MATERIAL SAFETY DATA SHEET

Customer's Use

Date Issued: 01/13/2005
MSDS No: ICC-02134
Date-Revised: 01/26/2012
Revision No: 16

INTERCOOL NFP

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: INTERCOOL NFP
GENERAL USE: Heat Transfer Fluid
PRODUCT DESCRIPTION: Inhibited Propylene Glycol
PRODUCT CODE: 24220
PRODUCT FORMULATION NAME: INTERCOOL NFP
CHEMICAL FAMILY: Glycol
GENERIC NAME: Inhibited Propylene Glycol
ACTIVE INGREDIENT(S): Propylene Glycol; Dipotassium Phosphate

MANUFACTURER

Interstate Chemical Company, Inc.
Corporate Headquarters-Hermitage
2797 Freedland Road
Hermitage, PA 16148
Emergency Contact: F. James Corbett,
Director of Quality & EH&S
E-Mail: 724-981-3771
Product Stewardship: 800-422-2436
Alternate Emergency Phone: 724-981-3771
Transportation: 800-422-2436
Service Number: 800-422-2436

24 HR. EMERGENCY TELEPHONE NUMBERS

800-ICC-CHEM

COMMENTS: This product contains propylene glycol which is on the FDA's GRAS (GENERALLY REGARDED AS SAFE) list. Dispose of in accordance with all applicable local, state, and federal regulations. For assistance with your waste management/environmental service needs including waste disposal and recycling, please contact Interstate Chemical Environmental Services at 800-422-2436 ext. 1703 or email us at environmentalservices@interstatechemical.com

2. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

EYES: May cause irritation.

SKIN: May cause skin irritation.

INGESTION: Relatively non-toxic. Ingestion of sizable amount (over 100ml) may cause some gastrointestinal upset and temporary central nervous system depression. Effects appear more severe in individuals with kidney problems

INHALATION: Vapor inhalation is generally not a problem unless heated or misted.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Vol. %	CAS
Propylene Glycol	> 90	57-55-6
Dipotassium Phosphate	< 10	7758-11-4
Yellow Dye	< 1	6417-85-2

4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention.

SKIN: Remove contaminated clothing. Wash with soap and water. Get medical attention.

INGESTION: Not expected to require first aid measures. Give several glasses of water to drink to dilute. If large amounts were swallowed, get medical advice.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: (210°F) ASTM D56

FLAMMABLE LIMITS: 2.6 to 12.5

AUTOIGNITION TEMPERATURE: (700°F)

EXTINGUISHING MEDIA: Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.

OTHER CONSIDERATIONS: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode. Move exposed containers from fire area, if it can be done without risk. Use water to keep fire-exposed containers cool.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Absorb liquid and place in sealed container for disposal.

LARGE SPILL: Ventilate area of leak or spill. Remove all sources of ignition. Contain and recover liquid when possible. Do not flush to sewer.

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: When released into water, this material is expected to readily biodegrade.

LAND SPILL: When released into the soil, this material is expected to readily biodegrade.

AIR SPILL: When released into the air, this material is expected to have a half-life between 1 and 10 days.

GENERAL PROCEDURES: Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Use non-sparking tools and equipment. Collect liquid in an appropriate container or absorb with an inert material (e. g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer!

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Protect container from physical damage. Store in a cool, dry, ventilated area away from sources of heat, moisture, and incompatible substances. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product.

HANDLING: Store in adequate storage area at ambient temp.

STORAGE: Store in a cool dry place. Keep from freezing.

SHELF LIFE: Greater than one year when stored in its original container at the recommended storage temperature with the bungs closed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Wear safety glasses with side shields (or goggles) and a face shield.

SKIN: For brief contact, no precautions other than clean body-covering clothing should be needed. When prolonged of frequently repeated contact could occur, use chemical protective clothing made from butyl rubber. Selection of specific items such as gloves, boots, apron, full-body suit, etc. will depend on local operation.

RESPIRATORY: For most conditions, no respiratory protection should be needed, however, in dusty atmospheres, use a NIOSH approved dust respirator.

PROTECTIVE CLOTHING: Where splashing is possible, full chemically resistant protective clothing and boots may be required.

WORK HYGIENIC PRACTICES: Establish good personal hygiene and work practices. Always wash hands and face before eating, drinking or smoking. Provide safety shower and eye wash station in work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

Chemical Name	Solubility in Water	Specific Gravity
Propylene Glycol	Complete	1.036

PHYSICAL STATE: Liquid

ODOR: Odorless

APPEARANCE: Clear, yellow liquid.

COLOR: Fluorescent yellow

pH: 8.0 to 9.5

PERCENT VOLATILE: Not Determined

VAPOR PRESSURE: ~ 0.129 mmHg at (77°F)

VAPOR DENSITY: ~ 2.6 (Air=1)

BOILING POINT: ~ (370°F)

FREEZING POINT: < -60°C Freezing Point Chart

MELTING POINT: -60°C

FLASHPOINT AND METHOD: (210°F) ASTM D56

SOLUBILITY IN WATER: Miscible

EVAPORATION RATE: < 1 (n-Butyl Acetate=1) Room Temperature

DENSITY: ~ 8.74 lbs/gal at (60°F)

SPECIFIC GRAVITY: ~ 1.048 (water=1) at 20°C

VISCOSITY #1: ~ 20 Centipoise at (68°F)

COMMENTS: The information in this section is calculated from specific known information about this product. This information should not be used as exact test results or specifications. The information is provided as typical properties for this product.

10. STABILITY AND REACTIVITY

STABLE: Yes

HAZARDOUS POLYMERIZATION: No

STABILITY: Stable under ordinary conditions of use and storage.

CONDITIONS TO AVOID: Oxidizing materials.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon dioxide and carbon monoxide may form when heated to decomposition. Aldehydes or lactic, pyruvic or acetic acids may also be formed.

INCOMPATIBLE MATERIALS: Heat, flames, ignition sources and incompatibles.

11. TOXICOLOGICAL INFORMATION

ACUTE

Chemical Name	ORAL LD_{50} (rat)	DERMAL LD_{50} (rabbit)
Propylene Glycol	20 g/kg (rats)	20.8 g/kg, Rabbit

DERMAL LD_{50}: 20.8 g/kg (rabbit)

ORAL LD_{50}: 20 g/kg (rat)

GENERAL COMMENTS: Oral rat LD50: 20g/kg. Skin rabbit LD50: 20.8g/kg. Irritation: Eye rabbit/Draize, 500 mg/24H mild.

12. ECOLOGICAL INFORMATION

CHEMICAL FATE INFORMATION: When released into the soil, this material is expected to readily biodegrade. When released into the soil, this material is expected to leach into groundwater. When released into water, this material is expected to readily biodegrade. When released into the air, this material is expected to be readily degraded by reaction with photochemically produced hydroxyl radicals. When released into the air, this material is expected to have a half-life between 1 and 10 days.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Whatever cannot be saved for recovery of recycling should be managed in an appropriate and approved waste disposal facility.

EMPTY CONTAINER: Dispose of container and unused contents in accordance with federal, state and local requirements.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Not Regulated by DOT

CANADA TRANSPORT OF DANGEROUS GOODS

SHIPPING NAME: Not regulated

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

FIRE: No **PRESSURE GENERATING:** No **REACTIVITY:** No **ACUTE:** Yes **CHRONIC:** No

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: The components of this blend are listed on the EPA TSCA Inventory of Chemical Substances.

TSCA STATUS: All ingredients in this mixture are in compliance with TSCA.

CANADA

WHMIS (WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM): Not listed on the toxic substances in schedule 1 of the Canadian Environmental Protection Act, 1999 (CEPA 1999).

16. OTHER INFORMATION

REASON FOR ISSUE: Updated MSDS

APPROVED BY: F. James Corbett **TITLE:** Director of Quality & EH&S

PREPARED BY: F. James Corbett

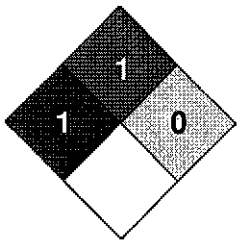
INFORMATION CONTACT: 800-422-2436 x 1136

REVISION SUMMARY: Revision #: 16. This MSDS replaces the March 09, 2011 MSDS. Any changes in information are as follows: In Section 1: MSDS Product Code

HMIS RATING

HEALTH:	1
FLAMMABILITY:	1
PHYSICAL HAZARD:	0
PERSONAL PROTECTION:	B

NFPA CODES



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