MATERIAL SAFETY DATA SHEET

SDS GHS Format



Date Issued: 09/21/2004 MSDS No: ICC-02068

Date-Revised: 04/19/2012

Revision No: 9

INTERCOOL NFE

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: INTERCOOL NFE **GENERAL USE:** Heat Transfer Fluid

PRODUCT DESCRIPTION: Heat Transfer Fluid

PRODUCT CODE: 24360

PRODUCT FORMULATION NAME: INTERCOOL NFE

CHEMICAL FAMILY: Glycol

GENERIC NAME: Inhibited Ethylene Glycol

ACTIVE INGREDIENT(S): Ethylene Glycol; Corrosion Inhibitors & Buffers

MANUFACTURER

24 HR. EMERGENCY TELEPHONE NUMBERS

(800) ICC-CHEM

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

COMMENTS: 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

GHS CLASSIFICATIONS

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Health

Acute Toxicity (Oral), Category 4 Skin Irritation, Category 3 Eye Irritation, Category 2B

GHS LABEL



WARNING

H302: Harmful if swallowed. H315: Causes skin irritation.

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

EMERGENCY OVERVIEW

IMMEDIATE CONCERNS: Warning! May be harmful if swallowed. May cause allergic skin reaction. May cause irritation to skin and eyes.

POTENTIAL HEALTH EFFECTS

EYES: Eye irritation

SKIN: May cause skin irritation.

INGESTION: This material may be harmful or fatal if swallowed. Lethal dose in humans is 100 ml (3-4 ounces).

INHALATION: Vapor inhalation is generally not a problem unless heated or misted. Then irritation may occur.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Vol. %	CAS
Ethylene Glycol	> 95	107-21-1
Corrosion Inhibitors & Buffers	< 5	mixture
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: If swallowed, induce vomiting immediately as directed by medical personnel.

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Never give anything by mouth to an unconscious person. Get medical attention immediately.

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

NOTES TO PHYSICIAN: Give sodium bicarbonate intravenously to treat acidosis.

5. FIRE FIGHTING MEASURES

FLASHPOINT AND METHOD: (230°F) ASTM D56

FLAMMABLE LIMITS: 3.2 to 15.3

AUTOIGNITION TEMPERATURE: (752°F)

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.

7. HANDLING AND STORAGE

HANDLING: Store in adequate storage area at ambient temp.

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

STORAGE TEMPERATURE: (20°F) Minimum to (150°F) Maximum

LOADING TEMPERATURE: (20°F) Minimum to (150°F) Maximum

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

PERSONAL PROTECTIVE EQUIPMENT

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

SKIN: (WHMIS) 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

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such as gloves, boots, apron, full-body suit, etc. will depend on local operation.

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

PROTECTIVE CLOTHING: (WHMIS) 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	Flash Point (°C)	Solubility	Specific Gravity
Ethylene Glycol	230	Complete	1.113

PHYSICAL STATE: Liquid

ODOR: Odorless

APPEARANCE: Clear, yellow liquid.

COLOR: Fluorescent yellow

pH: 8.0 to 9.5

PERCENT VOLATILE: 0 at (60°F)

VAPOR PRESSURE: 0.06 mmHg at (68°F)

VAPOR DENSITY: 2.14 (Air=1)

BOILING POINT: (388°F)

FREEZING POINT: (9°F)

MELTING POINT: (9°F)

FLASHPOINT AND METHOD: (230°F) ASTM D56

SOLUBILITY IN WATER: Miscible

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

DENSITY: ~ 9.17 lbs/gal at (68°F)

SPECIFIC GRAVITY: ~ 1.100 (water=1) at (68°F)

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.

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10. STABILITY AND REACTIVITY

STABLE: Yes

HAZARDOUS POLYMERIZATION: No

STABILITY: Stable under ordinary conditions of use and storage.

POLYMERIZATION: Product will not undergo polymerization.

CONDITIONS TO AVOID: Oxidizing materials.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon Dioxide and Water Vapor

INCOMPATIBLE MATERIALS: Strong Oxidizers

11. TOXICOLOGICAL INFORMATION

ACUTE

Chemical Name	ORAL LD ₅₀ (rat)	DERMAL LD ₅₀ (rabbit)
Ethylene Glycol	4700 mg/kg	9530 mg/kg

EYES: 500 mg/24H

ORAL LD₅₀: 4700 mg/kg (mice)

REPRODUCTIVE EFFECTS: Has shown teratogenic effects in laboratory animals.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Do not flush to sewer.

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: Environmentally Hazardous Substances, Liquid, N.O.S.

TECHNICAL NAME: Contains: Ethylene Glycol

PRIMARY HAZARD CLASS/DIVISION: 9

UN/NA NUMBER: UN3082

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PACKING GROUP: III

NAERG: 171

REPORTABLE QUANTITY (RQ) UNDER CERCLA: 5000 lbs

PLACARDS: Class 9

OTHER SHIPPING INFORMATION: REGULATED IN BULK ONLY

(GREATER THAN 119 GALLONS)

CANADA TRANSPORT OF DANGEROUS GOODS

SHIPPING NAME: Not regulated

15. REGULATORY INFORMATION

UNITED STATES

DOT LABEL SYMBOL AND HAZARD CLASSIFICATION



Class 9

Environmentally Hazardous Substance

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Immediate (Acute) Health Hazard

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

CHRONIC: No

313 REPORTABLE INGREDIENTS: Ethylene Glycol (107-21-1), 99% max.

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: Ethylene Glycol

Chemical Name	Vol. %	CERCLA RQ
Ethylene Glycol	> 95	5000 lbs

CERCLA RQ: 5,000 lbs

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).

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DOMESTIC SUBSTANCE LIST (INVENTORY): Ingredient: Ethylene Glycol (107-21-1): Korea (Yes); DSL(Yes); NDSL(No); Phil.(Yes)

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

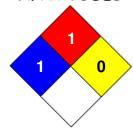
REVISION SUMMARY: Revision #: 9. This MSDS replaces the April 19, 2012 MSDS. Any

changes in information are as follows: In Section 1: MSDS Classification

HMIS RATING

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

NFPA CODES



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