



SAFETY DATA SHEET

Revision Date 08/20/2015

REVISION NUMBER: 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product name MID-COOL IE-P

Other means of identification

Product code 119764

Synonyms NONE

Recommended use of the chemical and restrictions on use

Recommended Use Heat transfer medium.

Uses advised against No information available

Details of the supplier of the safety data sheet

Manufacturer Address

See Distributor information.

Importer

Rochester Midland Limited
5353 John Lucas Drive
Suite 103
Burlington, ON L7L 6G5
Canada

Distributor

Rochester Midland Corporation
155 Paragon Drive
Rochester, New York 14624 USA

Emergency telephone number

EMERGENCY TELEPHONE

INFOTRAC: 1-800-535-5053
OUTSIDE U.S.: +1-352-323-3500
CANUTEC: 613-996-6666

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)
This chemical is considered hazardous by the WHMIS 2015 Hazardous Products Regulation.

Acute toxicity - Oral

Category 4

Label elements

Emergency Overview

WARNING

Hazard statements

Harmful if swallowed

**Appearance** Clear, Colorless**Physical state** Liquid**Odor** Odorless**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product

Precautionary Statements - Response

Call a POISON CENTER or doctor/physician if you feel unwell
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

No information available

Other Information

Unknown Acute Toxicity 5% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

PRODUCT COMPOSITION	CAS No.	%	TRADE SECRET
Ethylene glycol	107-21-1	90 - 99	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures**General advice**

Call a POISON CENTER or doctor/physician if you feel unwell.

Eye contact

IF IN EYES: Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin contact

IF ON SKIN: Wash with soap and water.

Inhalation

IF INHALED: Remove to fresh air.

Ingestion

IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. Rinse mouth.

Most important symptoms and effects, both acute and delayed**Symptoms**

No information available.

Indication of any immediate medical attention and special treatment needed**Note to physicians**

Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide (CO₂). Dry chemical. Water spray (fog). Alcohol resistant foam.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

No information available.

Hazardous combustion products Carbon oxides. Aldehydes.

Explosion data

Sensitivity to Mechanical Impact NONE.

Sensitivity to Static Discharge NONE.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Personal precautions Wear adequate personal protective equipment, see Section 8, Exposure Controls/Personal Protection. Evacuate personnel to safe areas.

Environmental precautions

Environmental precautions Keep out of drains, sewers, streams, or other bodies of water. See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Dike to contain. Pick up with absorbant material. Put in suitable container for disposal.

7. HANDLING AND STORAGE**Precautions for safe handling**

Advice on safe handling Use personal protection recommended in Section 8. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity).

Incompatible materials Alkali metals. Strong acids, bases and oxidizing agents. Sulfur and sulfite compounds.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters****Exposure Guidelines**

PRODUCT COMPOSITION	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethylene glycol 107-21-1	Ceiling: 100 mg/m ³ aerosol only	(vacated) Ceiling: 50 ppm (vacated) Ceiling: 125 mg/m ³	-

Appropriate engineering controls

ENGINEERING CONTROLS

Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Safety glasses are recommended to minimize eye contact.

Skin and body protection Chemical resistant gloves are recommended to minimize skin contact. Appropriate protective clothing as needed to prevent skin contact. It is the responsibility of the end user of this product to determine level of PPE required that is consistent with safe use of this product.

RESPIRATORY PROTECTION None normally required. NIOSH approved respirator if spray mist in air causes irritation.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid	Odor	Odorless
Appearance	Clear, Colorless	Odor threshold	No information available
Color	Colorless		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	9.8	
Melting point/freezing point	-13 °C / 9 °F	
Boiling point / boiling range	198 °C / 388 °F	
Flash point	111 °C / 232 °F	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor density	2.14	
Specific gravity	1.11 - 1.13	
Water solubility	No information available	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	398 °C / 748 °F	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

Other Information

Softening point	No information available
VOC (EPA METH.24) (G/L):	No information available
Density	No information available
Bulk density	No information available

10. STABILITY AND REACTIVITY

REACTIVITY

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

CONDITIONS TO AVOID

Extremes of temperature and direct sunlight.

Incompatible materials

Alkali metals. Strong acids, bases and oxidizing agents. Sulfur and sulfite compounds.

Hazardous Decomposition Products

Oxides of Carbon. Aldehydes. Ketones and their derivatives.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	Harmful if swallowed.
Inhalation	May cause irritation of respiratory tract.
Eye contact	May cause slight irritation.
Skin contact	Prolonged contact may lead to irritation and dermatitis.
Ingestion	Harmful if swallowed.

PRODUCT COMPOSITION	Oral LD50	Dermal LD50	Inhalation LC50
Ethylene glycol 107-21-1	= 4000 mg/kg (Rat)	-	-

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive Toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 5% of the mixture consists of ingredient(s) of unknown toxicity
The following values are calculated based on chapter 3.1 of the GHS document .
ATEmix (oral) 526 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

5% of the mixture consists of components(s) of unknown hazards to the aquatic environment

PRODUCT COMPOSITION	Algae/aquatic plants	Fish	Crustacea
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Ethylene glycol 107-21-1	6500 - 13000: 96 h Pseudokirchneriella subcapitata mg/L EC50	16000: 96 h Poecilia reticulata mg/L LC50 static 41000: 96 h Oncorhynchus mykiss mg/L LC50 14 - 18: 96 h Oncorhynchus mykiss mL/L LC50 static 27540: 96 h Lepomis macrochirus mg/L LC50 static 40761: 96 h Oncorhynchus mykiss mg/L LC50 static 40000 - 60000: 96 h Pimephales promelas mg/L LC50 static	46300: 48 h Daphnia magna mg/L EC50
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Persistence and degradability

No information available.

Bioaccumulation

No information available.

PRODUCT COMPOSITION	Partition coefficient
Ethylene glycol 107-21-1	-1.93

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS**Waste treatment methods****Disposal of wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging

Do not reuse container.

14. TRANSPORT INFORMATION**DEPT. OF TRANSPORTATION**

Proper shipping name

Not Regulated by DOT

TDG

Not Regulated

15. REGULATORY INFORMATION**International Inventories**

TSCA	Complies
DSL/NDL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

PRODUCT COMPOSITION	SARA 313 - Threshold Values %
Ethylene glycol - 107-21-1	1.0

SARA 311/312 Hazard Categories

ACUTE HEALTH HAZARD	YES
CHRONIC HEALTH HAZARD	No
FIRE HAZARD	No
Sudden release of pressure hazard	No
REACTIVE HAZARD	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

PRODUCT COMPOSITION	Hazardous Substances RQs (in LBS)	U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs
Ethylene glycol 107-21-1	5000	

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

PRODUCT COMPOSITION	NJRTK:	MARTK:	PARTK:
Ethylene glycol 107-21-1		Listed	Listed

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION**NFPA**

Health hazards 2

Flammability 1

Instability 0

Physical and Chemical Properties -

HMIS

Health hazards 2

Flammability 1
Physical hazards 0
Personal protection B

Revision Date 08/20/2015

Revision Note

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

*** END OF SDS ***