

*HC-FR 3000*  
*Low/Mid Brine Friction Reducer*

**SECTION 1. Identification**

Product Code: *HC-FR 3000*

Product Name: Friction Reducer

Supplier: Houston Chemical, Inc. PH: (281)955-0041  
PO Box 1183 FAX: (281)955-7210  
Cypress, TX 77410

Emergency Phone: (800)424-9300

**SECTION 2. Hazard(s) Identification**

**Emergency Overview:** Solutions extremely slippery when spilled.

**Skin:** Causes skin irritation.

**Eyes:** May cause eye irritation.

**SECTION 3. Composition/Information on Ingredients**

**Chemical characterization**

Anionic water-soluble polymer in emulsion.

**Hazardous or Regulated Components:**

None

**SECTION 4. First-Aid Measures**



FIRST AID - EYE CONTACT: Rinse thoroughly with plenty of water. Get medical attention if irritation develops and persists.

FIRST AID - SKIN CONTACT: Wash off immediately with soap and plenty of water. Get medical attention if irritation develops and persists.

FIRST AID - INHALATION: Move to fresh air immediately. No hazards which require special first aid measures.

FIRST AID - INGESTION: Do not induce vomiting. Rinse mouth with water. Obtain medical attention immediately.

**SECTION 5. Fire-Fighting Measures**

**Suitable extinguishing media**

Water spray, Carbon dioxide (CO<sub>2</sub>), Dry powder. Water. Foam.

**Precautions:**

Spills produce extremely slippery surfaces.

**Special protective equipment for firefighters.**

No special protective equipment required.

**Flash Point:**

Does not flash.

Autoignition temperature:

Does not ignite.

**SECTION 6. Accidental Release Measures**

**Personal precautions:** No special precautions required. Wear adequate personal protective equipment (see Section 8 Exposure Controls/ Personal Protection). Keep people away from spill/leak.

**Environmental precautions:** As with all chemical products, do not flush into surface water.

**Methods for Cleaning up:** DO NOT FLUSH WITH WATER. Dam up. Soak up with inert absorbent material. If liquid has been spilt in large quantities clean up promptly by scoop or vacuum. Keep in suitable and closed containers for disposal. After cleaning, flush away traces with water.

## SECTION 7. Handling and Storage

### Handling

Avoid contact with skin and eyes. When preparing the working solution ensure there is adequate ventilation. When using do no smoke.

### Storage

Keep in a dry cool place (0-30C). Keep away from heat and sources of ignition. Freezing will affect the physical condition and may damage the material.

## SECTION 8. Exposure Controls/Personal Protection

**Engineering measures:** Use local exhaust if misting occurs. Natural ventilation is adequate in absence of mists.

### Personal protective equipment:

**Respiratory protection:** Not Required; except in case of aerosol formation.

**Hand Protection:** PVC or other plastic material gloves.

**Eye Protection:** Safety glasses with side-shields. Do not wear contact lenses where this product is used.

**Skin and body protection:** Chemical resistant apron or protective suit if splashing or repeated contact with solution is likely.

**Hygiene measures:** Wash hands before breaks and at the end of workday. When using do not eat, drink or smoke. Handle in accordance with good industrial hygiene and safety practice.



**RESPIRATORY PROTECTION:** A NIOSH/MSHA 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.



**SKIN PROTECTION:** Wear impervious gloves to prevent contact with the skin. Wear long sleeves when contact is likely to occur. Wear protective gear as needed - apron, suit, boots.



**EYE PROTECTION:** Use chemical splash goggles and face shield (ANSI Z87.1 or approved equivalent).



**OTHER PROTECTIVE EQUIPMENT:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.



**HYGENIC PRACTICES:** Do not eat, drink, or smoke in areas where this material is used. Avoid breathing vapors. Remove contaminated clothing and wash before reuse. Wash thoroughly after handling. Wash hands before eating.

## SECTION 9. Physical and Chemical Properties

### General Information (Appearance, Odor)

**Physical State**

Viscous liquid

**Color**

Milky

**Odor**

Aliphatic

pH: 6-8 @ 5 g/l

**Specific Gravity:** 1.05

**Melting point/range (C):** Not Applicable

**Flash Point (C):** Does not flash

**Autoignition Temperature (C):** Does not ignite

**Vapor Pressure (mm Hg):** 0,002 @ 20C

**Bulk Viscosity (cps):** 1200

**Water Solubility:** See Technical Bulletin

**Kinematic Viscosity @ 40C (mm<sup>2</sup>/s):** >>20.5

## SECTION 10. Stability and Reactivity

### Conditions to avoid:

Stable. Hazardous polymerisation does not occur.

### Materials to avoid:

Oxidizing agents may cause exothermic reactions.

**Hazardous decomposition products:** Thermal decomposition may produce: Hydrogen chloride gas, nitrogen oxides (NO<sub>x</sub>), Carbon Oxides (CO<sub>x</sub>).

## SECTION 11. Toxicological Information



### Information on Toxicological Effects

#### Acute toxicity:

**Oral:** LD50/ oral/ rat > 5000 mg/kg

**Dermal:** LD50/ dermal/ rat > 5000 mg/kg.

**Inhalation:** The product is not expected to be toxic by inhalation.

#### Irritation:

**Skin:** Slightly irritating.

**Eyes:** May cause slight eye irritation.

**Sensitization:** Not sensitizing.

**Chronic Toxicity:** No chronic effects.

## SECTION 12. Ecological Information

**Aquatic Toxicity:**

**Toxicity to fish:** LC50 / Danio rerio (Zebra Fish)/ 96 hours > 100 mg/L (OECD 203)

**Toxicity to Daphnia:** EC50 / Daphnia magna (Water Flea)/ 48 hours > 100 mg/ L (OECD 202)

**Toxicity to Algae:** EC50 / Scenedesmus subspicatus (Green Algae)/ 72 Hours > 100 mg/L (OECD 201)

**Environmental Fate:**

**Persistence and degradability:** Not readily biodegradable.

**Hydrolysis:** Does not hydrolyse.

**SECTION 13. Disposal Considerations**

For more guidance and information contact our Waste Services Division at (262) 658-4000.

Always dispose of any waste in accordance with all local, state, and federal regulations.

**Product**

EPA Hazardous Waste - NO

**Contaminated packaging**

Rinse empty containers with water and use the rinse water to prepare the working solution. Can be landfilled or incinerated, when in compliance with local, state and federal regulations.

**DISPOSAL METHOD:** Dispose of waste in accordance with all local, state and federal regulations.

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:** Wear appropriate personal protective equipment. (See Exposure Controls / Personal Protection Section.) Eliminate all ignition sources. Prevent additional discharge of material if able to do so safely. Do not touch or walk through spilled material. Avoid runoff into storm sewers and ditches which lead to waterways. Ventilate spill area. Stay upwind of spill. A vapor suppressing foam may be used to reduce vapors. If leak or spill has not ignited, use water spray to disperse the vapors. Collect spilled materials for disposal. Use only non-combustible material for clean-up. Use clean, non-sparking tools to collect absorbed materials. Remove from surface by skimming or with suitable absorbents. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Recover by pumping (use an explosion proof or hand pump).

**SECTION 14. Transport Information**

**DOT:** Not classified as dangerous in the meaning of DOT regulations.

**IMDG/IMO:** Not classified as dangerous in the meaning of IMO/IMDG regulations.

**ICAO/LATA:** Not classified as dangerous in the meaning of ICAO/LATA regulations

**SECTION 15. Regulatory Information**

**US SARA Reporting Requirements:** None.

**SARA (Section 311/312) Hazard Class:** Not concerned.

**RCRA status:** Not RCRA hazardous

**California Proposition 65 Information:** WARNING! This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm, Acrylamide.

**USA (TSCA):** All components of this product are either listed on the inventory or are exempt from listing.

**Canada (DSL):** All components of this product are either listed on the inventory or are exempted from listing.

## SECTION 16. Other Information

### **HMIS Rating**

Health: 1

Flammability: 1

Reactivity: 0

### **NFPA Rating**

Health: 1

Fire: 1

Reactivity: 0

Special:

### **MSDS preparatory statement**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

This MSDS is prepared according to the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the ANSI MSDS Standard (Z400.1) by Kemira.









