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Material Safety Data Sheet

FRA 409

HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	

1. Product and Company Identification

Material name FRA 409
Version # 01
Issue date January-19-2015
CAS # Mixture
Product use Friction Reducer
Manufacturer information Weatherford®
 2000 St. James Place
 Houston, TX 77056
 United States
 Email: productsafety.compliance@weatherford.com
 Weatherford Information Line: 713-836-4000
 Chemtrec 800-424-9300

Supplier information Weatherford®
 2000 St. James Place
 Houston, TX 77056 US

Supplier emergency telephone number(s) CHEMTREC INT'L +1 703-527-3887

2. Hazards Identification

Emergency overview May cause irritation with prolonged contact. This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. Spills produce extremely slippery surfaces.

OSHA regulatory status This product is considered not hazardous under 29 CFR 1910.1200 (Hazard Communication).

Potential health effects

Routes of exposure Not applicable. Eye contact. Skin contact.
Eyes May cause irritation with prolonged contact.
Skin May cause irritation with prolonged contact. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
Inhalation Prolonged or excessive inhalation may cause respiratory tract irritation.
Ingestion Ingestion of large amounts may produce gastrointestinal disturbances including irritation, nausea, and diarrhea. May cause dizziness, incoordination, headache, nausea, and vomiting.

3. Composition / Information on Ingredients

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



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4. First Aid Measures

First aid procedures

Eye contact

Flush eyes immediately with large amounts of water. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Skin contact

Immediately flush skin with plenty of water. Remove contaminated clothing, including shoes, after flushing has begun. Get medical attention if irritation develops and persists.

Inhalation

Call a POISON CENTER or doctor/physician if you feel unwell. If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed.

Ingestion

Get medical advice/attention if you feel unwell. If ingestion of a large amount does occur, call a poison control center immediately. Never give anything by mouth to a victim who is unconscious or is having convulsions. Do not induce vomiting without medical advice. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

General advice

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. If you feel unwell, seek medical advice (show the label where possible). Show this safety data sheet to the doctor in attendance.

5. Fire Fighting Measures

Flammable properties

The product is not flammable.

Extinguishing media

Suitable extinguishing media

Water fog. Carbon dioxide (CO₂). Alcohol resistant foam. Dry chemical powder.

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

Protection of firefighters

Specific hazards arising from the chemical

No unusual fire or explosion hazards noted.

Protective equipment and precautions for firefighters

Firefighters should wear full protective gear. Evacuate area and fight fire from a safe distance.

Fire fighting equipment/instructions

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. In the event of fire and/or explosion do not breathe fumes. Cool containers with flooding quantities of water until well after fire is out. ALWAYS stay away from tanks engulfed in flame. Move containers from fire area if you can do so without risk.

Hazardous combustion products

May include oxides of carbon. May include oxides of nitrogen. May include oxides of sulphur.

6. Accidental Release Measures

Personal precautions

Spills produce extremely slippery surfaces. 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. Ensure adequate ventilation. 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 leak if you can do so without risk. Prevent entry into waterways, sewer, basements or confined areas. Should not be released into the environment.



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Methods for cleaning up Extinguish all flames in the vicinity.

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. Clean contaminated surface thoroughly.

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 Avoid heat, sparks, open flames and other ignition sources. When using, do not eat, drink or smoke. Do not use in areas without adequate ventilation. Wash thoroughly after handling. Wear personal protective equipment. Avoid release to the environment. Do not empty into drains. Do not breathe mist or vapor. Do not get this material in contact with eyes. Do not taste or swallow. Do not get on skin and clothing.

Storage Keep away from heat and sources of ignition. Store in a closed container away from incompatible materials. Keep away from food and drink. Store in a well-ventilated place. Keep container tightly closed. Store in accordance with local/regional/national/international regulation.

8. Exposure Controls / Personal Protection

Occupational exposure limits No exposure limits noted for ingredient(s).

Biological limit values No biological exposure limits noted for the ingredient(s).

Engineering controls Ensure adequate ventilation, especially in confined areas. Eye wash fountain and emergency showers are recommended.

Personal protective equipment

Eye / face protection Avoid contact with eyes. Wear safety glasses with side shields (or goggles) and a face shield.

Skin protection Avoid contact with the skin. Wear protective gloves. Wear suitable protective clothing. Normal work clothing (long sleeved shirts and long pants) is recommended. Closed-toe shoes recommended. The suitability for a specific workplace should be discussed with the producers of the protective gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other.

Respiratory protection If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Use a positive-pressure air-supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection.

Hand protection Wear protective gloves. The suitability for a specific workplace should be discussed with the producers of the protective gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other.

General hygiene considerations Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice. When using, do not eat, drink or smoke.

9. Physical & Chemical Properties

Appearance Opaque liquid.



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Physical state	Liquid.
Form	Liquid. Inverse emulsion
Color	White.
Odor	Slight oil odor.
Odor threshold	Not available.
pH	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Boiling point	> 212 °F (> 100 °C)
Melting point/Freezing point	-16.78 °F (-27.1 °C)
Solubility (water)	Very soluble
Specific gravity	1.01 - 1.04
Relative density	Not available.
Flash point	> 200.0 °F (> 93.3 °C)
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Auto-ignition temperature	Not available.
Other data	
Density	8.42 - 8.68 lb/gal

10. Chemical Stability & Reactivity Information

Chemical stability	Material is stable under normal conditions.
Conditions to avoid	Heat, flames and sparks. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Irritants. Toxic gas. May include oxides of carbon. May include oxides of nitrogen. May include oxides of sulphur.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information

Sensitization	Not expected to be hazardous by OSHA criteria.
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)	
Not listed.	
Skin corrosion/irritation	May cause irritation with prolonged contact.
Mutagenicity	Not expected to be hazardous by OSHA criteria.
Reproductive effects	Not expected to be hazardous by OSHA criteria.
Teratogenicity	Not expected to be hazardous by OSHA criteria.



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12. Ecological Information

Ecotoxicity	Not available.
Environmental effects	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Aquatic toxicity	Not available.
Persistence and degradability	Not available.
Mobility in environmental media	This product is miscible in water.

13. Disposal Considerations

Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the material under controlled conditions in an approved incinerator. Do not allow this material to drain into sewers/water supplies. Dispose in accordance with all applicable regulations. It is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets the criteria for hazardous waste.
Waste from residues / unused products	Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.
Contaminated packaging	Empty containers should be sent to an approved waste handling site for recycling or disposal.

14. Transport Information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

TDG

Not regulated as dangerous goods.

IMDG

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.

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.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA (Superfund) reportable quantity, lbs

None



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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

Not listed.

International Inventories

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 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)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

US state regulations California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

US. Massachusetts RTK - Substance List

Not regulated.

US. New Jersey Worker and Community Right-to-Know Act

Not listed.

US. Pennsylvania Worker and Community Right-to-Know Law

Not listed.

US. Rhode Island RTK

Not regulated.

16. Other Information

Further information HMIS® is a registered trade and service mark of the NPCA.

HMIS® ratings
Health: 1
Flammability: 0
Physical hazard: 0

NFPA ratings
Health: 1
Flammability: 0
Instability: 0



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