KP-EG Heat Transfer Fluid

Safety Data Sheet

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Revision date: 03/15/2015 Supersedes: 05/01/2012 Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name : KP-EG Heat Transfer Fluid

Product form : Mixture

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Heat Transfer Fluid

1.3. Details of the supplier of the safety data sheet

Kriss Premium Products, Inc.
3400 East 42nd Street
Minneapolis, MN 55406

1.4. Emergency telephone number

Emergency number : INFORMATION: 612-722-8485
CHEMTREC: (800) 424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US) : Acute toxicity, Oral (Category 4), H302
Eye Irritation (Category 2B)

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :

GHS07

Signal word (GHS-US) : **Warning**

Hazard statements (GHS-US) : H302 – Harmful if swallowed
H320 – Causes eye irritation

Precautionary statements (GHS-US) : P264 - Wash skin and clothing thoroughly after handling
P270 – Do not eat, drink, or smoke when using this product.
P301+P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P330 – Rinse Mouth.
P337+P313 – If eye irritation persists: Get medical advice/attention.
P501 – Dispose of contents/container to an approved waste disposal plant.

2.3. Potential Health Effects

Eyes	May cause eye irritation.
Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Ingestion	May be harmful if swallowed.

SECTION 3: Composition/information on ingredients

3.1. Substance : Not applicable

3.2. Mixture

Name	Product identifier	%
Ethylene Glycol	CAS 107-21-1	15 - 100
Inhibitor Solution (trade secret)	n/a	0 - 10
Dye (may be with or without)	n/a	< 1

** Chemicals listed are only those ingredients which are not trade secrets, are classified as health hazards and are present above their concentration limits.*

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : No special measures required

First-aid measures after inhalation : IF INHALED: Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately.

First-aid measures after skin contact : IF ON SKIN: Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Seek medical attention if necessary.

First-aid measures after eye contact : IF IN EYES: Rinse with plenty of water for at least 15 minutes and seek medical attention if necessary.

First-aid measures after ingestion : IF INGESTED: Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If conscious, rinse mouth with water and consult a physician.

4.2. Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see Section 2.2)and in Section 11.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Product is not flammable. Use water, fog, foam, carbon dioxide or dry chemical on fires involving this product. Use appropriate media for adjacent fire. Cool unopened containers with water.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Closed containers may rupture or explode due to steam pressure build-up when exposed to extreme heat. Water may be used to cool closed containers. May emit toxic fumes (oxides of carbon) under fire conditions. (See also Stability and Reactivity section).

5.3. Special protective equipment and precautions for firefighters

Protection during firefighting : Do not release runoff from fire control methods to sewers or waterways. Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face piece operated in pressure-demand or positive-pressure mode. Full protective equipment including self-contained breathing apparatus should be used during a fire. During emergency conditions, overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Seek medical attention.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures	See section 8 for recommendations on the use of personal protective equipment.
Environmental precautions	Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements.
Methods and materials for containment and cleaning up	Absorb spill with noncombustible absorbent material, then place in a suitable container for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations.

SECTION 7: Handling and storage

7.2. Precautions for safe handling : See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use. Avoid formation of aerosols.

7.3. Conditions for safe storage, including any incompatibilities

: Store in cool, dry well ventilated area. Store only in containers that are resistant to alkaline solutions. Keep away from incompatible materials (see section 10 for incompatibilities).

SECTION 8: Exposure controls/personal protection

8.1. Control and exposure limits recommended by the chemical manufacturer

USA OSHA, Table Z-1, Limits for Air Contaminants – 1910.1000: 50 ppm, 125 mg/m^3 (ethylene glycol, C value)

USA ACGIH, Threshold Limit Values (TLV): 100 mg/m^3 (ethylene glycol, C value)

Eye and upper respiratory tract irritation, not classifiable as a human carcinogen.

8.2. Appropriate engineering controls : Use with adequate ventilation to minimize exposure to mists or sprays of this product. Prudent practice is to ensure eyewash/safety shower stations are available near areas where this product is used. Monitoring of oxygen level is recommended.

8.2. Exposure controls

Personal protective equipment : The type of protective equipment must be selected according to the amount and concentration of the substance in the workplace.

Hand protection : Wear butyl rubber, natural rubber, neoprene, Nitrile rubber or other suitable gloves for routine industrial use.

Eye protection : Chemical goggles or safety glasses with side shields.

Skin and body protection : Wear suitable protective clothing. Wear long sleeves.

Respiratory protection : None needed for normal circumstances of use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: Clear, or may be dyed (pink, blue, green)
Odor	: Odorless.
Odor Threshold	: No data available
pH	: 9.0 – 10.5
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: No data available
Freezing point	: -16.7°C (2°F), for >99% concentration
Boiling point	: >100 °C (212 °F)
Flash point	: None for concentrations <80%
Self ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Vapor density at 20 °C	: > 2.0 (air=1)
Specific Gravity	: 1.0 – 1.1 at 20°C (70°F)
Solubility	: Complete solubility in water.
Log Pow	: No data available
Log Kow	: No data available
Viscosity	: >1.0 cP at 25 °C (77 °F)
Explosive properties	: Product does not present an explosion hazard.
Oxidizing properties	: No data available
Explosive limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity : No data available.

10.2. Chemical stability : Stable under ordinary conditions of use and storage.

10.3. Possibility of hazardous reactions : Stable under ordinary conditions of use and storage.

10.4. Conditions to avoid : Contact with incompatible chemicals and exposure to extremely high temperatures

10.5. Incompatible materials: : Strong oxidizers, stron acids, acid chlorides, acid anhydrides, chloroformates, or strong reducing agents.

10.6. Hazardous decomposition products : Mainly carbon dioxide and carbon monoxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

For ethylene glycol :

LD50 oral, rat : 4,700 mg/kg

LD50 dermal, rabbit : 10,626 mg/kg

Skin corrosion/irritation : No data available

Serious eye damage/eye irritation : Eyes – rabbit. Result : milde eye irritation, 24h

Irritancy of product : This product may cause irritation to contaminated tissues.

Reproductive toxicity : This product is not reported to produce mutagenic, embryotoxic, teratogenic, or reproductive effects in humans.

Suspected cancer agent : No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH, NTP, OR OSHA.

SECTION 12: Ecological information

12.1. Ecotoxicity

Ethylene Glycol	
Toxicity to fish	NOEC – Pimephales promelas (fathead minnow) – 39,140 mg/L, 96h
	NOEC – Pimephales promelas (fathead minnow) – 32,000 mg/L, 7d
	LC50 – Oncorhynchus mykiss (rainbow trout) – 18,500 mg/L, 96h
	LC50 – Leuciscus idus (golden orfe) - >10,000 mg/L, 48h
Toxicity to invertebrates	NOEC – Daphnia – 24,000 mg/L, 48h
	EC50 – Daphnia magna (water flea) – 74,000 mg/L, 24h
	LC50 – Daphnia magna (water flea) – 41,000 mg/L, 48h

12.2. Persistence and degradability

KP-EG Heat Transfer Fluid	
Persistence and degradability	Ratio BOD/ThBOD: 0.78%

12.2. Bioaccumulation potential

KP-EG Heat Transfer Fluid	
	Bioaccumulation, other fish – 61d, 50 mg/L
	Bioaccumulation factor (BCF): 0.60

12.3. Mobility in soil

KP-EG Heat Transfer Fluid	
Ecology - soil	No data available

12.4. Other adverse effects

Other adverse effects : None

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste Residues : Waste disposal must be in accordance with appropriate Federal, State and local regulations. This product, if unaltered by use, may be disposed of by treatment at apermitted facility or as advised by your local hazarrdous waste regulatory authority.

Product Containers : Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container.

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

US DOT	Not Dangerous Goods
TDG	Not Dangerous Goods
IMDG	Not Dangerous Goods
Marine Pollutant	No
IATA/ICAO	Not Dangerous Goods

SECTION 15: Regulatory information

TSCA Inventory Status	All ingredients are listed on the TSCA inventory.
DSCL (EEC)	All ingredients are listed on the DSCL inventory.
California Proposition 65	Not Listed
SARA 302	Not Listed
SARA 304	Not Listed
SARA 311	Acute Health Hazard
SARA 312	Acute Health Hazard
SARA 313	Not Listed
WHMIS Canada	Class D-2A: Poisonous and infectious material- Other effects- Very toxic Class D-1B: Poisonous and infectious material- Immediate and serious effects- Toxic

SECTION 16: Other information

Indication of changes : Revision 1.0 – 24 Mar 2015 - New SDS Created.

Other information : Author. SRO.

NFPA health hazard : 2 - Intense or continued but not chronic exposure could cause temporary incapacitation or possible residual injury

NFPA fire hazard : 1 – Materials that require considerable preheating, under all ambient temperature conditions, before ignition and combustion can occur.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.

HMIS III Rating

Health : 2

Flammability : 1

Physical : 0

Personal Protection : C

We believe that the information contained on this Safety Data Sheet is accurate. The suggested procedures are based on experience as of the date of publication. They are not necessarily adequate in every circumstance. These suggestions should not be confused with or followed in violation of applicable laws, regulations, rules or insurance requirements. The seller makes no warranty expressed or implied concerning the accuracy or any results obtained from the use of any information and no warranty expressed or implied concerning the use of the products. The buyer assumes all risks of the use and/or handling.