

**Material safety data sheet**  
According to EU Regulation 1907/2006 in the current version  
**Marine Z**

**1. Identification of the substance/mixture and company**

Trade name: Marine Z  
Polysaccharides extracted from brown algae (*Laminaria digitata*) using a marine enzyme

INCI Glycerin, Aqua, Hydrolyzed algin, Zinc sulfat

CAS No. : 56-81-5/ 7732-18-5/ 9005-32-7/ 7446-20-0

EINECS No. : 200-289-5/ 231-791-2/ 232-680-1/ 616-097-3

REACH registration No. : Exempt/ Exempt/ 05-2114590129-42-0000/ 01-2119474684-27-0000

Utilization: Raw material for cosmetic or professional use

Supplier company identification: Elemental SRL, Piața Cazărmii no.15, 410188-Oradea, jud.Bihor, Romania  
Tel/Fax: +40259-436.755, www.elemental.eu

Emergency: RO: număr național pentru cazuri de urgență: 021 3183606 Institutul de Sănătate Publică București.  
International emergency number: +49 180 2273-112

**2. Hazards Identification**

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

This mixture does not present a health hazard with the exception of possible occupational exposure thresholds (see paragraphs 3 and 8).

This mixture does not present an environmental hazard. No known or foreseeable environmental damage under standard conditions of use.

2.2. Label elements

In compliance with EC regulation No. 1272/2008 and its amendments.

No labeling requirements for this mixture.

2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC)  $\geq 0.1\%$  published by the European Chemicals Agency (ECHA) under article 57 of REACH: <http://echa.europa.eu/fr/candidate-list-table>.

The mixture fulfills neither the PBT nor the vPvB criteria for mixtures in accordance with annex XIII of the REACH regulations EC 1907/2006.

**3. Declaration of ingredients**

3.1. Substances

Material	C.A.S	EINECS	Risk Symbol	%
AQUA (WATER) / EAU	7732-18-5	231-791-2	-	47.25

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GLYCERIN (note [1])	56-81-5	200-289-5	-	50
HYDROLYZED ALGIN	9005-32-7	232-680-1	-	2.50
ZINC SULFATE	7446-20-0	616-097-3	GHS07, GHS05, GHS09 Dgr Acute Tox. 4, H302 Eye Dam. 1, H318 Aquatic Acute 1, H400 M Acute = 1 Aquatic Chronic 1, H410 M Chronic = 1	0.25

[1] Substance for which maximum workplace exposure limits are available.

**4. First aid measures**

As a general rule, in case of doubt or if symptoms persist, always call a doctor.  
NEVER induce swallowing by an unconscious person.

4.1. Description of first aid measures

In the event of exposure by inhalation : Bring the person to fresh air. Seek medical attention.

In the event of splashes or contact with eyes : Wash immediately and abundantly the eyes with plenty of water for at least 15 min. Seek medical attention in the event of persistent irritation.

In the event of splashes or contact with skin : Rinse immediately with plenty of water. Seek medical attention if the symptoms persist.

In the event of swallowing : Seek medical attention, showing the label. Do not induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

No data available.

4.3. Indication of any immediate medical attention and special treatment needed

No data available.

**5. Fire fighting measures**

Non-flammable.

5.1. Extinguishing media

Suitable methods of extinction

In the event of a fire, use :

- carbon dioxide (CO2)

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- powder
- sprayed water or water mist
- foam

5.2. Special hazards arising from the substance or mixture

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed :

- carbon monoxide (CO)
- carbon dioxide (CO<sub>2</sub>)

5.3. Advice for firefighters

No data available

**6. Accidental release measures**

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6.1. Personal precautions, protective equipment and emergency procedures

Consult the safety measures listed under headings 7 and 8.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections

No data available.

**7. Handling and storage**

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Requirements relating to storage premises apply to all facilities where the mixture is handled.

7.1. Precautions for safe handling

Always wash hands after handling.

Use in a well-ventilated place.

Fire prevention : Prevent access by unauthorized personnel.

Recommended equipment and procedures : For personal protection, see section 8. Observe precautions stated on label and also industrial safety regulations.

Prohibited equipment and procedures : No smoking, eating or drinking in areas where the mixture is used.

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7.2. Conditions for safe storage, including any incompatibilities  
No data available.

**Storage:**

Keep in its original closed packaging at ambient temperature (15 to 25°C).  
Shelf life: 2 years after manufacturing process in its original closed packaging.  
Keep refrigerated at 4°C after opening.

**Packaging:**

Always keep in packaging made of an identical material to the original.

7.3. Specific end use(s)

No data available.

**8. Exposure controls / personal protection**

8.1. Control parameters

Occupational exposure limits :

- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010) :

CAS	TWA	STEL	Ceiling	Definition	Criteria
56-81-5	10 mg/m <sup>3</sup>	-	-	-	

- Germany - AGW (BAuA - TRGS 900, 29/01/2018) :

CAS	VME	Excess	Notes
56-81-5	200 E mg/m <sup>3</sup>	-	2(I)

- France (INRS - ED984 :2016) :

CAS	VME-ppm	VME-mg/m <sup>3</sup>	VLE-ppm	VLE-mg/m <sup>3</sup>	Notes	TMP No
56-81-5	-	10	-	-	-	

- UK / WEL (Workplace exposure limits, EH40/2005, 2011) :

CAS	TWA	STEL	Ceiling	Definition	Criteria
56-81-5	10 mg/m <sup>3</sup> - ppm	- mg/m <sup>3</sup> - ppm	-	-	-

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation,

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especially in confined areas.

- Eye / face protection

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles in accordance with standard EN166.

- Hand protection

Wear suitable protective gloves in the event of prolonged or repeated skin contact.

Type of gloves recommended :

- Natural latex
- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))
- PVC (polyvinyl chloride)
- Butyl Rubber (Isobutylene-isoprene copolymer)
- Body protection

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

**9. Physical and chemical properties**

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9.1. Information on basic physical and chemical properties

General information :

Physical state : Fluid liquid. Limpid liquid, a light deposit may appear with time

Color :Yellow orange to orange

Odor : characteristic

Important health, safety and environmental information

pH :	5.00 +/-1.00. Neutral.
Boiling point/boiling range :	Not specified.
Flash point interval :	Not relevant.
Vapor pressure (50°C) :	Not relevant.
Density :	1.050-1.200
Water solubility :	Soluble.
Melting point/melting range :	Not specified.
Self-ignition temperature :	Not specified.
Decomposition point/decomposition range :	Not specified.
Index of refraction :	1.390-1.450

9.2. Other information

No data available.

**10. Stability and reactivity**

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10.1. Reactivity

No data available.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

No data available.

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

The thermal decomposition may release/form :

- carbon monoxide (CO)

- carbon dioxide (CO<sub>2</sub>)

**11. Toxicological information**

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11.1. Information on toxicological effects

No data available.

11.1.1. Substances

No toxicological data available for the substances.

11.1.2. Mixture

The toxicological evaluation of the product is based on data comparable substances

Acute toxicity :

Acute oral toxicity : DL50 > 2000 mg/kg

Skin corrosion/skin irritation :

Mild irritant

Irritation : No observed effect.

Average score = 0.3

Serious damage to eyes/eye irritation :

slightly irritant

Respiratory or skin sensitisation :

(skin) very well tolerated

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Germ cell mutagenicity :  
Ames test (in vitro) : Negative.  
With or without metabolic activation.  
OCDE 471 (Reverse mutation test bacteria).  
No mutagenic effect.

Other information  
Evaluation of phototoxic potential : not phototoxic

**12. Ecological information**

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12.1. Toxicity

Fish toxicity : No observed effect.  
LC50 > 100 mg/l  
Species : Danio rerio  
Duration of exposure : 96 h

Crustacean toxicity : No observed effect.  
EC50 > 100 mg/l  
Species : Daphnia magna  
Duration of exposure : 48 h

Algae toxicity : No observed effect.  
ECr50 > 100 mg/l  
Species : Desmodesmus subspicatus  
Duration of exposure : 72 h  
Similar product tests

12.2. Persistence and degradability  
No data available.

12.3. Bioaccumulative potential  
No data available.

12.4. Mobility in soil  
No data available.

12.5. Results of PBT and vPvB assessment  
No data available.

12.6. Other adverse effects  
No data available.

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12.7 German regulations concerning the classification of hazards for water (WGK, AwSV vom 18/04/2017, KBws) :  
WGK 2 : Hazardous for water.

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**13. Disposal considerations**

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods  
Do not pour into drains or waterways.

Waste :  
Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.  
Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.  
Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging :  
Empty container completely. Keep label(s) on container.  
Give to a certified disposal contractor.

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**14. Transport information**

Exempt from transport classification and labeling.

14.1. UN number  
Exempt

14.2. UN proper shipping name  
Exempt

14.3. Transport hazard class(es)  
Exempt

14.4. Packing group  
Exempt

14.5. Environmental hazards  
Exempt

14.6. Special precautions for user  
Exempt

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**15. Regulatory information**

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

- Classification and labeling information included in section 2:

The following regulations have been used:

- Container information:

No data available.

- Particular provisions :

No data available.

- German regulations concerning the classification of hazards for water (WGK, AwSV vom 18/04/2017, KBws) :  
WGK 2 : Hazardous for water.

- Standardized American system for the identification of hazards presented by the product in view of emergency procedures (NFPA 704):

NFPA 704, Labeling: Health=0 Inflammability=1 Instability/Reactivity=1 Specific Risk=none

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15.2. Chemical safety assessment

No data available.

**16. Additional information**

16.1. Wording of the phrases mentioned in section 3 :

H302	Harmful if swallowed.
H318	Causes serious eye damage.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

16.2. Abbreviations:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

CAS: Chemical Abstracts Service (division of the American Chemical Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances.

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

IATA: International Air Transport Association.

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IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

IMDG: International Maritime Code for Dangerous Goods.

INCI: International Nomenclature of Cosmetic Ingredients.

LTE: Long-term exposure.

PNEC: Predicted No Effect Concentration.

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

STE: Short-term exposure.

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

**Disclaimer:**

This material safety data sheet does not constitute a guarantee of the properties of the product and is not a contractual legal report. The information is given in good faith on the basis of our best knowledge of the product at the indicated time. However, we cannot accept responsibility or liability for any consequences arising from its use, no warranty for correctness and completeness is given. We caution the users against the incurred possible risks when the product is used at other ends than the use for which it was initially planned. It is the user's responsibility during handling, storage and product use to consult the main regulatory texts in force regarding workers and environment protection.