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Prepared by: ITW – Magnaflux

SECTION 1: IDENTIFICATION**1.1. PRODUCT IDENTIFICATION**

Product's name: ML-500WB

1.2. RECOMMENDED USE AND USE RESTRICTIONS

Use: Non-destructive testing

1.3. SAFETY DATA SHEET SUPPLIER IDENTIFICATION**Name:**

ITW Chemical Products LTDA
Rua Jorge A. Camasmie, 670. Embu das Artes
São Paulo Brazil
CEP: 06816-050

Telephone:

55 11 5197.7500

1.4. EMERGENCY PHONE NUMBER

Emergency telephone number: SUATRANS: 0800 7077022 - ACCIDENTS/LEAKS

SECTION 2: HAZARD IDENTIFICATION**2.1. CHEMICAL CLASSIFICATION****Hazard Class**

Corrosion / Skin Irritation 2

Serious eye damage / Eye irritation 1

Skin sensitivity 1

Specific target organ toxicity - repeated exposure 2 (Kidney, Liver, Central Nervous System)

2.2. ELEMENTOS DO RÓTULO**Danger Pictogram:****Warning word:**

Danger

Danger Phrases:

Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. May cause damage to organs Kidneys, Liver, Central Nervous System through prolonged or repeated exposure.

**Precautionary Phrases:
Prevention**

Wash skin and/or hair thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Contaminated work clothing must not be allowed to leave the workplace. Do not breathe dust/fume/gas/mist/vapours/spray.

**Precautionary Phrases:
Emergency Response**

IF ON SKIN: Wash with plenty of water. In case of skin irritation: Consult a doctor. Remove contaminated clothing and wash before reuse. IF IN EYES: Rinse cautiously with water for several minutes. If you wear contact lenses, remove them if possible. Continue rinsing. Immediately call a TOXICOLOGY INFORMATION CENTER or physician. IF ON SKIN: Wash abundantly with water. In case of irritation or rash: consult a doctor. If you feel unwell, consult a doctor.

Precautionary Phrases:
Storage Store in a locked place.

Precautionary Phrases:
Disposition Dispose of contents/container to a special or hazardous waste collection point.

2.3. ADDITIONAL INFORMATION

Adopted classification system: Standard ABNT-NBR 14725-2: 2019

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1. COMPONENT

Mixtures	At the. UN	H / F / R / *	No.CAS%	Weight
MONOETHANOLAMINE	UN 2491	Not available	141-43-5	0,01 - 10
TRIETHANOLAMINE	Not available	Not available	102-71-6	0,01 - 10

Confidential information retained, according to ABNT NBR 14725-4: 2014

SEÇÃO 4: FIRST AID MEASURES

4.1. THE FIRST AID MEASURE:

Eyes: In case of contact with eyes, immediately flush eyes with plenty of water for at least 20 minutes, including under the eyelids. If it's easy, remove contact lenses, if worn. See a doctor immediately.

Skin: In case of skin contact, wash immediately with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation persists.

Inhalation: If breathing is difficult, remove to fresh air and keep at rest in a comfortable position for breathing. Get medical assistance/advice if you feel unwell.

Ingestion: In case of ingestion, do not induce vomiting unless instructed by a medical team. Never give anything by mouth to an unconscious person. Get immediate attention, medical advice.

4.2. MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND CHRONIC

Eyes: May cause eye irritation. Symptoms may include pain or discomfort, excessive blinking and tear production, with marked redness and swelling of the conjunctiva.

Skin: Causes skin irritation. Symptoms may include redness, swelling, drying, dryness and cracking of the skin. May cause an allergic skin reaction.

Inhalation: May cause respiratory tract irritation. Inhaling the vapors formed during heating may cause drowsiness, dizziness and nausea.

Ingestion: May be fatal if swallowed and enters airways. May cause stomach upset, nausea or vomiting. This product can be aspirated into the Lungs and cause chemical pneumonia.

4.3. INDICATIONS ON URGENT MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Note to doctors: Symptoms may not appear immediately.

Specific treatments: In case of accident or if you feel unwell, seek medical help immediately (show the label whenever possible or MSDS).

SECTION 5: FIRE FIGHTING MEASURES

5.1. FLAMMABILITY

Flammable: Non flammable

5.2. EXTINGUISHING MEANS

Suitable extinguishing media: Dry chemical, carbon dioxide, water fog, foam, sand/earth.

Unsuitable extinguishing media: Do not use water jet

5.3. SPECIAL HAZARDS

Combustion Products: May include, but are not limited to: carbon oxides.

Explosion Data:

Sensitivity to mechanical impact: Not available

Sensitivity to static discharge: Not available

5.4. SPECIAL EQUIPMENT AND PRECAUTIONS FOR PROTECTIVE FIRE FIGHTERS

Stay upwind of the fire. Wear full fire fighting PPE (full protective gear) and respiratory protection (RPE). Use water jet to keep fire exposed containers cool. Avoid the straight hose jet; will spread the fire. Containers can explode when heated.

SECTION 6: CONTROL MEASURES FOR SPILLS OR LEAKS

6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Use personal protection recommended in section 8. Isolate the risk area and prevent unnecessary or unprotected persons from entering. Eliminate any source of ignition.

6.2. CONTAINMENT AND CLEANING METHODS AND MATERIALS

Containment Methods: Contain and/or absorb spillage with inert material (sand, vermiculite), then place in a suitable container. Do not discharge into sewer system or allow to enter watercourses. Use appropriate personal protective equipment (PPE)

Methods for Cleaning Up: Collect material and place in a disposal container. Provide ventilation.

SECTION 7: HANDLING AND STORAGE

7.1. PRECAUTIONS FOR INSURANCE

Handling: Do not operate in temperatures above 40 °C / 107 °F unless wearing proper PPE. Avoid contact with eyes, skin or clothing. Avoid breathing the mist. Do not swallow. Handle and open container with care. Do not eat, drink or smoke during use. (See section 8)

General Hygiene Advice: Wash contaminated clothing before reuse. Wash hands before eating, drinking, smoking.

7.2. SAFE STORAGE CONDITIONS, INCLUDING POSSIBLE INCOMPATIBILITIES

Storage: Keep out of reach of children. Store locked up. Protect from sunlight. Do not store at temperatures above 40. Store in a well-ventilated place. (See section 10).

SECTION 8: EXPOSURE CONTROL AND PERSONAL PROTECTION

8.1. CONTROL PARAMETERS

Exposure Indications

Ingredient	Occupational Exposure Limits	
	OSHA-PEL	ACGIH-TLV
MONOETHANOLAMINE	Not available	Not available
TRIETHANOLAMINE	Not available	5 mg/m ³

8.2. EXHIBITION CONTROL

Engineering Controls: Use adequate ventilation to keep exposures (levels of dusts, fumes, vapor, etc.) below recommended exposure limits.

8.3. PERSONAL PROTECTION MEASURES

Individual protection equipment:

Eye/Face Protection: Safety glasses or goggles are recommended when using product

Skin protection:

Hand protection: Chemical resistant gloves such as nitrile rubber or neoprene®.

Body protection: Wear suitable protective clothing.

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection should be based on known exposure or anticipated levels of hazards from the product and the selected safe working limits.

General Health and Safety Measures: Do not eat, smoke or drink where material is handled, processed or stored. Wash hands thoroughly before eating or smoking.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. BASIC INFORMATION ON PHYSICS AND CHEMICALS

Aspect:	Oily
Color:	Green
Odor:	Oil smooth
Odor Limit:	Liquid
Physical State:	9.5 - 10.5 (2% solution)
pH:	Not available
Melting Point / Freezing Point:	> 100°C
Initial Boiling Point and Boiling Range:	> 93°C
Flash Point:	Insignificant
Evaporation Index:	Non flammable
Flammability:	Not available
Lower Flammability/Explosive Limit:	Not available
Upper Flammability/Explosive Limit:	Not available
Steam Pressure:	1.03 - 1.13 g/cm ³
Steam Density:	Miscible in water and ethanol
Relative Density / Specific Gravity:	Not available
Solubility:	Not available
Partition coefficient n-Octanol / Water:	Not available

Auto Ignition Temperature:	Not available
Decomposition Temperature:	Not available
Viscosity:	Not available
Oxidizing Properties:	Not available
Explosive Properties:	
VOC g/1	

SECTION 10: STABILITY AND REACTIVITY

10.1. REACTIVITY

No dangerous reaction under normal conditions of use and storage.

10.2. CHEMICAL STABILITY

Stable under normal conditions of pressurized content.

10.3. POSSIBILITY OF HAZARDOUS REACTIONS

No dangerous reaction under normal conditions of use.

10.4. CONDITIONS TO AVOID

Heat, incompatible materials. Protect from sunlight.

10.5. INCOMPATIBLE MATERIALS

Strong oxidizing agents.

10.6. HAZARDOUS DECOMPOSITION PRODUCTS

May include but are not limited to carbon oxides and nitrogen oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. INFORMATION ON TOXICOLOGICAL EFFECTS

Likely Routes of Exposure: Skin contact, eye contact, inhalation, ingestion.

Symptoms related to Chemical / physical / toxicological characteristics:

Eyes: Causes serious eye damage. Symptoms may include pain or discomfort, excessive blinking and tear production, with marked redness and swelling of the conjunctiva. It can cause burns.

Skin: Causes skin irritation. Symptoms may include redness, swelling, drying, dryness and cracking of the skin. May cause an allergic skin reaction.

Ingestion: May be fatal if swallowed and enters airways. May cause stomach upset, nausea or vomiting. This product can be aspirated into the lungs and cause chemical pneumonia.

Inhalation: May cause respiratory tract irritation. Inhaling the vapors formed during heating may cause drowsiness, dizziness and nausea.

Acute Toxicity:

Ingredients	IDLH	LC50	DL50
MONOETHANOLAMINE	Not available	Not available	Not available
TRIETHANOLAMINE	Not available	Not available	Oral 4190 mg/kg, rato Dérmico >20 mL/kg, coelho

Calculated mean values of acute chemical toxicity		
LC50 (inhalation)	DL50 (oral)	DL50 (skin)
Not available	Not available	>2000 mg / kg, Coelho

Ingredients	Listed as a carcinogen or potential carcinogen (NTP, IARC, OSHA, ACGIH, 65) *
MONOETHANOLAMINE	Not available
TRIETHANOLAMINE	I-3

* See Section 15 for more information

11.2. LATE EFFECTS, IMMEDIATE AND CHRONIC EFFECTS SHORT AND LONG PERIOD OF EXPOSURE

Skin corrosion/irritation:	Causes skin irritation
Severe eye irritation/damage:	Causes serious eye damage
Respiratory sensitization:	Based on available data, classification criteria are not met
Skin Sensitization:	Causes skin sensitivity
Single exposure:	Based on available data, classification criteria are not met
Chronic health effects:	Based on available data, classification criteria are not met
Carcinogenicity:	Based on available data, classification criteria are not met
Mutagenicity:	Based on available data, classification criteria are not met
Reproductive Toxicity	
- Development:	Based on available data, classification criteria are not met
- Teratogenicity:	Based on available data, classification criteria are not met
- Embryotoxicity:	Based on available data, classification criteria are not met
- Fertility:	Based on available data, classification criteria are not met
Repeated exposure:	Causes damage to Kidneys, Liver, Central Nervous System by repeated exposure and without PPE
Aspiration hazard:	Based on available data, classification criteria are not met
Toxicologically synergistic materials:	Not available
Other information:	Not available

SECTION 12: ECOLOGICAL INFORMATION

12.1. ECOTOXICITY

Acute / Chronic Toxicity: May cause long-term adverse effects in the aquatic environment.

12.2. PERSISTENCE AND DEGRADABILITY

Not available

12.3. BIOACCUMULATIVE POTENTIAL

Bioaccumulation: Not available

12.4. MOBILITY ON THE GROUND

Not available

12.5. OTHER ADVERSE EFFECTS

Not available

SECTION 13: CONSIDERATIONS ON FINAL DESTINATION**13.1. RECOMMENDED METHODS FOR FINAL DISPOSAL**

Disposal Method: This material must be disposed of in accordance with all local, state, provincial, and federal laws.

Other disposal recommendations: Not available

SECTION 14: TRANSPORT INFORMATION**14.1. TRANSPORT INFORMATION**

TERRESTRIAL: Resolution no. 5947/21 of June 1, 2021, of the National Land Transport Agency (ANTT), Approves the Complementary Instructions to the Regulation of Land Transport of Dangerous Goods and its amendments.

Product not classified as dangerous for transport.

MARITIME: IMDG Code (IMO)

Data not available.

AIR: IATA-DGR

Data not available

14.2. UN NUMBER

Unregulated

14.3. PROPER NAME FOR TRANSPORT

Not applicable

14.4. TRANSPORT CLASS OF RISK (ES)

Not applicable

14.5. PACKING GROUP

Not applicable

14.6. ENVIRONMENTAL RISKS

Not available

14.7. MOST TRANSPORTATION ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE

Not available

14.8. SPECIAL PRECAUTIONS FOR THE USER

Do not handle until all safety precautions have been read and understood.

SECTION 15: REGULATORY INFORMATION**15.1. SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS / SPECIFIC LEGISLATION FOR THE CHEMICAL PRODUCT****Specific safety, health and environmental regulations for the chemical**

Regulatory information only refers to the main prescriptions applicable to the product. The user must pay attention to the possible existence of local regulations that complement these prescriptions, such as municipal or state legislation, for example.

SECTION 16: OTHER INFORMATION**CAPTIONS AND ABBREVIATIONS**

DNA	European Agreement on the International Transport of Dangerous Goods by Waterway
ADR	European Agreement on the international carriage of dangerous goods by road
AOX	Organic bonds with CAS absorbable halogens
DMEL	Level derived from exposure with minimal effects (genotoxic substances)
DNEL	Derived exposure level with minimal effects (genotoxic substances)
IATA	International Air Transport Association
IMDG	International Maritime Code for the Transport of Dangerous Goods (IMDG Code)
CL50	Lethal concentration 50%
DL50	Lethal dose 50%
MARPOL	International Convention for the Prevention of Pollution from Ships NOAEC
NOAEL	Level of adverse effect not observed NOEC
PEC	Predictable concentration in the environment
PNEC	Predictable concentration without effects
RID	International Rail Transport of Dangerous Goods

This MSDS was prepared in accordance with ABNT-NBR 14725-4:2014. The information contained in this SDS is based on information from our suppliers or our knowledge. Suggestions and recommendations for the use of our products are based on experience and the good results obtained. Any inappropriate use and outside compliance with the legislation will be the sole responsibility of the user. This product is intended for industrial use only.

This information corresponds to our current stage of knowledge and is intended to provide a general description of our products. All existing intellectual / industrial property rights must be observed. Due to possible changes in our products as well as applicable national and international regulations and laws, the condition of our product may change. These documents are available upon request and provided in accordance with the respective legislation. Before handling our products, the revised version must be obtained.

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