

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 E

Other means of identification

Product code 119766 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 Importer

See Distributor information.

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 Viscous

Physical state Liquid

Odor Mild Sweet

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**

3. COMPOSITION/INFORMATION ON INGREDIENTS

PRODUCT COMPOSITION	CAS No.	%	TRADE SECRET
Ethylene glycol	107-21-1	100	*

^{*}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 Aldehydes. Carbon oxides.

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 See Section 12 for additional ecological information. Keep out of drains, sewers, streams,

or other bodies of water.

Methods and material for containment and cleaning up

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

Methods for cleaning upDike 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. Emptied containers may retain

hazardous properties. Do not cut, puncture or weld on or near the container. Avoid contact with skin, eyes or clothing. Do not breathe mist or vapors. Wash thoroughly after handling. Wash contaminated clothing before reuse. Keep away from heat/sparks/open flames/hot

surfaces. — No smoking.

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

Exposure Guidelines .			
PRODUCT COMPOSITION	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethylene glycol	Ceiling: 100 mg/m³ aerosol	(vacated) Ceiling: 50 ppm	-
107-21-1	only	(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 protectionChemical 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. Use approved NIOSH respiratory protection if TLV/PEL exceeded

or if over exposure is likely.

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

Appearance Clear, Colorless Viscous Odor Mild Sweet

Color Colorless Odor threshold No information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH Unknown

Melting point/freezing pointNo information availableBoiling point / boiling range197.3 °C / 387.1 °FFlash point111 °C / 232 °FEvaporation rateNo information availableFlammability (solid, gas)No information available

Flammability Limit in Air

Upper flammability limit:
Lower flammability limit:
Vapor pressure

No information available
No information available
No information available

Vapor density 2.14 Specific gravity 1.115

Water solubility No information available Solubility in other solvents No information available Partition coefficient No information available 398 °C / 748 °F Autoignition temperature No information available **Decomposition temperature** Kinematic viscosity No information available **Dynamic viscosity** No information available **Explosive properties** No information available **Oxidizing properties** No information available

Other Information

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

Bulk density

No information available
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.

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	= 4000 mg/kg (Rat)	-	-
107-21-1			

Information on toxicological effects

Symptoms No information available.

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

Sensitization
Germ cell mutagenicity
No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 500 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

0% of the mixture consists of components(s) of unknown hazards to the aquatic environment

PRODUCT COMPOSITION	Algae/aguatic plants	Fish	Crustacea
THE DESTRUCTION	7 tigaoraquatio pianto	1 1011	o i doladoa

Ethylene glycol	6500 - 13000: 96 h	16000: 96 h Poecilia	46300: 48 h Daphnia magna
107-21-1	Pseudokirchneriella	reticulata mg/L LC50 static	mg/L EC50
	subcapitata mg/L EC50	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	

Persistence and degradability

No information available.

Bioaccumulation

No information available.

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

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

Complies **TSCA** Complies DSL/NDSL Complies **EINECS/ELINCS** Complies **ENCS** Complies **IECSC KECL** Complies **PICCS** Complies Complies **AICS**

Legend:

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

DSL/NDSL - 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

CHRONIC HEALTH HAZARD

FIRE HAZARD

Sudden release of pressure hazard

REACTIVE HAZARD

YES

No

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		Listed	Listed
107-21-1			

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION

NFPA

Health hazards 2 Flammability 1

Instability 1

Physical and Chemical Properties -

HMIS

Health hazards 2

Flammability 1 Physical hazards 1 Personal protection X

Revision Date Revision Note Disclaimer 08/20/2015

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 ***