HC-FR 7000

Freshwater Friction Reducer

Rev. Date: 4/11/2014

1. IDENTIFICATION

Product Name	*HC-FR 7000*
Product Use	Friction Reducer
Supplier	Houston Chemical PO Box 1183 - Cypress, TX 77410
Contact Numbers	281-955-0041
E-mail Contact for SDS	info@houstonchem.com (customer service)
Emergency Telephone Number	CHEMTREC: 800-424-9300

2. HAZARDS IDENTIFICATION

Hazard Classification

Acute Toxicity Inhalation 3
STOT-RE, 2 (liver, kidneys)
Eye Irritant, 2B

Precautionary Statements

DANGER! Toxic if inhaled. Causes eye irritation. May cause damage to liver and kidneys with prolonged or repeated exposure.

Do not breathe vapor, mist or spray. Wear eye and face protection. Use only outdoors or in well ventilated areas.

If inhaled remove person to fresh air and keep comfortable for breathing. Call poison control center or a physician. If in eyes rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. If eye irritation persists seek medical attention. Seek medical attention if you feel unwell.

Store in a well ventilated place. Keep container tightly closed.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Description Mixture

Component	CAS No.	Conc. (%)
Glycol Ether	*	*
Anionic polymer	*	*
Ethoxylated alcohol	*	*
Aliphatic hydrocarbons	*	*

(*) Our company is withholding the specific chemical composition under provision of the OSHA Hazard Communication Rule Trade Secrets. The specific composition will be made available to health professionals in accordance with 29 CFR 1910.1200(i)(1-4).

4. FIRST AID MEASURES

Inhalation	If inhaled remove person to fresh air and keep comfortable for breathing. Call poison control center or a physician.
Skin	Remove contaminated clothing. Immediately wash off with mild detergent for at least 15 minutes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Obtain medical attention if pain or irritation persists.
Eye	If in eyes rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. If eye irritation persists seek medical attention.
Ingestion	Do not induce vomiting unless directed to do so my medical personnel. Obtain immediate medical attention.

5. FIRE FIGHTING MEASURES

Extinguishing media	CO_2, Foam, Water Fog
Unsuitable extinguishing media	None.
Fire fighting procedures	Do not enter any enclosed or confined fire space without proper protective equipment including self contained breathing apparatus and full bunker gear.
Combustion products	Carbon dioxide, nitrogen oxide, carbon monoxide.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	No action shall be taken involving any personal risk or without suitable training. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate.
Personal Protection	Wear protective clothing specified for normal operations (see section 8).
Environmental Protection	Prevent contamination of soil and water. Prevent from spreading or entering into drains or watercourses by using sand, earth, or other appropriate barriers.
Clean up methods - small spillage	Absorb or contain liquid with absorbent material and placed into labelled containers for appropriate disposal. Do not flush area with water. Product may cause a slip hazard if mixed with water. If slipperiness remains apply more dry-sweeping compound.
Clean up methods - large spillage	Stop leak if without risk. Move containers from spill area. Absorb or contain liquid with absorbent material and placed into labelled containers for appropriate disposal. Product may cause a slip hazard if mixed with water. If slipperiness remains apply more dry-sweeping compound. Dispose of via a licensed waste disposal contractor.

7. HANDLING AND STORAGE

Handling

Do not breathe vapor, mist or spray. Wear eye and face protection. Use only outdoors or in well ventilated areas. It is recommended that the entire contents of the container be agitated prior to use. Provide good ventilation of working area (local exhaust ventilation if necessary).

Storage

Avoid storing at elevated temperatures. Keep from freezing. Store at 5-27 °C (41-80.6 °F) to maintain product integrity.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits		**TWA (8 hours)**			**STEL (15 min)**			**Ceiling**			
Components:	**List name**	**ppm**	**mg/m3**	**Other**	**ppm**	**mg/m3**	**Other**	**ppm**	**mg/m3**	**Other**	**Notes**
Petroleum Distillate (anionic polymer)	US ACGIH	-	-	-	-	-	-	-	-	-	-
	OSHA PEL	500	1200	-	-	-	-	-	-	-	-

Engineering Control Measures

Where the material is not used in a closed system, good enclosure and local exhaust ventilation should be provided to control exposure.

Respiratory Protection

Where exposures are below the established exposure limit, no respiratory protection is required. Where exposures exceed the established exposure limit, use respiratory protection recommended for the material and level of exposure.

Hand Protection

Chemical resistant gloves.

Eye Protection

Chemical splash goggles (chemical monogoggles). Wear face-shield in addition when transferring material.

Body Protection

Use protective clothing, which is chemical resistant to this material. Safety shoes or boots should be chemical resistant.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance & Physical state White liquid

Odor Slight petroleum oil

Odor Threshold Not available

pH-value 6-8 upon dilution in water

Melting/Freezing Point	<20 °F
Initial Boiling Point Range	Not determined
Flash Point	Closed cup: >200 °F
Evaporation Rate	<1 (butyl acetate = 1)
Flammability	Not applicable
Upper/Lower Explosion Limits	Not available
Vapor Pressure	Not determined
Vapor Density	>1 (air – 1) similar to water
Relative density	0.92 - 0.96 (68 °F)
Density	Not determined
Solubility	Dispersible in water
Partial coefficient (n-octanol/water)	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity	Not available

10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions of use.
Conditions To Avoid	Avoid temperatures over 32.2 °C, 90 °F.
Incompatible Materials	Strong oxidizers, bases and acids, copper alloys.
Thermal Decomposition Products	Oxides of carbon, hydrocarbons, acrid vapors and fumes.

11. TOXICOLOGICAL INFORMATION

Basis for assessment	Information given is based on the toxicology of the product.
Skin irritation:	Not expected to be a primary skin irritant. Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis. Symptoms may include redness, edema, drying and cracking of the skin.
Eye irritation	Mild irritation.
Acute toxicity - Dermal	Petroleum Distillates – LD50 (rabbit) >3.16 g/kg
Acute toxicity - Inhalation	ND.
Acute toxicity - Oral	Petroleum Distillates – Acute LD50 (rat) >5 g/kg
Repeated dose toxicity	ND.
Mutagenicity	ND.
Developmental toxicity	ND.

12. ECOLOGICAL INFORMATION

Basis for Assessment	Ecotoxicological data have not been determined specifically for this product.
Mobility	ND
Persistence/degradability	ND
Bioaccumulation	ND
Freshwater Fish Toxicity	ND
Freshwater Invertebrates Toxicity	ND
Acute toxicity - algae	ND
Acute toxicity - bacteria	ND

13. DISPOSAL CONSIDERATIONS

Waste disposal	Avoid disposal into wastewater treatment facilities. Treatment, storage, transportation and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations.

Container disposal	Drain container and rinse thoroughly. Puncture container to avoid reuse. Dispose to licensed disposal contractor.
Local Legislation	The recommendations given are considered appropriate for safe disposal. However, local regulations may be more stringent and these must be complied with.

14. TRANSPORT INFORMATION

DOT Classification Not a DOT regulated material.

15. REGULATORY INFORMATION

INTERNATIONAL REGISTRATION:

TSCA (USA)	All components listed or exempted.
SARA 311/312	**MSDS distribution - chemical inventory - hazard identification:** Immediate (acute) health hazard

16. OTHER INFORMATION

HEALTH HAZARD: 1

FIRE HAZARD: 1

REACTIVITY: 0

Prepared by:	Audris King
Revisions:	3/26/2014: Section 9, density updated.
	4/11/2014: Updated to reflect GHS classification and format.

The information is based on the data of which we are aware and is believed to be correct as of the data hereof. Since the information contained herein may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modification of the information, we do not assume any responsibility for the result of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.