



SAFETY DATA SHEET

[In accordance with the criteria of Regulation No 1907/2006 (REACH) as amended]

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: REEF MINERAL SALT

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: synthetic sea salt for coral cultures.

Uses advised against: not determined.

1.3 Details of the supplier of the safety data sheet

Manufacturer: Aquaforest Sp. z o.o.

Address: ul. Starowiejska 18, 32-800 Brzesko, Poland

Telephone: +48 14 691 79 79

E-mail address for a competent person responsible for sds: info@aquaforest.eu

1.4 Emergency telephone number

112

Section 2: Hazards identification

2.1 Classification of the substance or mixture

Product is not classified as hazardous for human health and life and for the environment.

2.2 Label elements

Hazard pictograms and signal words

None.

Hazard statements

None.

Precautionary statements

None.

Additional labeling

EUH210 Safety data sheet available on request.

2.3 Other hazards

Product does not contain ingredients, which meet criteria for PBT or vPvB in accordance with Annex XIII of REACH Regulation.

Section 3: Composition/information on ingredients

3.1 Substances

Not applicable.

3.2 Mixtures

CAS number:	10043-52-4	calcium chloride	< 6 %
EC number:	233-140-8	Eye Irrit. 2 H319	
INDEX number:	017-013-00-2		
Registration number:	01-2119494219-28-0013		

Full text of each relevant H phrase is given in section 16 of SDS.



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Section 4: First aid measures

4.1 Description of first aid measures

Skin contact: take off contaminated clothes. Wash contaminated skin with water and soap and rinse thoroughly. Consult a doctor if disturbing symptoms occur.

Eye contact: contact an ophthalmologist if disturbing symptoms occur. Protect non-irritated eye, remove contact lenses. Rinse contaminated eyes with water for at least a few minutes. Avoid strong stream of water – risk of damage of the cornea.

Ingestion: rinse mouth. Do not induce vomiting. Contact a doctor if disturbing symptoms occur. Never give anything by mouth to an unconscious person. If necessary, call a doctor, show the container or label.

Inhalation: consult a doctor if disturbing symptoms occur.

4.2 Most important symptoms and effects, both acute and delayed

Skin contact: possible redness, burning, dryness.

Eye contact: redness, tearing, burning, irritation.

Inhalation: possible abdominal pain, nausea, vomiting, diarrhea.

Ingestion: dust can cause irritation of mucous membranes of the respiratory system.

4.3 Indication of any immediate medical attention and special treatment needed

Physician makes a decision regarding further medical treatment after thoroughly examination of the injured. Symptomatic treatment.

Section 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: product is not flammable, adapt extinguishing media to the materials gathered in the vicinity.

Unsuitable extinguishing media: water jet – risk of propagation of the flame.

5.2 Special hazards arising from the substance or mixture

During combustion harmful gases consisting of chlorine, calcium, sodium, magnesium, potassium compounds and other unidentified products of thermal decomposition may be produced. Do not inhale combustion products, it may cause health risk.

5.3 Advice for firefighters

Personal protection typical in case of fire. Do not stay in the fire zone without self-contained breathing apparatus and protective clothing resistant to chemicals. In case of fire, cool endangered containers with water spray from the safe distance. Collect used extinguishing media.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Limit the access for the outsiders into the breakdown area, until the suitable cleaning operations are completed. In case of large spills, isolate the exposed area. Ensure that effects of the breakdown are removed only by qualified personnel. Wear personal protective equipment. Avoid direct contact with eyes. Do not inhale dusts of the product. Ensure adequate ventilation.

6.2 Environmental precautions

Do not let the product to enter ground waters, drainage system, sewage and soil. In case of release of large amounts of the product, it is necessary to take appropriate steps to prevent it from spreading into the environment. Notify relevant emergency services.

6.3 Methods and material for containment and cleaning up

Collect spilled product mechanically, avoid dusting (eg. using industrial vacuum cleaner) and place it in properly labelled containers. Treat collected material as waste and pass it for disposal. Clean and ventilate contaminated place.



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6.4 Reference to other sections

Appropriate conduct with waste product – section 13. Personal protection equipment – section 8.

Section 7: Handling and storage

7.1 Precautions for safe handling

Handle in accordance with good occupational hygiene and safety practices. Do not eat, drink or smoke in the workplace. Before breaks and after work wash hands. Ensure adequate ventilation. Avoid eyes and skin contamination. Avoid dust formation. Do not inhale dusts of the product. Wear personal protective equipment. Avoid eyes contamination and prolonged contact with skin.

7.2 Conditions for safe storage, including any incompatibilities

Store in dry, cool and well ventilated place in original containers. Keep away from food, foodstuffs and animal feed. Protect from direct sunlight and moisture. Keep away from incompatible materials (see subsection 10.5).

7.3 Specific end use(s)

No information about uses other than mentioned in subsection 1.2.

Section 8: Exposure controls/personal protection

8.1 Control parameters

There are no occupational exposure limit values at working place for the substances present in the mixture at the Community level. Please check any national occupational exposure limit values in your country.

Legal Basis: Commission Directive 2006/15/EC, 2000/39/EC, 2009/161/EU, 2017/164/EU.

8.2 Exposure controls

Observe good occupational hygiene and safety practices. Do not eat, drink or smoke when using the product. Wash hands thoroughly before breaks and after work. Avoid eyes contamination. Ensure adequate general and/or local ventilation in the workplace. Wear personal protective equipment.

Hand and body protection

Under normal conditions of work is not required. When prolonged contact is possible (eg. during operations connected with removal of leaked product) protective gloves should be worn. Recommended gloves material: nitrile rubber or other material providing sufficient level of protection. In case of short term contact use protective gloves with effectiveness level 2 or higher (permeation time > 30 minutes). In case of long term contact use protective gloves with effectiveness level 6 (permeation time > 480 minutes). Wear protective clothing.

When using protective gloves during work with chemical products, it should be noted that the efficacy levels and corresponding breakthrough times do not indicate actual times of protection at a particular workplace, because the protection can be affected by many factors, e.g. temperature, other substances etc. If there are any signs of degradation, damage or change in appearance (colour, flexibility, shape), it is recommended to replace the gloves with a new pair. Please follow the manufacturer's instructions, not only in terms of gloves' usage, but also in terms of their cleaning, maintenance and storage. It is also important to know how to take off the gloves in order to avoid hands contamination.

Eye protection

Use tight protective goggles if there is a risk of eye contamination.

Respiratory protection

Under normal conditions of use is not required.

Applied personal protective equipment must comply with the requirements of the Regulation 2016/425/EU. The employer is obliged to provide protective equipment relevant to performed activities and in accordance with all quality requirements, including its maintenance and cleaning.

Environmental exposure controls

Avoid release to the environment, do not enter the sewage system. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.



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Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

physical state/form:	solid/powder
colour:	white
odour:	characteristic, weak
odour threshold:	not determined
pH:	8,2 (solution)
melting point/freezing point:	not determined
initial boiling point and boiling range:	not determined
flash point:	not applicable
evaporation rate:	not applicable
flammability (solid, gas):	not applicable, product is not flammable
upper/lower flammability or explosive limits:	not determined
vapour pressure:	not applicable
vapour density:	not applicable
specific gravity:	not determined
solubility(ies):	mixes with water
partition coefficient: n-octanol/water:	not determined
auto-ignition temperature:	not determined
decomposition temperature:	not determined
explosive properties:	not display
oxidising properties:	not display
viscosity:	not applicable

9.2 Other information

No additional test results.

Section 10: Stability and reactivity

10.1 Reactivity

Product is feebly reactive. It does not undergo hazardous polymerization. See also subsections 10.3 and 10.5

10.2 Chemical stability

The product is stable under normal conditions of handling and storage.

10.3 Possibility of hazardous reactions

Hazardous reactions are not known.

10.4 Conditions to avoid

Avoid elevated temperatures, sources of fire and heat. Protect from moisture.

10.5 Incompatible materials

Acids, bases, strong oxidizers, metals.

10.6 Hazardous decomposition products

Not known.

Section 11: Toxicological information

11.1 Information on toxicological effects

Toxicity of the components

calcium chloride [CAS 10043-52-4]

LD ₅₀ (oral, rat)	1000-4000 mg/kg
LD ₅₀ (oral, mouse)	1940 mg/kg
LD ₅₀ (oral, rabbit)	1384 mg/kg



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Toxicity of the mixture

Acute toxicity

Based on available data, the classification criteria are not met.

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Serious eye damage/irritation

Based on available data, the classification criteria are not met.

Respiratory or skin sensitization

Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Carcinogenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Section 12: Ecological information

12.1 Toxicity

Toxicity of the components

calcium chloride [CAS 10043-52-4]

Acute toxicity for fish	LC ₅₀ (96 h): 4630 mg/L/ <i>Pimephales promelas</i> LC ₅₀ (48 h): > 6560 mg/L/ <i>Pimephales promelas</i> LC ₅₀ (24 h): > 6660 mg/L/ <i>Pimephales promelas</i> LC ₅₀ (96 h): 9500 — 11300 mg/L/ <i>Lepomis macrochirus</i> LC ₅₀ (96 h): 13400 mg/L/ <i>Gambusia affinis</i>
Acute toxicity for invertebrates	LC ₅₀ (48 h): 1062 - 2770 mg/L/ <i>Daphnia magna</i> LC ₅₀ (48 h): 1830 mg/L/ <i>Ceriodaphnia dubia</i> EC ₅₀ (96 h): 780 mg/L/ <i>Tubifex tubifex</i> EC ₅₀ (48 h): 1830 mg/L/ <i>Tubifex tubifex</i> EC ₅₀ (24 h): 2260 mg/L/ <i>Tubifex tubifex</i> LC ₅₀ (48 h): 19400 mg/L/ <i>Cyclops abyssorum prealpinus</i> LC ₅₀ (48 h): 11100 mg/L/ <i>Eudiaptomus padanus padanus</i> LC ₅₀ (48 h): 8300 mg/L/ <i>Daphnia hyaline</i> LC ₅₀ (24 h): 44400 mg/L/ <i>Caenorhabditis elegans</i> LC ₅₀ (96 h): 1600 mg/L/ <i>Nitocra spinipes</i>
Chronic toxicity for invertebrates	EC ₅₀ (21 d): 610 mg/L/ <i>Daphnia magna</i> EC ₁₆ (21 d): 320 mg/L/ <i>Daphnia magna</i> LC ₅₀ (21 d): 920 mg/L/ <i>Daphnia magna</i>
Toxicity for algae	EC ₅₀ (72 h): 2900 mg/L/ <i>Pseudokirchneriella subcapitata</i> EC ₅₀ (72 h): > 4000 mg/L/ <i>Pseudokirchneriella subcapitata</i> EC ₅₀ (72 h): 27000 mg/L/ <i>Pseudokirchneriella subcapitata</i> EC ₂₀ (72 h): 1000 mg/L/ <i>Pseudokirchneriella subcapitata</i>



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Toxicity of the mixture

Product is not classified as hazardous for the environment.

12.2 Persistence and degradability

Product is a mixture of inorganic substances – it does not undergo biodegradation. Product undergoes hydrolysis.

12.3 Bioaccumulative potential

No data.

12.4 Mobility in soil

Mobility of the mixture's components depends on their hydrophilic and hydrophobic properties as well as abiotic and biotic conditions of the soil, including its structure, climatic conditions and soil organisms (mainly bacteria, fungi, algae, invertebrates). According to REACH Annex XI, the tests do not need to be carried out because the chlorides dissociate in the water. Chlorides do not adsorb onto solid particles. Cations can be adsorbed on soil particles or form stable inorganic salts with sulphate or carbonate anions, calcium also occurs naturally in the soil.

12.5 Results of PBT and vPvB assessment

Substances contained in the product are not assessed as PBT or vPvB.

12.6 Other adverse effects

Product is not classified as hazardous to the ozone layer. Consider other harmful effects of individual components of the mixture on the environment (eg, endocrine disrupting potential, global warming potential).

Section 13: Disposal considerations

13.1 Waste treatment methods

Disposal methods for the mixture: disposal in accordance with the local legislation. Residues should be stored in original containers. Waste code should be assigned in place of formation.

Disposal methods for used packing: reuse/recycle/eliminate empty containers in accordance with the local legislation. Only completely emptied packaging can be recycled.

Legal basis: Directive 2008/98/EC as amended, 94/62/EC as amended.

Section 14: Transport information

14.1 UN Number

Not applicable, product is not classified as dangerous during air, sea and land transport.

14.2 UN proper shipping name

Not applicable.

14.3 Transport hazard class(es)

Not applicable.

14.4 Packing group

Not applicable.

14.5 Environmental hazards

Not applicable.

14.6 Special precautions for user

Not applicable.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable.



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Section 15: Regulatory information

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

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC as amended.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 as amended.

Commission Regulation (EU) No 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives.

European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste.

Commission Directive 2000/39/EC of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Commission Directive 2006/15/EC of 7 February 2006 establishing a second list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC.

Commission Directive 2009/161/EU of 17 December 2009 establishing a third list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Commission Directive 2000/39/EC.

Commission Directive 2017/164/EU of 31 January 2017 establishing a fourth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC, and amending Commission Directives 91/322/EEC, 2000/39/EC and 2009/161/EU.

Regulation (EU) No 2016/425 of the European Parliament and of the Council of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC.

15.2 Chemical safety assessment

It is not necessary to carry out a chemical safety assessment for the mixture.

Section 16: Other information

Full text of indicated H phrases mentioned in section 3

H319 Causes serious eye irritation.

Abbreviations and acronyms

PBT Persistent, Bioaccumulative and Toxic substance

vPvB very Persistent, very Bioaccumulative substance

Eye Irrit, 2 Eye irritation category 2

Trainings

Before commencing working with the product, the user should learn the Health & Safety regulations, regarding handling chemicals, and in particular, undergo a proper workplace training.

Key literature references and sources of data

This SDS was prepared on the basis of sheets of the individual components, literature data, online databases as well as our knowledge and experience, taking into account current legislation.

Additional information

Classification was based on data on hazardous substances calculation method under the guidance of Regulation 1272/2008/EC (CLP).

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Version: 2.0/EN

Changes: sections: 1-16

Safety Data Sheet made by: „THETA“ Technical Consulting

This SDS annuls and replaces all previous versions



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The information above is based on a current available data concerning the product, but also on the experience and knowledge in this field of the producer. They are neither a quality description of the product nor a guarantee of particular features. They are to be treated as aid to safety in transport, storage and usage of the product. That does not free the user from the responsibility of improper usage of the information above and also of improper compliance with the law norms in the field.