

MATERIAL SAFETY DATA SHEET

Customer's Use

Date Issued: 12/05/2008
MSDS No: ICC-02744**INTERCOOL OP-100 P****1. PRODUCT AND COMPANY IDENTIFICATION****PRODUCT NAME:** INTERCOOL OP-100 P**GENERAL USE:** Heat Transfer Fluid**PRODUCT FORMULATION NAME:** INTERCOOL OP-100 P**ACTIVE INGREDIENT(S):** Ethylene Glycol; Corrosion Inhibitors and Buffers**MANUFACTURER**Interstate Chemical Company, Inc.
Corporate Headquarters-Hermitage
2797 Freedland Road
Hermitage PA 16148**Emergency Contact:** F. James Corbett,
Director of Quality & EH&S**Product Stewardship:** 800-422-2436**Alternate Emergency Phone:** 724-981-
3771**Transportation:** 800-422-2436**Alternate Transportation Phone:** 724-981-
3771**Service Number:** 800-422-2436**Alternate Customer Service:** 724-981-3771**24 HR. EMERGENCY TELEPHONE NUMBERS**

800-ICC-CHEM

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**EMERGENCY OVERVIEW****PHYSICAL APPEARANCE:** Substance can cause skin, eye, and respiratory tract irritation/burning.**IMMEDIATE CONCERNS:** Warning! May be harmful if swallowed. Maybe harmful if inhaled or absorbed through skin. May cause allergic skin reaction. May cause irritation to skin, eyes, and respiratory tract.**POTENTIAL HEALTH EFFECTS****EYES:** May cause irritation.**SKIN:** Minor skin irritation and penetration may occur.**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.**3. COMPOSITION / INFORMATION ON INGREDIENTS**

Chemical Name	Wt. %	CAS
Ethylene Glycol	> 90	107-21-1
Corrosion Inhibitors and Buffers	1 - 10	mixture
Pink Dye	0.001 - 0.1	

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. 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

GENERAL PROCEDURES: Avoid contact with eyes, skin, and clothing.

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**EXPOSURE GUIDELINES**

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)					
		EXPOSURE LIMITS			
		OSHA PEL		ACGIH TLV	
Chemical Name		ppm	mg/m ³	ppm	mg/m ³
Ethylene Glycol	TWA	50 ppm [1]	[1]	50 ppm [2]	[2]
OSHA TABLE COMMENTS: 1. Ceiling 2. Ceiling (vapor)					

PERSONAL PROTECTIVE EQUIPMENT

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

SKIN: Wear appropriate protective gloves and clothing to prevent skin exposure.

RESPIRATORY: Not expected to require personal respirator usage.

PROTECTIVE CLOTHING: Wear appropriate protective clothing to prevent skin exposure.

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	Solubility in Water	Specific Gravity
Ethylene Glycol	230	Complete	1.113

PHYSICAL STATE: Liquid

ODOR: Odorless

APPEARANCE: Clear, pink liquid

COLOR: Pink

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 at (68°F)

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

VISCOSITY #1: 20 Centipoise at (68°F)

WEIGHT PER VOLUME: 9.17 lbs/gal

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.

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: Oral administration of ethylene glycol to pregnant experimental animals has been shown to cause birth defects in the offspring. These effects were not seen when ethylene glycol was administered by dermal application or by inhalation.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Do not flush to sewer.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Whatever cannot be saved for recovery or 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

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

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

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

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

313 REPORTABLE INGREDIENTS: Ethylene Glycol (107-21-1), 60% max.

EPCRA SECTION 313 SUPPLIER NOTIFICATION

Chemical Name	Wt. %	CAS
Ethylene Glycol	> 90	107-21-1

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: Ethylene Glycol

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).

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

16. OTHER INFORMATION

REASON FOR ISSUE: Revised MSDS

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

PREPARED BY: F. James Corbett

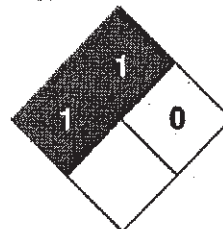
INFORMATION CONTACT: 800-422-2436 x 1136

REVISION SUMMARY: New MSDS

HMIS RATING

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

NFPA CODES



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