

written following Norm ISO 11014-1

MATERIAL SAFETY DATA SHEET**GOËMAR[®] MZ 63**

09/99/M6

I - IDENTIFICATION OF THE PRODUCT AND OF THE COMPANY**I.1- IDENTIFICATION OF THE FORMULA**

- * Utilisation # **Seaweed foliar fertilizer.**
- * Standard denomination # trace elements mixture manganese & zinc (EC fertilizer)

I.2- COMPANY IDENTIFICATION

Laboratoires GOËMAR
 # Z.A.C. la Madeleine - Avenue du Général Patton
 # 35400 SAINT MALO - FRANCE
 Tél. : 33.2.99.21.53.70.
 Fax. : 33.2.99.82.56.17.

I.3- EMERGENCY CALLING

ORFILA **ANTI-POISON CENTER (Rennes)**
 # **33.1.45.42.59.59.** **33.2.99.59.22.22.**

II - COMPOSITION / INFORMATION ON INGREDIENTS**PREPARATION :**

The preparation is not classified as dangerous.

- * **Dangerous substances**
 and
 * Temporary labelled substances
 by the producer

denomination / CAS n° / CE n°	conc. (%w/w)	classification
# manganese salt	< 10%	Xn, R48/20/22
# zinc salt	< 20%	Xi, R36/38
none		

NOTES :**III - HAZARDS IDENTIFICATION****MAIN DANGEROUS EFFECTS :**

- * For human health
- * For environment
- * Physical and chemical hazards

No dangerous effect is the product is used according to recommendations written on the label.

Avoid pouring into draining system and surface water.

IV - FIRST AID MEASURES**IN CASE OF :**

- * Ingestion
- * Inhalation
- * Skin contact
- * Eyes contact
- * Special means for quick-acting close to the place of work

Wash out mouth with water. Keep patient at rest and obtain medical attention at once.

Take the patient to get fresh air.

Take off dirty clothes.
Wash with water.

Flush 15 mn with water.
Seek medical advice if irritation developps.

Eyes shower.
Safety shower.

V - FIRE FIGHTING MEASURES	
* Extinguishing media	Use multi-purpose dry powder extinguishers
* Precautions	Evacuate the place.
	# Provide for holding contaminated water.
	# Possible release of toxic fumes (various oxides).
* Protection equipments	Professionals : use a self contained breathing apparatus.
VI - ACCIDENTAL RELEASE MEASURES	
* Individual protection	Ensure ventilation. Use gloves.
* Environmental protection	# Avoid pouring into draining system or environment. Avert concerned authorities.
* Cleaning methods	# In case of pouring on public place, absorb the liquid with a neutral absorbant and sweep it. Do not flush with water. Do not reintroduce into original jerrycan ; treat as waste.
VII - HANDLING AND STORAGE	
* Handling	For individual protection, see point 8 for details.
* Precautions	Handle carefully to avoid accidental dispersion and spatter.
* Storage	Keep the product into original container. Jerrycans will be labelled and kept closed. Store away from food and farm animals. Do not store below -10°C.
VIII - EXPOSURE CONTROLS / PERSONAL PROTECTION	
* Exposition control	
* Technical measure	Work in fresh air.
INDIVIDUAL PROTECTION EQUIPMENT (IPE)	
* Breathing protection	
* Hands protection	Use gloves.
* Eyes protection	# Safety goggles.
* Skin protection	Overall is recommended.
* Necessary hygiene restrictions	Wash hands with water after handling the product. Do not eat or drink during the handling.

IX - PHYSICAL AND CHEMICAL PROPERTIES	
<ul style="list-style-type: none"> * Aspect * Smell * pH * Boiling point * Melting point * Flash point * Inflammability (solid-gas) * Combustive properties * Vapour pressure * Relative density * Solubility * Vapour density * Viscosity 	<p>green liquid, with seaweed particles.</p> <p># 2.2 - 2.7</p> <p>no data</p> <p>no data</p> <p>no data</p> <p>no data</p> <p>no data</p> <p>no data</p> <p>1,270 - 1,285</p> <p>Soluble in water in all proportions.</p> <p>no data</p> <p>no data</p>
X - STABILITY AND REACTIVITY	
<ul style="list-style-type: none"> * Conditions to avoid * Materials to avoid * Hazardous decomposition products 	<p># The preparation is stable in normal conditions of storage and use.</p> <p># Possible release of various oxides in case of fire.</p>
XI - TOXICOLOGICAL INFORMATION	
<ul style="list-style-type: none"> * Oral way * Skin contact * Eyes contact * Fog and aerosol exposition * Mammal experimental data 	<p># Informations about the raw materials :</p> <p>zinc salt : LD50 (oral, rat) = 2150-2950 mg/kg</p> <p>Zinc and manganese salt can cause skin irritation.</p> <p>Zinc and manganese salt can cause eye irritation.</p> <p>No data for the preparation.</p>
XII - ECOLOGICAL INFORMATION	
<ul style="list-style-type: none"> * Aquatic environment * Terrestrial environment 	<p>#</p> <p>No data for the preparation.</p> <p>For zinc salt : LC 50 (fish, 96h) = 1-10 mg/l</p> <p>No available data.</p>

XIII - DISPOSAL CONSIDERATIONS	
* Waste elimination	Avoid to waste the product into draining system. Keep waste into suitable containers for ulterior treatment.
* Further precautions	Destroy the packaging according to national or local legislation in effect. Packaging : do not reuse
XIV - TRANSPORT INFORMATION	
* road / railway	The preparation doesn't contain any substance concerned by ADR regulation.
* maritime way	
* air way	
XV - REGULATORY INFORMATION	
	# following directive 1999/45/EC.
* Symbol	none
* R sentence(s)	none
* S sentence(s)	S2 : keep out of reach of children. # S13 : keep away from food, drink and animal feeding stuffs. # S20/21 : when using do not eat, drink or smoke.
* National recommendations	
XVI - OTHER INFORMATION	
REFERENCES :	
* For data	Suppliers data ; company in-house data.
* For transport	
* For EC regulation	Directive 91/155/EEC. # Directive 1999/45/EC.
# symbol points out a modification with regard to the previous sheet.	
<p><i>N.B. : This sheet completes the technical leaflet but doesn't replace it. The information written here above are based on our relative knowledge to the concerned product, at the time of writing this safety data sheet. They are honestly written. A list of the main regulation, legislation and administrative texts can be joined to this sheet as indication. The use of the product for other purposes than those indicated on the label may present a risk.</i></p>	