

Material Safety Data Sheet

WFR-55LA (W)

HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	

1. Product and Company Identification

Material name	WFR-55LA (W)
Patent Number	Not available
Revision date	April-13-2011
Version No.	1
CAS #	Mixture
Product use	Friction Reducer
Supplier information	Weatherford Fracturing Technologies 515 Post Oak Blvd Suite 1000 Houston, TX 77027 US

2. Hazards Identification

Emergency overview	CAUTION Spills produce extremely slippery surfaces. Avoid prolonged contact with eyes, skin and clothing. May cause irritation with prolonged contact.
OSHA regulatory status	This product is considered not hazardous under 29 CFR 1910.1200 (Hazard Communication).
Potential health effects	
Eyes	Avoid contact with eyes. May cause eye irritation.
Skin	Avoid contact with the skin. May cause irritation with prolonged contact.
Inhalation	Avoid breathing vapors or mists of this product. May cause irritation of respiratory tract.
Ingestion	Do not ingest. May be irritating to mouth, throat, and stomach.
Potential environmental effects	Ecological injuries are not known or expected under normal use.

3. Composition / Information on Ingredients

The manufacturer lists no ingredients as hazardous according to OSHA 29 CFR 1910.1200.

4. First Aid Measures

First aid procedures	
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops or persists.
Inhalation	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention immediately.

Ingestion

If swallowed, seek medical advice immediately and show this container or label. Do not induce vomiting without medical advice.

General advice

If you feel unwell, seek medical advice (show the label where possible).

5. Fire Fighting Measures

Flammable properties

Not a fire hazard. The product is not flammable.

Extinguishing media

Suitable extinguishing media

Dry chemical, CO₂, water spray or regular foam.

Protection of firefighters

Protective equipment and precautions for firefighters

Use water spray to cool unopened containers. Cool containers with flooding quantities of water until well after fire is out.

6. Accidental Release Measures

Personal precautions

Contaminated surfaces will be extremely slippery. Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained.

Environmental precautions

Prevent further leakage or spillage if safe to do so.

Methods for containment

Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible.

Methods for cleaning up

Large Spills: Dike far ahead of liquid spill for later disposal. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. After removal flush contaminated area thoroughly with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean contaminated surface thoroughly.

Never return spills in original containers for re-use.

Other information

Clean up in accordance with all applicable regulations.

7. Handling and Storage

Handling

Use this product with adequate ventilation. Avoid contact with skin, eyes and clothing. Avoid prolonged exposure. Avoid release to the environment.

Storage

Store away from heat. Keep from freezing. Store in a closed container away from incompatible materials.

8. Exposure Controls / Personal Protection

Engineering controls

Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye / face protection

Wear safety glasses with side shields.

Skin protection

Wear appropriate chemical resistant clothing. Wear appropriate chemical resistant gloves.

Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.



9. Physical & Chemical Properties

Appearance	Liquid.
Color	Milky.
Odor	Aliphatic.
Odor threshold	Not available
Physical state	Liquid.
Form	Viscous liquid.
pH	7 @ 5g/l
Melting point	Not available
Freezing point	Not available
Boiling point	Not available
Flash point	Does not flash
Evaporation rate	Not available
Flammability	Not available.
Flammability limits in air, upper, % by volume	Not available
Flammability limits in air, lower, % by volume	Not available
Vapor pressure	Not available
Vapor density	Not available
Specific gravity	1.05
Relative density	Not available
Solubility (water)	Not available
Partition coefficient (n-octanol/water)	Not available
Auto-ignition temperature	Does not ignite
Decomposition temperature	Not available
Viscosity	1200 cps

10. Chemical Stability & Reactivity Information

Chemical stability	Stable at normal conditions.
Conditions to avoid	Avoid temperature extremes. Do not freeze.
Incompatible materials	Oxidizing agents.
Hazardous decomposition products	Carbon oxides. Nitrogen oxides (NOx).
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information

Acute effects	Acute LD50: > 5000 mg/kg, Rat, Oral
Neurological effects	Not expected to be hazardous by OSHA criteria.



12. Ecological Information

Ecotoxicity	LC50 > 100 mg/l (OECD 203), Danio rerio, 96.00 Hours, IC50 > 100 mg/l (OECD 201), Scenedesmus subspicatus, 72.00 Hours, EC50 > 100 mg/l (OECD 202), Daphnia magna, 48.00 Hours,
Environmental effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Persistence and degradability	Not readily biodegradable.

13. Disposal Considerations

Disposal instructions	Dispose of contents/container in accordance with local/regional/national/international regulations. 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.
Contaminated packaging	Triple rinse containers. Dispose in accordance with local, state and federal regulations.

14. Transport Information

Department of Transportation (DOT) Requirements

Not regulated as hazardous goods.

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Not regulated as dangerous goods.

Canadian Transportation of Dangerous Goods (TDG) Requirements

Not regulated as dangerous goods.

IMDG

Not regulated as hazardous goods.

IMDG

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

15. Regulatory Information

US federal regulations	This product is not known to be 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.
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CERCLA/SARA Hazardous Substances - Not applicable.

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical No

CERCLA (Superfund) reportable quantity

None



Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - No
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

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of New and Existing Chemicals (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)

16. Other Information

HMIS® ratings

Health: 1
Flammability: 0
Physical hazard: 0

NFPA ratings

Health: 1
Flammability: 0
Instability: 0

Prepared by

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Disclaimer

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