

1 PRODUCT AND COMPANY IDENTIFICATION

Manufacturer

KOST USA, Inc
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Product Name: KOSTChill PG HD 35/65
Revision Date: August 12, 2010
Version: 1
MSDS Number: 2569
Common Name: Mixture
CAS Number: Mixture
Product Code: 2569
Chemical Family: Mixture
Synonyms: Inhibited Propylene Glycol
Product Use: Heat Transfer Fluid

Emergency Telephone Number: 800-424-9300 (Chemtrec)

2 HAZARDS IDENTIFICATION

Route of Entry: Eyes; Skin; Inhalation; Ingestion
Target Organs:
Inhalation: Vapours expected to be slightly irritating.
Skin Contact: Not an irritant.
Eye Contact: May cause slight temporary irritation. Vapour or mist may cause irritation.
Ingestion: Very low toxicity if swallowed. Harmful effects not anticipated from small amounts.

HMIS® Rating H*0/F1/PH0
NFPA-ratings (scale 0-4): Health = 0, Fire = 1, Reactivity = 0

This is not a WHMIS Controlled substance.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

Cas #	Perc.	Chemical Name
57556	30-40%	Propylene glycol
7732185	60-70%	Water
7758114	1-2%	Potassium Phosphate, Dibasic
Proprietary	1-2%	Corrosion Inhibitors and Dye

4 FIRST AID MEASURES

- Inhalation:** If symptoms develop, move victim to fresh air. If symptoms persist, obtain medical attention.
- Skin Contact:** Remove contaminated clothing and wash before reuse. Promptly flush skin with water until all chemical is removed.
- Eye Contact:** Immediately flush eyes with large amounts of water for at least 15 minutes, lifting eyelids occasionally to facilitate irrigation. Remove contact lenses after initial 1-2 minutes of flushing and continue flushing. If effects occur get immediate medical attention.
- Ingestion:** Not a direct hazard.

Notes to Physician: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5 FIRE FIGHTING MEASURES

- Flash Point:** None
- Flash Point Method:** PMCC
- Autoignition Temperature:** 371°C (700°F)
- LEL:** Not Determined
- UEL:** Not Determined
- Flammability Classification:** OSHA/NFPA Class IIIB combustible liquid

Extinguishing Media: Alcohol-resistant foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only. Do not use direct water stream.

Specific Hazards: Material will not burn unless preheated. Containers exposed to intense heat from fires should be cooled with large quantities of water.

Protective Equipment: Wear full protective clothing and self-contained breathing apparatus (SCBA).

Hazardous Combustion Products: Smoke may contain the original material in addition but not limited to: Carbon Monoxide, Carbon Dioxide.

6 ACCIDENTAL RELEASE MEASURES

Protective Measures: Isolate area. Avoid contact with spilled material. Watch out for slippery conditions when spillage. Refer to Section 8 of this Material Safety Data Sheet for personal protective equipment.

Clean Up Methods: Contain spilled material if possible. Collect in suitable and properly labeled containers. Small spills: Pick up excess with inert absorbent material and place into separate waste container. Large Spills: Dike material. Keep away from drains and ground water. Pump into suitable and properly containers or salvage truck for recovery or safe disposal. See Section 13 for disposal considerations.

Additional Advice: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.

7 HANDLING AND STORAGE

- Handling Precautions:** Do not swallow. Avoid contact with eyes, skin, or clothing. Consider normal working hygiene. Wash thoroughly after handling. Wash clothing before reuse and decontaminate or discard contaminated shoes. Do not expose containers to open flame, excessive heat, or direct sunlight. Do not puncture or drop containers. Handle with care and avoid spillage on the floor (slippage). Keep material out of reach of children. Use local exhaust over processing area.

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Storage Requirements: Keep away from heat, sparks, and flames. Protect container and its fittings from physical damage. Store in cool/dry area. Suitable packing materials.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Use mechanical (general) ventilation to control airborne levels below exposure guidelines.

Protective Equipment: HMIS PP, H | Splash Goggles, Gloves, Apron, Vapor Respirator

Eyes/Face Protection: Usage of safety glasses/ goggles is recommended.

Skin Protection: Chemical resistant gloves; Apron; Boots; Face shield or Full suit selection will depend on task. Launder contaminated clothing before use.

Hand Protection: Use of gloves approved to relevant standards made from the following materials may provide suitable protection: PVC, Neoprene rubber or nitrile rubber. Personal hygiene is a key element of effective hand care.

Respiratory Protection: If ventilation does not control airborne concentrations, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation.

Ingestion: Use good personal hygiene. Do not consume food in the work area. Wash hands before eating, drinking, smoking or using the restroom..

Exposure Guidelines/Other:

Exposure Limits:

<u>Component</u>	<u>List</u>	<u>Type</u>	<u>Value</u>
Propylene Glycol	WEEL	TWA Aerosol	10 mg/m ³

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Light Pink to Red

Physical State: Liquid

Odor: Slight to no odor

pH: 10.3

Vapor Pressure: <0.1 mmHg @ 20°C

Vapor Density: >1.0

Boiling Point: 103°C (217°F)

Freezing/Melting Pt.: -15°C (4°F)

Solubility: Completely

Spec Grav./Density: 1.026 @ 20°C

10 STABILITY AND REACTIVITY

Stability: Product is stable under normal conditions.

Conditions to avoid: High Temperature.

Materials to avoid (incompatibility): Strong Oxidizing Agents. Strong Acids; Strong Bases.

Hazardous Decomposition products: Combustion will produce carbon dioxide and, possibly toxic chemicals such as carbon monoxide. Aldehydes; Alcohols; Other Organic Acids

Hazardous Polymerization: Will not occur.

11 TOXICOLOGICAL INFORMATION

Acute Toxicity has not been determined on specific product:

Eye irritation: Essentially non-irritating.

Sensitation: Not a skin sensitiser

Chronic Toxicity and Carcinogenicity: Expected not to cause cancer in long term animal studies

Repeated Dose Toxicity: Shown effects on: Central Nervous Sytem

Mutagenicity: Not expected

Reproductive and Developmental Toxicity: Expected not to be a developmental toxicant or impair fertility.

12 ECOLOGICAL INFORMATION

Acute Toxicity has not been tested on specific product:

Fish: Low Toxicity

Aquatic Invertebrates: Low Toxicity

Algae: Low Toxicity

Microorganisms: Low Toxicity

Mobility: Dissolves in water. If product enters soil, it will be highly mobile and may contaminate ground water.

Persistence/degradability: Inherently biodegradable.

Bioaccumulation: Does not bioaccumulate significantly.

13 DISPOSAL CONSIDERATIONS

This material, if discarded as produced, is not a RCRA "listed" hazardous waste. However, it should be fully characterized for toxicity and possible reactivity prior to disposal (40 CFR 261). Use which results in chemical or physical change or contamination may subject it to regulation as a hazardous waste. Along with properly characterizing all waste materials, consult state and local regulations regarding the proper disposal of this material.

Container contents should be completely used and containers should be emptied prior to discard. Container rinsate could be considered a RCRA hazardous waste and must be disposed of with care and in full compliance with federal, state and local regulations. Larger empty containers, such as drums, should be returned to the distributor or to a drum reconditioner. To assure proper disposal of smaller empty containers, consult with state and local regulations and disposal authorities.

14 TRANSPORT INFORMATION



US DOT Classification (49CFR)
NOT REGULATED

Canadian Road and Rail Shipping Classification
NOT REGULATED

IMDG
NOT REGULATED

IATA/CAO
NOT REGULATED

15 REGULATORY INFORMATION

OSHA Hazard Communication Standard:

This product is not a "Hazardous Chemical" as defined by the OSHA 29CFR 1910.1200

SARA Hazardous Catagories Section 311/312 (EPCRA):

Immediate (Acute): no

Delayed (Chronic): no

Fire: no

Reactive: no

Sudden Release: no

SARA Toxic Release Inventroy Section 313 (TRI):

NONE

California Safe Water Drinking and Toxic Enforcement Act (Proposition 65)

This material does not contain any chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Pennsylvania Right-To-Know List of Hazardous Chemicals

Component	Cas #	Amount
Propylene Glycol	57-55-6	35%

Component Notification Status

DSL (CA) Listed

TSCA (US) Listed

COMPONENT / (CAS/PERC) / CODES

*Water (7732185 60-70%) TSCA

*Propylene glycol (57556 30-40%) HAP, PA, TSCA

*Phosphoric acid, dipotassium salt (7758114 1-2%) TSCA

REGULATORY KEY DESCRIPTIONS

HAP = Hazardous Air Pollutants

PA = PA Right-To-Know List of Hazardous Substances

TSCA = Toxic Substances Control Act

16 OTHER INFORMATION

Disclaimer:

MSDS *Material Safety Data Sheet* **KOST USA, Inc**



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END OF MSDS DOCUMENT