



Revision Date 01/21/2020

SAFETY DATA SHEET

REVISION NUMBER: 3

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

Product identifier

Product name ML-10

Other means of identification

Product code 107710

UN/ID No. 3085

Synonyms None

Registration Number(s) 6836-115-527

Recommended use of the chemical and restrictions on use

Recommended Use Disinfectant.

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

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)

Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Oxidizing solids	Category 1

Label elements

Emergency Overview

DANGER

Hazard statements

Harmful if swallowed

Harmful if inhaled

Causes severe skin burns and eye damage

May cause an allergic skin reaction

May cause fire or explosion; strong oxidizer

**Appearance** White Briquettes.**Physical state** Solid**Odor** Pungent**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Use only outdoors or in a well-ventilated area
 Do not breathe dust/fume/gas/mist/vapors/spray
 Wear protective gloves/protective clothing/eye protection/face protection
 Contaminated work clothing should not be allowed out of the workplace
 Keep away from heat/sparks/open flames/hot surfaces. — No smoking
 Keep/Store away from clothing/combustible materials
 Take any precaution to avoid mixing with combustibles
 Wear fire/flame resistant/retardant clothing

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
 Wash contaminated clothing before reuse
 IF ON SKIN: Wash with plenty of soap and water
 If skin irritation or rash occurs: Get medical advice/attention
 IF ON CLOTHING: rinse immediately contaminated clothing and skin with plenty of water before removing clothes
 Rinse skin with water/shower
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 Call a POISON CENTER or doctor/physician if you feel unwell
 Immediately call a POISON CENTER or doctor/physician
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
 Rinse mouth
 Do NOT induce vomiting
 In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion
 In case of fire: Use CO₂, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

No information available

Other Information

- Very toxic to aquatic life with long lasting effects.
- Toxic to aquatic life.

Unknown Acute Toxicity

28.9% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

PRODUCT COMPOSITION	CAS No.	%	TRADE SECRET
1, 3-dichloro-5, 5-dimethyl hydantoin	118-52-5	15 - 40	*
1-Bromo-3-chloro-5, 5-dimethyl hydantoin	126-06-7	45 - 70	*

1, 3-dichloro-5-ethyl-5-methylhydantoin	89415-87-2	10 - 30	*
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*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. If skin irritation or rash occurs: Get medical advice/attention. IF ON SKIN: Gently wash with plenty of soap and water.
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. Call a POISON CENTER or doctor/physician if you feel unwell.
Ingestion	IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell. Rinse mouth. Do NOT induce vomiting.

Most important symptoms and effects, both acute and delayed

Symptoms	No information available.
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Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Dry chemical, CO₂, water spray or regular foam.

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. Toxic vapors are emitted in a fire condition. 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	Wear adequate personal protective equipment, see Section 8, Exposure Controls/Personal Protection.
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Environmental precautions

Environmental precautions	See Section 12 for additional ecological information.
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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 Reclaim as much as possible. Shovel or sweep up residue and place in suitable containers. Keep out of drains, sewers, streams, or other bodies of water.

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

Advice on safe handling DANGER. CORROSIVE. OXIDIZER. Avoid contact with skin, eyes or clothing. Do not breathe dust/fume/gas/mist/vapors/spray. Keep out of reach of children.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container closed when not in use. Store in a cool, dry area. Do not store near organic materials. Do not store near heat, sparks or flame.

Incompatible materials Strong alkalies. Strong acids and oxidizers.

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

PRODUCT COMPOSITION	ACGIH TLV	OSHA PEL	NIOSH IDLH
1, 3-dichloro-5, 5-dimethyl hydantoin 118-52-5	STEL: 0.4 mg/m ³ TWA: 0.2 mg/m ³	(vacated) STEL: 0.4 mg/m ³ (vacated) TWA: 0.2 mg/m ³ TWA: 0.2 mg/m ³	5 mg/m ³

Appropriate engineering controls

ENGINEERING CONTROLS Eyewash stations. Mechanical ventilation as needed. Showers.

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. 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	Solid		
Appearance	White Briquettes.	Odor	Pungent
Color	White	Odor threshold	No information available

Property	Values	Remarks • Method
pH	Unknown	
Melting point/freezing point	No information available	
Boiling point / boiling range	No information available	
Flash point	No information available	
Evaporation rate	< 1	

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	No information available
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):	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

Moisture. Extremes of temperature and direct sunlight.

Incompatible materials

Strong alkalies. Strong acids and oxidizers.

Hazardous Decomposition Products

Nitrogen oxides (NO_x). Oxides of Carbon. Chlorines. Bromine.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	Harmful if swallowed. Causes severe skin burns and eye damage. Harmful by inhalation.		
Inhalation	Causes burns. Harmful by inhalation.		
Eye contact	Corrosive to the eyes and may cause severe damage including blindness.		
Skin contact	Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. Causes burns.		
Ingestion	Harmful if swallowed. Causes burns.		

PRODUCT COMPOSITION	Oral LD50	Dermal LD50	Inhalation LC50
1-Bromo-3-chloro-5, 5-dimethyl hydantoin	= 485 mg/kg (Rat)	-	= 1880 mg/m ³ (Rat) 4 h

126-06-7

Information on toxicological effects**Symptoms** No information available.Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization	May cause sensitization by skin contact.
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** 28.9% 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)	494 mg/kg
ATEmix (inhalation-dust/mist)	2.2 mg/l

12. ECOLOGICAL INFORMATIONEcotoxicity

28.9% of the mixture consists of components(s) of unknown hazards to the aquatic environment

PRODUCT COMPOSITION	Algae/aquatic plants	Fish	Crustacea
1-Bromo-3-chloro-5, 5-dimethyl hydantoin 126-06-7	-	0.87: 96 h Oncorhynchus mykiss mg/L LC50 0.56: 96 h Lepomis macrochirus mg/L LC50 0.28: 96 h Pimephales promelas mg/L LC50	0.47: 48 h water flea mg/L EC50

Persistence and degradability

No information available.

Bioaccumulation

No information available.

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.**

3085

Proper shipping name

OXIDIZING SOLID, CORROSIVE, N.O.S., (Bromochloro-5, 5 Dimethyl Midazolidene-2,

Hazard Class	4-Dione)
Subsidiary class	5.1
Packing Group	8
Description	III 5 Kilograms (11 Pounds) and Less may be Classed as LTD. QTY.

TDG

UN/ID No.	3085
Proper shipping name	OXIDIZING SOLID, CORROSIVE, N.O.S., (Bromochloro-5, 5 Dimethyl Midazolidene-2, 4-Dione)
Hazard Class	5.1
Subsidiary class	8
Packing Group	III
Description	5 Kilograms (11 Pounds) and Less may be Classed as LTD. QTY.

15. REGULATORY INFORMATION**International Inventories**

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Does not Comply
IECSC	Does not Comply
KECL	Complies
PICCS	Complies
AICS	Complies

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 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	YES
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:
1, 3-dichloro-5, 5-dimethyl hydantoin 118-52-5	Listed	Listed	Listed

U.S. EPA Label Information

EPA Pesticide Registration Number 6836-115-527

EPA Statement

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

EPA Pesticide Label

DANGER

HIGHLY CORROSIVE

Causes irreversible eye damage and skin burns. May be fatal if swallowed. Irritating to nose and throat.

This pesticide is toxic to fish.

STRONG OXIDIZING AGENT.

16. OTHER INFORMATION

NFPA

Health hazards 3

Flammability 1

Instability 1

Physical and Chemical Properties OX

HMIS

Health hazards 3

Flammability 1

Physical hazards 1

Personal protection C

Revision Date 01/21/2020

Revision Note

Revised the ingredients listed in Section 3.

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 ***