
<b>Potential environmental effects</b>	Ecological injuries are not known or expected under normal use.





### 3. Composition / Information on Ingredients

Components	CAS #	Percent
Ethylene Glycol	107-21-1	10 - 20
Triethanolamine hydroxyacetate	68299-02-5	10 - 20
Glycolic Acid	79-14-1	1 - 2.5

### 4. First Aid Measures

#### First aid procedures

**Eye contact**

Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Get medical attention if irritation develops and persists.

**Skin contact**

Immediately flush skin with plenty of water. Remove and isolate contaminated clothing and shoes. Get medical attention if irritation develops and persists.

**Inhalation**

Move to fresh air. Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Get medical attention if symptoms occur.

**Ingestion**

Rinse mouth. Do not induce vomiting without advice from poison control center. Never give anything by mouth to a victim who is unconscious or is having convulsions. If ingestion of a large amount does occur, call a poison control center immediately.

**Notes to physician**

In case of shortness of breath, give oxygen. Keep victim warm.

**General advice**

In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). In case of shortness of breath, give oxygen. Keep victim warm. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### 5. Fire Fighting Measures

**Flammable properties**

Not flammable by OSHA criteria.

**Extinguishing media****Suitable extinguishing media**

Dry chemical, CO<sub>2</sub>, water spray or regular foam.

**Unsuitable extinguishing media**

Do not use a solid water stream as it may scatter and spread fire.

**Protection of firefighters****Protective equipment and precautions for firefighters**

Structural firefighters protective clothing will only provide limited protection.

**Fire fighting equipment/instructions**

Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. ALWAYS stay away from tanks engulfed in flame. Withdraw immediately in case of rising sound from venting safety devices or any discoloration of tanks due to fire. Move containers from fire area if you can do it without risk. Do not scatter spilled material with high pressure water streams. Use water spray to cool unopened containers. Cool containers with flooding quantities of water until well after fire is out.

**Specific methods**

Use water spray to cool unopened containers.





## 6. Accidental Release Measures

### Personal precautions

Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak. Keep out of low areas. Ventilate closed spaces before entering them.

### Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not contaminate water.

### Methods for containment

Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use water spray to reduce vapors or divert vapor cloud drift. Prevent entry into waterways, sewer, basements or confined areas. Should not be released into the environment.

### Methods for cleaning up

Should not be released into the environment.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills in original containers for re-use. For waste disposal, see section 13 of the MSDS.

### Other information

Clean up in accordance with all applicable regulations.

## 7. Handling and Storage

### Handling

Wear personal protective equipment. Use only with adequate ventilation. Wash thoroughly after handling. Avoid release to the environment.

### Storage

Keep containers tightly closed in a cool, well-ventilated place. Store in a closed container away from incompatible materials. Use care in handling/storage. Store in accordance with local/regional/national/international regulation.

## 8. Exposure Controls / Personal Protection

### Occupational exposure limits

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Ethylene Glycol (107-21-1)	Ceiling	100 mg/m <sup>3</sup>	Aerosol.

### Engineering controls

Ensure adequate ventilation, especially in confined areas.

### Personal protective equipment

#### Eye / face protection

Wear safety glasses with side shields (or goggles).

#### Skin protection

Wear protective gloves. Wear suitable protective clothing. Closed-toe shoes recommended.

#### Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. A NIOSH- approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits.

#### General hygiene considerations

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Keep away from food and drink. Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical & Chemical Properties

### Appearance

Liquid.



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<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid.
<b>Color</b>	Light yellow.
<b>Odor</b>	Ammoniacal.
<b>Odor threshold</b>	Not available.
<b>pH</b>	3.5 - 5
<b>Vapor pressure</b>	0.01 hPa estimated
<b>Vapor density</b>	Not available.
<b>Boiling point</b>	387.14 °F (197.3 °C) estimated
<b>Melting point/Freezing point</b>	8.6 °F (-13 °C) estimated
<b>Solubility (water)</b>	Complete.
<b>Specific gravity</b>	1.20 - 1.24
<b>Relative density</b>	Not available.
<b>Flash point</b>	> 201.00 °F (> 93.89 °C)
<b>Flammability limits in air, upper, % by volume</b>	Not available.
<b>Flammability limits in air, lower, % by volume</b>	Not available.
<b>Auto-ignition temperature</b>	748.00 °F (397.78 °C) estimated
<b>VOC</b>	10 % estimated
<b>Percent volatile</b>	49.59 % estimated
<b>Other data</b>	
<b>Density</b>	1210.00 kg/m <sup>3</sup> 10.10 lb/gal
<b>Flammability class</b>	Combustible IIIB estimated

## 10. Chemical Stability & Reactivity Information

<b>Chemical stability</b>	Stable at normal conditions.
<b>Conditions to avoid</b>	Heat, flames and sparks.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Not available.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.

## 11. Toxicological Information

### Toxicological data

Components	Species	Test Results
Ethylene Glycol (107-21-1)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	9530 mg/kg





Components	Species	Test Results
<i>Oral</i> LD50	Rat	5.89 g/kg
Glycolic Acid (79-14-1) <b>Acute</b> <i>Inhalation</i> LC50	Rat	7.7 mg/l/4h 7.7 mg/l, 4 Hours
<i>Oral</i> LD50	Guinea pig Rat	1920 mg/kg 1950 mg/kg
<i>Other</i> LD50	Cat Rat	1000 mg/kg 1000 mg/kg

**Sensitization** Not expected to be hazardous by OSHA criteria.  
**Chronic effects** Not expected to be hazardous by OSHA criteria.  
**Carcinogenicity** Not expected to be hazardous by OSHA criteria.

**ACGIH Carcinogens**

Ethylene Glycol (CAS 107-21-1) A4 Not classifiable as a human carcinogen.

**Skin corrosion/irritation** Not expected to be hazardous by OSHA criteria.  
**Neurological effects** Not expected to be hazardous by OSHA criteria.

**12. Ecological Information**

**Ecotoxicological data**

Components	Species	Test Results
Ethylene Glycol (107-21-1) <b>Aquatic</b> Fish	LC50 Fathead minnow ( <i>Pimephales promelas</i> )	8050 mg/l, 96 hours
Glycolic Acid (79-14-1) Fish	LC50 Fish	5000.0001 mg/L, 96 Hours

**Environmental effects** Ecological injuries are not known or expected under normal use. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

**Persistence and degradability** Not available.

**Bioaccumulation / Accumulation**

**Bioaccumulative potential**

**Octanol/water partition coefficient log Kow**

Glycolic Acid	-1.11
Ethylene Glycol	-1.36



**Partition coefficient**

Glycolic Acid	-1.11
Ethylene Glycol	-1.36

**Mobility in environmental media** This product is miscible in water.

**13. Disposal Considerations**

**Disposal instructions** Do not allow this material to drain into sewers/water supplies. This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.20-24). Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. Dispose in accordance with all applicable regulations.

**14. Transport Information****DOT**

Not regulated as dangerous goods.

**TDG**

Not regulated as dangerous goods.

**IATA**

Not regulated as dangerous goods.

**IMDG**

Not regulated as dangerous goods.

**15. Regulatory Information**

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.  
All components are on the U.S. EPA TSCA Inventory List.

**Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2))**

Not regulated.

**DEA Essential Chemical Code Number**

Not regulated.

**Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))**

Not regulated.

**DEA Exempt Chemical Mixtures Code Number**

Not regulated.

**US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration**

Ethylene Glycol (CAS 107-21-1) 1.0 %

**US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance**

Ethylene Glycol (CAS 107-21-1) Listed.

**CERCLA (Superfund) reportable quantity**

Ethylene Glycol: 5000.0000



**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**  
Immediate Hazard - Yes  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

**Section 302 extremely hazardous substance** No

**Section 311 hazardous chemical** No

**Inventory status**

<b>Country(s) or region</b>	<b>Inventory name</b>	<b>On inventory (yes/no)*</b>
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

**State regulations**

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

**US - New Jersey RTK - Substances: Listed substance**

Ethylene Glycol (CAS 107-21-1) Listed.

**US - Pennsylvania RTK - Hazardous Substances: Listed substance**

Ethylene Glycol (CAS 107-21-1) Listed.

**16. Other Information****HMIS® ratings**

Health: 2  
Flammability: 1  
Physical hazard: 0  
Personal protection: B

**NFPA ratings**

Health: 2  
Flammability: 1  
Instability: 0





**Disclaimer**

THIS PRODUCT'S HEALTH AND SAFETY INFORMATION IS PROVIDED TO ASSIST OUR CUSTOMERS IN ASSESSING COMPLIANCE WITH HEALTH, SAFETY AND ENVIRONMENTAL REGULATIONS. THE INFORMATION CONTAINED HEREIN IS BASED ON DATA AVAILABLE TO US, AND IS BELIEVED TO BE ACCURATE, ALTHOUGH NO GUARANTEE OR WARRANTY IS PROVIDED OR IMPLIED BY THE COMPANY IN THIS RESPECT. SINCE THE USE OF THIS PRODUCT IS WITHIN THE EXCLUSIVE CONTROL OF THE USER, IT IS THE USER'S RESPONSIBILITY TO DETERMINE THE CONDITIONS OF SAFE USE. SUCH CONDITIONS MUST COMPLY WITH ALL GOVERNMENTAL REGULATIONS.

**This data sheet contains changes from the previous version in section(s):**

Product and Company Identification: Alternate Trade Names  
Accidental Release Measures: Methods for containment

