



Material Safety Data Sheet

Issue Date: 04-DEC-2007
Supersedes: 04-DEC-2007

RE-FLOW

1 Identification

Identification of substance or preparation
RE-FLOW

Product Application Area
Multifunctional diesel fuel additive

Company/Undertaking Identification
GE Water & Process Technologies Canada
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Oakville, Ontario, L6M 4B2
T 905-465-3030

Emergency Telephone
(800) 877-1940

Prepared by Product Stewardship Group: T 215-355-3300 Prepared on: 04-DEC-2007

2 Hazard(s) identification

EMERGENCY OVERVIEW

May cause moderate irritation to the skin. May cause dermatitis.
May be absorbed. Severe irritant to the eyes. Vapors, gases, mists
or aerosols may cause irritation to the upper respiratory tract.
Prolonged exposure may cause dizziness and headache.

Odor: Slight Hydrocarbon; Appearance: Yellow, Liquid

Fire fighters should wear positive pressure self-contained breathing
apparatus(full face-piece type). Proper fire-extinguishing media:
dry chemical, carbon dioxide, or foam--Water spray should be used
only to cool fire-exposed containers and disperse vapors.

POTENTIAL HEALTH EFFECTS

ACUTE SKIN EFFECTS:

Primary route of exposure; May cause moderate irritation to the
skin. May cause dermatitis. May be absorbed.

ACUTE EYE EFFECTS:

Severe irritant to the eyes.

ACUTE RESPIRATORY EFFECTS:

Primary route of exposure;Vapors, gases, mists or aerosols may cause irritation to the upper respiratory tract. Prolonged exposure may cause dizziness and headache.

INGESTION EFFECTS:

May cause gastrointestinal irritation with possible nausea, vomiting, headache, dizziness, unconsciousness and injury to the kidneys and liver. Small amounts aspirated during ingestion/vomiting may cause lung injury, possibly death.

TARGET ORGANS:

Prolonged or repeated exposure may increase the risk of cancer and/or cause toxicity to the liver, kidney, nervous system and reproductive system, CNS depression and/or defatting-type dermatitis.

MEDICAL CONDITIONS AGGRAVATED:

Not known.

SYMPTOMS OF EXPOSURE:

Excessive dermal exposure causes defatting and drying of skin. Excessive inhalation of vapors causes dizziness, headache and nausea.

3 Composition / information on ingredients

Information for specific product ingredients as required by the WHMIS Regulations is listed. Refer to additional sections of this MSDS for our assessment of the potential hazards of this formulation.

HAZARDOUS INGREDIENTS:

Cas#	Chemical Name	Range (w/w%)
91-20-3	NAPHTHALENE Irritant; absorbed by skin; sensitizer; possible human carcinogen (IARC=2B; NTP=anticipated); toxic to liver, kidney, and blood; causes nasal tumors in rats ORAL LD50-RAT: 2,200 MG/KG DERMAL LD50-RABBIT: > 2,000 MG/KG INHL. LC50-RAT: > 340 MG/M3/HR	1-5
100-41-4	ETHYLBENZENE Flammable liquid; Irritant (eyes, skin, and respiratory); possible human carcinogen (IARC=2B; NTP=anticipated);potential nervous system toxin ORAL LD50-RAT: 3,500 MG/KG DERMAL LD50-RABBIT: 15,400 MG/KG INHL. LC50: NO DATA.	0.1-1.0
67-63-0	ISOPROPYL ALCOHOL Flammable liquid; chronic overexposure may cause liver and kidney toxicity ORAL LD50-RAT: 5,045 MG/KG DERMAL LD50-RABBIT: 12,800 MG/KG INHL. LC50-RAT 12,000 PPM/8HR	40-70
64742-94-5	SOLVENT NAPHTHA, PETROLEUM, HEAVY AROMATIC	15-40

	Combustible liquid; irritant (eyes) ORAL LD50-RAT: 3,200 MG/KG DERMAL LD50-RABBIT: 1,800 MG/KG INHL. LC50-RAT: > 580 PPM/4HR	
64742-95-6	LIGHT AROMATIC NAPHTHA Combustible; irritant ORAL LD50-RAT: >5,600 MG/KG DERMAL LD50-RAT: >4,000 MG/KG INHL. LC50-RAT: >10,200 MG/M3/4HR	10-20
95-63-6	1,2,4-TRIMETHYLBENZENE Flammable; irritant (respiratory); CNS depressant ORAL LD50-RAT: 5,000 MG/KG DERMAL LD50: NO DATA. INHL. LC50-RAT: 18 GM/M3/4HR	7-13

4 First-aid measures

SKIN CONTACT:

Wash thoroughly with soap and water. Remove contaminated clothing. Thoroughly wash clothing before reuse. Get medical attention if irritation develops or persists.

EYE CONTACT:

Remove contact lenses. Hold eyelids apart. Immediately flush eyes with plenty of low-pressure water for at least 15 minutes. Get immediate medical attention.

INHALATION:

Remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. Get immediate medical attention.

INGESTION:

Do not feed anything by mouth to an unconscious or convulsive victim. Do not induce vomiting. Immediately contact physician. Dilute contents of stomach using 2-8 fluid ounces (60-240 mL) of milk or water.

NOTES TO PHYSICIANS:

This product contains a hydrocarbon solvent. Aspiration into the lungs will result in chemical pneumonia and may be fatal.

5 Fire-fighting measures

FIRE FIGHTING INSTRUCTIONS:

Fire fighters should wear positive pressure self-contained breathing apparatus (full face-piece type).

EXTINGUISHING MEDIA:

dry chemical, carbon dioxide, or foam--Water spray should be used only to cool fire-exposed containers and disperse vapors.

HAZARDOUS DECOMPOSITION PRODUCTS:

oxides of carbon and nitrogen

FLASH POINT:

~ 60F ~ 16C P-M(CC)

6 Accidental release measures

PROTECTION AND SPILL CONTAINMENT:

Ventilate area. Use specified protective equipment. Contain and absorb on absorbent material. Place in waste disposal container. Remove ignition sources. Flush area with water. Spread sand/grit.

DISPOSAL INSTRUCTIONS:

The waste characteristics of the absorbed material, or any contaminated soil, should be determined in accordance with provincial regulations. Water contaminated with this product may be sent to a sanitary sewer treatment facility, in accordance with any local agreement or discharged under provincial regulations. Incinerate or land dispose in an approved landfill.

7 Handling and storage

HANDLING:

Flammable. Store in explosive proof area where electrical equipment meets NFPA code.

STORAGE:

Keep containers closed when not in use. Keep away from flames or sparks. Bond containers during filling or discharge when performed at temperatures at or above the product flash point.

8 Exposure controls / personal protection

EXPOSURE LIMITS

Consult local authorities for acceptable provincial values.

CHEMICAL NAME

NAPHTHALENE

PEL (OSHA): 10 PPM
TLV (ACGIH): 10 PPM

ETHYLBENZENE

PEL (OSHA): 100 PPM(125PPM-STEL)
TLV (ACGIH): 100 PPM(125PPM-STEL)

ISOPROPYL ALCOHOL

PEL (OSHA): 400 PPM(500PPM-STEL)
TLV (ACGIH): 200 PPM(400PPM-STEL)

SOLVENT NAPHTHA, PETROLEUM, HEAVY AROMATIC

PEL (OSHA): NOT DETERMINED
TLV (ACGIH): NOT DETERMINED
MISC: Note- manufacturer's recommended exposure limit: 100 ppm.

LIGHT AROMATIC NAPHTHA

PEL (OSHA): NOT DETERMINED
TLV (ACGIH): NOT DETERMINED
MISC: Note- manufacturer's recommended exposure limit: 100 ppm.

1,2,4-TRIMETHYLBENZENE

PEL (OSHA): NOT DETERMINED
TLV (ACGIH): 25 PPM(TRIMETHYLBENZENE MIXED ISOMERS)

8) EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

ENGINEERING CONTROLS:

Adequate ventilation to maintain air contaminants below exposure limits.

RESPIRATORY PROTECTION:

If air-purifying respirator use is appropriate, use organic vapor cartridges and any of the following particulate respirators: R95, R99, R100, P95, P99 or P100.

SKIN PROTECTION:

nitrile gloves-- Wash off after each use. Replace as necessary.

EYE PROTECTION:

splash proof chemical goggles

9 Physical and chemical properties

Density	6.7 lbs/ga	Vapor Pressure (mmHG)	< 5.0
Freeze Point (F)	< -32	Vapor Density (air=1)	> 1.00
Freeze Point (C)	< -36		
Viscosity(cps 70F,21C)	7	% Solubility (water)	< 0.0
Odor	Slight Hydrocarbon		
Appearance	Yellow		
Physical State	Liquid		
Flash Point	P-M(CC)	~ 60F	~ 15C
pH :	No Data		
Evaporation Rate (Ether=1)	< 1.00		
Percent VOC:	98.0		

NA = not applicable ND = not determined

10 Stability and reactivity

STABILITY:

Stable under normal storage conditions.

HAZARDOUS POLYMERIZATION:

Will not occur.

INCOMPATIBILITIES:

May react with strong oxidizers.

DECOMPOSITION PRODUCTS:

oxides of carbon and nitrogen

INTERNAL PUMPOUT/CLEANOUT CATEGORIES:

"B"

11 Toxicological information

No Data Available.

12 Ecological information

AQUATIC TOXICOLOGY

No Data Available.

BIODEGRADATION

No Data Available.

13 Disposal considerations

Incinerate or bury in approved landfill. Please be advised that there may be additional local or provincial requirements relating to the disposal of waste. Consult provincial and local regulations regarding the proper disposal of this material.

14 Transport information

Transportation of Dangerous Goods:

FLAMMABLE LIQUID, N.O.S. (AROMATIC
SOLVENT, ISOPROPANOL)
3, UN 1993, PG II

DOT EMERGENCY RESPONSE GUIDE #: 128

15 Regulatory information

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

CEPA:

All components of this product comply with substance notification requirements under CEPA.

WHMIS CLASSIFICATION:

B2 D2A D2B

16 Other information

NFPA/HMIS		CODE TRANSLATION
Health	2	Moderate Hazard
Fire	3	Serious Hazard
Reactivity	0	Minimal Hazard
Special	NONE	No special Hazard
(1) Protective Equipment	B	Goggles, Gloves

(1) refer to section 8 of MSDS for additional protective equipment recommendations.

CHANGE LOG

	EFFECTIVE DATE	REVISIONS TO SECTION:	SUPERCEDES
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MSDS status:	31-JAN-2005		** NEW **
	22-JUL-2005	2, 3, 5, 8, 9, 15	31-JAN-2005
	23-SEP-2005	3, 9	22-JUL-2005
	04-DEC-2007	4, 5, 8, 10	23-SEP-2005