



SAFETY DATA SHEET

Revision Date 10/01/2018

REVISION NUMBER: 3

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

Product identifier

Product name F-110

Other means of identification

Product code 101770

UN/ID No. 1760

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Cleaning agent. Carbon remover.

Uses advised against No information available

Details of the supplier of the safety data sheet

Manufacturer Address

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

Importer

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

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

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 1
Serious eye damage/eye irritation	Category 1
Corrosive to metals	Category 1

Label elements

Emergency Overview

DANGER

Hazard statements

Causes severe skin burns and eye damage
May be corrosive to metals

**Appearance** Clear Blue**Physical state** Liquid**Odor** Slight detergent odor.**Precautionary Statements - Prevention**

Do not breathe dust/fume/gas/mist/vapors/spray
 Wash face, hands and any exposed skin thoroughly after handling
 Wear protective gloves/protective clothing/eye protection/face protection
 Keep only in original container

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 Immediately call a POISON CENTER or doctor/physician
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 Wash contaminated clothing before reuse
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 Immediately call a POISON CENTER or doctor/physician
 IF SWALLOWED: Rinse mouth. DO NOT induce vomiting
 Absorb spillage to prevent material damage

Precautionary Statements - Storage

Store locked up
 Store in corrosive resistant container

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

No information available

Other Information

- Harmful to aquatic life with long lasting effects.

Unknown Acute Toxicity 1.602% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

PRODUCT COMPOSITION	CAS No.	%	TRADE SECRET
Sodium metasilicate	6834-92-0	1 - 5	*
Monoethanolamine	141-43-5	10 - 30	*

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

4. FIRST AID MEASURES

First aid measures**General advice**

Immediately call a POISON CENTER or doctor/physician.

Eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

Skin contact

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin

with water/shower. Wash contaminated clothing before reuse.

Inhalation IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

Ingestion IF SWALLOWED: Rinse mouth. DO NOT induce vomiting.

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

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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

Specific hazards arising from the chemical

No information available.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

CORROSIVE MATERIAL. Avoid exposure to mist and splashes. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Cool exposed containers with water spray.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation, especially in confined areas.

Environmental precautions

Environmental precautions 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 DANGER: Concentrated, alkaline liquid. Avoid contact with eyes, skin and clothing. Do not breathe mist or vapors. Mix only with water. Do not reuse container. Read and follow label instructions. Keep out of reach of children.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep/store only in original container. Empty containers may retain product residue, follow SDS/label precautions even after container is emptied. Contact with certain food sugars can release

hazardous amounts of carbon monoxide gas in enclosed vessels.

Incompatible materials

May react violently with strong acids. Neutralizes active ingredients.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters**Exposure Guidelines**

PRODUCT COMPOSITION	ACGIH TLV	OSHA PEL	NIOSH IDLH
Monoethanolamine 141-43-5	STEL: 6 ppm TWA: 3 ppm	(vacated) STEL: 6 ppm (vacated) STEL: 15 mg/m ³ (vacated) TWA: 3 ppm (vacated) TWA: 8 mg/m ³ TWA: 3 ppm TWA: 6 mg/m ³	30 ppm

Appropriate engineering controls**ENGINEERING CONTROLS**

General mechanical and/or local exhaust as needed to meet exposure limits if mist in air. Corrosion resistant equipment recommended. Showers. Eyewash stations.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Goggles and face shield 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. Liquid may penetrate leather shoes and cause delayed burns. 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	Slight detergent odor.
Appearance	Clear Blue	Odor threshold	No information available
Color	No information available		
Property	Values	Remarks • Method	
pH	13	+/- 0.5	
Melting point/freezing point	No information available		
Boiling point / boiling range	No information available		
Flash point	-	None to boiling.	
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	1.072 - 1.082		
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	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): 162
Density 8.97 lbs/gal (1.08 kg/l)
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

May react violently with strong acids. Neutralizes active ingredients.

Hazardous Decomposition Products

Oxides of Carbon. Oxides of Nitrogen. Oxides of Sodium.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	Causes severe skin burns and eye damage.
Inhalation	Causes burns.
Eye contact	Corrosive to the eyes and may cause severe damage including blindness.
Skin contact	Causes burns.
Ingestion	Causes burns.

PRODUCT COMPOSITION	Oral LD50	Dermal LD50	Inhalation LC50
Sodium metasilicate 6834-92-0	= 600 mg/kg (Rat)	-	-
Monoethanolamine 141-43-5	= 1720 mg/kg (Rat)	= 1 mL/kg (Rabbit)	-

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 1.602% 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) 7024 mg/kg

ATEmix (dermal) 6753 mg/kg

ATEmix (inhalation-dust/mist) 10 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects.

1.602% of the mixture consists of components(s) of unknown hazards to the aquatic environment

PRODUCT COMPOSITION	Algae/aquatic plants	Fish	Crustacea
Sodium metasilicate 6834-92-0	-	210: 96 h Brachydanio rerio mg/L LC50 semi-static 210: 96 h Brachydanio rerio mg/L LC50	-
Monoethanolamine 141-43-5	15: 72 h Desmodesmus subspicatus mg/L EC50	300 - 1000: 96 h Lepomis macrochirus mg/L LC50 static 3684: 96 h Brachydanio rerio mg/L LC50 static 227: 96 h Pimephales promelas mg/L LC50 flow-through 200: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 114 - 196: 96 h Oncorhynchus mykiss mg/L LC50 static	65: 48 h Daphnia magna mg/L EC50

Persistence and degradability

No information available.

Bioaccumulation

PRODUCT COMPOSITION	Partition coefficient
Monoethanolamine 141-43-5	-1.91

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

UN/ID No. 1760

Proper shipping name	CORROSIVE LIQUID N.O.S. (ETHANOLAMINE, SODIUM HYDROXIDE)
Hazard Class	8
Packing Group	III
Description	5 Liters (1.3 Gallons) and Less may be Classed as LTD. QTY.

TDG

UN/ID No.	1760
Proper shipping name	CORROSIVE LIQUID N.O.S. (ETHANOLAMINE, SODIUM HYDROXIDE)
Hazard Class	8
Packing Group	III
Description	5 Liters (1.3 Gallons) and Less may be Classed as LTD. QTY.

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

SARA 311/312 Hazard Categories

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

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

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:
Monoethanolamine 141-43-5	Listed	Listed	Listed

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION

NFPA

Health hazards 3

Flammability 0

Instability 1

Physical and Chemical Properties ALKALI

HMIS

Health hazards 3

Flammability 0

Physical hazards 1

Personal protection C

Prepared By

EH&S DEPARTMENT

Revision Date

10/01/2018

Revision Note

Minor revisions for Canadian GHS compliance.

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 ***