



SAFETY DATA SHEET

Revision Date 07/02/2015

REVISION NUMBER: 1

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

Product identifier

Product name MIDFLOC® 1345E, Cationic Flocculant Emulsion

Other means of identification

Product code 118038

Synonyms NONE

Recommended use of the chemical and restrictions on use

Recommended Use Water treatment chemical. Flocculating agent.

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.

Skin corrosion/irritation

Category 2

Label elements

Emergency Overview

WARNING

Hazard statements

Causes skin irritation

**Appearance** Viscous White**Physical state** Liquid**Odor** Hydrocarbon**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling
 Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

Call a POISON CENTER or doctor/physician if you feel unwell
 IF ON SKIN: Wash with plenty of soap and water
 If skin irritation occurs: Get medical advice/attention
 Take off contaminated clothing and wash before reuse

Hazards not otherwise classified (HNOC)

No information available

Other Information

3. COMPOSITION/INFORMATION ON INGREDIENTS

PRODUCT COMPOSITION	CAS No.	%	TRADE SECRET
Distillates, petroleum, hydrotreated light	64742-47-8	20 - 24	*
Ethoxylated alcohol	68551-12-2	0 - 3.5	*
Ethoxylated alcohol	68439-50-9	0 - 3.5	*
Ethoxylated alcohol	68002-97-1	0 - 3.5	*
Citric acid, monohydrate	5949-29-1	<= 2	*
Ethylene Oxide	75-21-8	< 0.1 PPM	*
Acrylamide	79-06-1	< 0.1	*

*The exact percentage (concentration) of composition has been withheld as a trade secret. Components listed above that have a zero minimum and a common maximum range are interchangeably used components based on availability. Only one of these components is contained in the product up to the maximum amount noted.

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: Gently wash with plenty of soap and water. If skin irritation occurs: Get medical advice/ attention.

Inhalation

IF INHALED: Remove to fresh air.

Ingestion

IF SWALLOWED: Clean mouth with water and drink afterwards plenty of water.

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

Water spray (fog). Carbon dioxide (CO₂). Dry chemical.

Unsuitable extinguishing media Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

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. Cool exposed containers with water spray.

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.

Environmental precautions

Environmental precautions Should not be released into the environment.

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 Be aware of potential for surfaces to become slippery. Dike to collect large liquid spills. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers. Flush residue with water.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

Storage Conditions Store at room temperature. Do not use iron, copper, or aluminum containers or equipment.

Incompatible materials Strong oxidizing agents. Do not use iron, copper, or aluminum for storage or delivery system.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines .

PRODUCT COMPOSITION	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ethylene Oxide 75-21-8	TWA: 1 ppm	STEL: 5 ppm see 29 CFR 1910.1047 TWA: 1 ppm	800 ppm
Acrylamide 79-06-1	TWA: 0.03 mg/m ³ inhalable fraction and vapor	S* (vacated) S* (vacated) TWA: 0.03 mg/m ³ TWA: 0.3 mg/m ³	60 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

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	Odor	Hydrocarbon
Appearance	Viscous White	Odor threshold	No information available
Color	White		

Property	Values	Remarks • Method
pH	5	+/- 1
Melting point/freezing point	No information available	
Boiling point / boiling range	100 °C / 212 °F	
Flash point	> 94 °C / > 200 °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	No information available	
Specific gravity	1.0	
Water solubility	No information available	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	> 20.5 mm ² /s	
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

Strong oxidizing agents. Do not use iron, copper, or aluminum for storage or delivery system.

Hazardous Decomposition Products

Oxides of Carbon. Oxides of Nitrogen. Ammonia. Hydrogen chloride. Sulfur dioxide.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information No data available

Inhalation No data available.

Eye contact May cause slight irritation.

Skin contact Causes skin irritation.

Ingestion Large amounts may cause irritation, nausea, diarrhea.

PRODUCT COMPOSITION	Oral LD50	Dermal LD50	Inhalation LC50
Distillates, petroleum, hydrotreated light 64742-47-8	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 5.2 mg/L (Rat) 4 h
Ethylene Oxide 75-21-8	= 72 mg/kg (Rat)	-	= 800 ppm (Rat) 4 h

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.

PRODUCT COMPOSITION	ACGIH	IARC	NTP	OSHA
Ethylene Oxide 75-21-8	A2	Group 1 Group 2A	Known	X
Acrylamide 79-06-1	A3	Group 2A	Reasonably Anticipated	X

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**12. ECOLOGICAL INFORMATION****Ecotoxicity**

PRODUCT COMPOSITION	Algae/aquatic plants	Fish	Crustacea
Distillates, petroleum, hydrotreated light 64742-47-8	-	2.4: 96 h Oncorhynchus mykiss mg/L LC50 static 45: 96 h Pimephales promelas mg/L LC50 flow-through 2.2: 96 h Lepomis macrochirus mg/L LC50 static	-
Citric acid, monohydrate 5949-29-1	-	1516: 96 h Lepomis macrochirus mg/L LC50 static	-
Ethylene Oxide 75-21-8	-	73 - 96: 96 h Pimephales promelas mg/L LC50	137 - 300: 48 h Daphnia magna mg/L LC50
Acrylamide 79-06-1	-	81 - 150: 96 h Lepomis macrochirus mg/L LC50 flow-through 137 - 191: 96 h Oncorhynchus mykiss mg/L LC50 static 74 - 150: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 124: 96 h Pimephales promelas mg/L LC50 static 103 - 115: 96 h Pimephales promelas mg/L LC50 flow-through	98: 48 h Daphnia magna mg/L EC50 98: 48 h Daphnia magna mg/L EC50 Flow through

Persistence and degradability

No information available.

Bioaccumulation

No information available.

PRODUCT COMPOSITION	Partition coefficient
Citric acid, monohydrate 5949-29-1	-1.72
Ethylene Oxide 75-21-8	-0.3
Acrylamide 79-06-1	-1.24

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 does not contain any 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 Oxide - 75-21-8	0.1
Acrylamide - 79-06-1	0.1

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, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

PRODUCT COMPOSITION	Hazardous Substances RQs (in LBS)	U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs
Ethylene Oxide 75-21-8	10	1000

Acrylamide 79-06-1	5000	1000 10000
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US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals

PRODUCT COMPOSITION	CA PROP 65:
Ethylene Oxide - 75-21-8	Listed Reproductive - Female Reproductive - Male Developmental
Acrylamide - 79-06-1	Listed Reproductive - Male Developmental

U.S. State Right-to-Know Regulations

PRODUCT COMPOSITION	NJRTK:	MARTK:	PARTK:
Ethylene Oxide 75-21-8	0882	Listed	Listed
Acrylamide 79-06-1	0022	Listed	Listed

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION**NFPA**

Health hazards 1

Flammability 1

Instability 0

Physical and Chemical Properties -

HMIS

Health hazards 1

Flammability 1

Physical hazards 0

Personal protection B

Revision Date

07/02/2015

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 ***