SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Trade name:	Stone Fix
Chemical name:	-
EC No:	-
CAS No:	-
Index No:	-
REACH No:	-
UFI No:	S800-G00Y-700J-T4X7

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

1.2.1. Relevant identified uses

Rocks joining in marine fishkeeping.

1.2.2. Uses advised against

None

1.3. Details of the supplier of the safety data sheet

Aquaforest sp. z o.o. sp. k.
ul. Starowiejska 18
32-800 Brzesko, POLAND
info@aquaforest.eu
Tel.: +48 14 691 79 79

1.4. Emergency telephone number

Emergency number: 112
Manufacturer number: +48 14 691 79 79 (8.00 am-4.00 pm)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

According to the Regulation (EC) No 1272/2008:

Product is classified as hazardous

Skin Irrit. 2	H315	Causes skin irritation.
Eye Dam. 1	H318	Causes serious eye damage.
STOT SE 3	H335	May cause respiratory irritation.

Physical hazards:	No hazard
Health hazards:	Causes skin irritation, serious eye damage,may cause respiratory irritation
Environmental hazards:	No hazard

2.2. Label elements

According to the Regulation (WE) 1272/2008:
Pictograms:

Signal word:
DANGER

Hazard statements:

H315	Causes skin irritation.
H319	Causes serious eye damage.
H335	May cause respiratory irritation.

Precautionary statement:

P102	Keep out of reach of children.
P280	Wear protective gloves / eye protection.
P260	Do not breathe dust.
P305 + P351 + P338	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P313	Get medical advice/attention.
P302 + P352	IF ON SKIN: Wash with plenty of water.

Additional labelling requirements.
Contains: portland cement.

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

Product is a mixture

Name	Identifiers		Concentration [% w/w]	CLP Classification
portland cement*	CAS:	65997-15-1	20 – 40	Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335
	EC:	266—043—4		
	Index No:	-		
	Reg. No:	-		

* substance with possible TLV in working environment
The product also contains calcium carbonate and silica, which are not classified as hazardous, but for which occupational exposure limits might have been set. Check relevant national regulation.
Full text of H phrases is provided in Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Contamination of the skin
Take off contaminated clothes. Wash contaminated skin with water and soap and rinse thoroughly. Do not use solvents or thinners. Consult a doctor if disturbing symptoms occur.

Contamination of the eyes
Protect non—irritated eye. Rinse contaminated eyes with water for at least a few minutes. Avoid strong stream of water — risk of damage of the cornea. Contact an ophthalmologist if disturbing symptoms occur.

Inhalation
Remove the victim to fresh air. Keep warm and calm. Consult a doctor if disturbing symptoms occur.

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

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

Acute symptoms

Inhalation:	irritation, cough, sneezing, headaches, throat and nose pain, hoarseness.
Skin contamination:	possible redness, dryness, irritation.
Eye contamination:	irritation, tearing, pain, redness, serious eye damage.
Ingestion:	possible irritation of mucous membranes of gastrointestinal tract with following effects: abdominal pains, nausea, vomiting, diarrhoea, there is a possibility of blocking of gastrointestinal tract.

Delayed symptoms – no data
Effects of exposure – No data

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
Extinguishing powder, water spray, carbon dioxide, extinguishing foam. Adapt extinguishing media to the materials gathered in the vicinity.

Unsuitable extinguishing media:
waterjet — risk of propagation of the flame.

5.2. Special hazards arising from the substance or mixture

During combustion harmful gases consisting of carbon oxides 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. Cool containers endangered with fire with water fog from a safe distance. Do not let extinguishing media residues to reach sewage and surface waters.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:
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. Avoid direct contact with skin and eyes. Ensure adequate ventilation. Wear personal protective equipment. Do not step on spilled material.

For emergency responders:
Follow instructions, use appropriate personal protection measures, See Section 8. Inform about accident, call appropriate services.

6.2. Environmental precautions

Do not let the product to enter ground waters, drainage system, sewage and soil. Notify relevant emergency

services.

6.3. Methods and material for containment and cleaning up

Collect spilled product mechanically and place it in properly labelled container. Avoid dusting. Treat collected material as waste and pass for disposal. Clean and ventilate contaminated area.

6.4. Reference to other sections

Personal protective equipment – section 8
Waste disposal – section 13

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Handle in accordance with good occupational hygiene and safety practices. Avoid eyes and skin contamination. Do not smoke. Before breaks and after work wash hands. Use as intended. Keep unused containers tightly closed. Wear personal protective equipment. Do not reuse emptied containers. Do not inhale product dusts.

7.2. Conditions for safe storage, including any incompatibilities

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

7.3. Specific end use(s)

No information about uses other than those mentioned in subsection 1.2.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

Occupational Exposure Limit Value:
Please check national occupational exposure limit values in your country for portland cement (CAS 65997-15-1)

DNELs (Derived No Effect Levels) available for mixture components:

Not applicable

Exposure Route	WORKERS				GENERAL POPULATION			
	Systemic Effects		Local Effects		Systemic Effects		Local Effects	
	Long-term	Acute	Long-term	Acute	Long-term	Acute	Long- term	Acute
Inhalation	-	-	-	-	-	-	-	-
Dermal	-	-	-	-	-	-	-	-
Oral					-	-	-	-
Eye	-				-			

8.2. Exposure controls

Appropriate engineering 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 and skin contamination. Ensure adequate general and/or local ventilation in the workplace. It is recommended to install safety eyewash in the vicinity of the workplace.

Individual protection measures
Respiratory protection
Under normal conditions of use is not required. In emergency situations wear adequate respiratory protection equipment.

Hand and body protection:
Wear protective gloves resistant to chemicals. 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) and thickness > 0,1 mm.

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
Wear tightly fitting protective glasses.

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.

Protective equipment standards:
EN 140:2001 Respiratory protective devices – Half masks and quarter masks – Requirements, testing, marking.
EN 143:2004 Respiratory protective devices – Particle filters – Requirements, testing, marking.
EN 149+A1:2010 Respiratory protective devices – Filtering half masks to protect against particles – Requirements, testing, marking.
EN 14387+A1:2010 Respiratory protective devices – Gas filter(s) and combined filter(s) – Requirements, testing, marking.
EN 374-1:2017-01 Protective gloves against dangerous chemicals and micro-organisms – Part 1: Terminology and performance requirements for chemical risks.
EN 374-2:2015-04 Protective gloves against dangerous chemicals and micro-organisms – Part 2: Determination of penetration resistance.
EN 16523-1+A1:2018-11 Determination of material resistance to permeation by chemicals – Part 1: Permeation by potentially hazardous liquid chemicals under conditions of continuous contact.
EN 166:2005 Personal eye protection. Specifications.
EN 14605+A1:2010 Protective clothing against liquid chemicals – Performance requirements for clothing with liquid-tight (Type 3) or spray-tight (Type 4) connections, including items providing protection to parts of the body only (Types PB [3] and PB [4]).
EN ISO 20344:2012 Personal protective equipment – Test methods for footwear

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.

PNECs (Predicted No Effect Concentrations) for mixture components:

Not applicable

Environment compartment	**PNEC**
Freshwater:	-
Intermittent releases (freshwater):	-
Marine water:	-
Intermittent releases (marine water):	-
Sewage treatment plant:	-
Sediment (freshwater):	-
Sediment (marine water):	-

Air: -
Soil: -
Hazard for Predators: -

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state	Solid, powder
Colour	Gray
Odour	Characteristic
Melting point/freezing point	Not determined
Boiling point or initial boiling point and boiling range	Not determined
Flammability	Not flammable
Lower and upper explosion limit	Not applicable
Flash point	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	Not determined
pH	Not applicable
Kinematic viscosity	Not applicable
Solubility	Insoluble in water
Partition coefficient n-octanol/water (log value)	Not determined
Vapour pressure	Not determined
Density and/or relative density	1,17-1,43 g/cm^3
Relative vapour density	Not applicable
Particle characteristics	Not determined

9.2. Other information

Information with regard to physical hazard classes
No additional data regarding physical hazards.

Other safety characteristics
No additional data.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity
Product is reactive. 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
Possible exothermic reactions with evolution of carbon dioxide.

10.4. Conditions to avoid
Avoid sources of heat, fire and direct sunlight, moisture.

10.5. Incompatible materials
Strong acids, strong oxidizers.

10.6. Hazardous decomposition products
Not known.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Product was not tested for toxicological properties. Hazard classification was conducted according to regulation1272/2008 by calculation methods based on hazardous ingredients content.

Acute toxicity:
Acute Oral Toxicity: product does not met criteria for classification
Acute Dermal Toxicity: product does not met criteria for classification
Acute Inhalation Toxicity: product does not met criteria for classification
Skin corrosion/irritation:
Causes skin irritation.
Serious eye damage/irritation:
Product causes serious eye damage.
Respiratory or skin sensitisation:
Product does not met criteria for classification
Germ cell mutagenicity:
Product does not contain any compounds with germ cell mutagenicity hazard
Carcinogenicity:
Product does not contain any compounds with carcinogenic hazard
Reproductive toxicity:
Product does not contain any compounds with reprotoxic hazard
STOT-single exposure:
Product may cause respiratory irritation.
STOT-repeated exposure:
Product does not met criteria for classification
Aspiration hazard:
Product does not met criteria for classification

11.2. Information on other hazards

No data

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Product was not tested for environment hazards. According to regulation 1272/2008 product is not classified as hazardous to environment.

Product does not met criteria for classification

12.2. Persistence and degradability

Product does not undergo biodegradation.

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

Product cures in contact with moisture and water, product is not mobile in soil.

12.5. Results of PBT and vPvB assessment

Based on data available product in not PBT/vPvB.

12.6. Endocrine disrupting properties

No information available.

12.7. 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).

Ecotoxicological data for hazardous components:

Portland cement (CAS: 65997-15-1)

Acute toxicity

Trophic level	Value	Species	Additional data
Fish	LC50 >10000 mg/l	*Danio rerio*	96 h, OECD 203
Invertebrates	EC50 >10000 mg/l	*Daphnia magna*	48 h, OECD 202
Algae	EC50 440 mg/l	*Pseudokirchnerella subcapitata*	72 h, ISO 8692

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues/unused products:
store product in original container. Do not let product to enter sewage system. This waste should be classified as hazardous. Waste code should be assigned in place of formation.

Disposing of the packaging:
reuse/recycle/liquidate empty containers in accordance with the local legislation. Send disposable packaging to an utilization. Do not mix with other waste. This waste should be classified as hazardous.

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

SECTION 14: TRANSPORT INFORMATION

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

14.1. UN number or ID number

ADR	IMDG Code	IATA DGR
-	-	-

14.2. UN proper shipping name

ADR	IMDG Code	IATA DGR
-	-	-

14.3. Transport hazard class(es)

ADR	IMDG Code	IATA DGR
-	-	-

14.4. Packing group

ADR	IMDG Code	IATA DGR
-	-	-

14.5. Environmental hazards

ADR	IMDG Code	IATA DGR
-	-	-

14.6. Special precautions for user

ADR	IMDG Code	IATA DGR
-	-	-

14.7. Maritime transport in bulk according to IMO instruments

-

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 from 18.12.2006 concerning the Registration, Evaluation, Authorization and Restriction from Chemicals (REACH)

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

Regulation (EU) 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

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

Directive 2012/18/EU of the European Parliament and of the Council of 4 July 2012 on the control of major-accident hazards involving dangerous substances, amending and subsequently repealing Council Directive 96/82/EC

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

European agreement concerning international road transport of dangerous products (ADR)

15.2. Chemical safety assessment

Chemical safety assessment was not conducted for the product.

SECTION 16: OTHER INFORMATION

Explanation of abbreviations and acronyms used in safety data sheet

Skin Irrit. 2, H315 Causes skin irritation.
Eye Irrit. 2, H319 Causes serious eye irritation.
STOT SE 3, H335 May cause respiratory irritation.

ADR European Agreement concerning the International Carriage of Dangerous Goods by Road under framework Directive 94/55/EC, as amended
ATE Acute Toxicity Estimate: acute toxicity values are expressed as (approximate) LD50 (oral, dermal) or LC50 (inhalation) values or as ATEs.
CAS Chemical Abstracts Service
CPR Cardio-pulmonary resuscitation
DNEL derived no-effect level
EC number unique seven-digit identifier assigned to substances for regulatory purposes withing European Inventory of Existing Commercial Chemical Substances (EINECS)
EC50 median effective concentration
EINECS European Inventory of Existing Commercial Chemical Substances
GHS (United Nations) Globally Harmonised System of Classification and Labelling of Chemicals: it defines the criteria internationally agreed by the United Nation Economic and Social Council (UN ECOSOC) for the classification and labelling of hazardous substances and mixtures
ICAO International Civil Aviation Organisation, refers to Annex 18 to the Convention on International Civil

Aviation The Safe Transport of Dangerous Goods by Air
IMDG International Maritime Dangerous Goods Code for the transport of dangerous goods by sea
IUPAC International Union of Pure and Applied Chemistry
LOEC Lowest Observed Effect Concentration
LD50 Lethal Dose; dose at which 50% of the animals will be expected to die.
LC50 Lenthal Concentration; standard measure of the toxicity of the surrounding medium that will kill half of the sample population of a specific test-animal in a specified period through exposure via inhalation
NOEC No Observed Effect Concentration
M factor Multiplying factor
NICNAS (Australia) National Industrial Chemicals Notification and Assessment Scheme
NIOSH (United States) National Institute of Occupational Safety and Health
OECD Organisation for Economic Cooperation and Development
OSHA (United States) Occupational Safety and Health Administration
PBT Persistent, bioaccumulative and toxic
PNEC Predicted No Effect Concentration
(Q)SAR (Quantitative) Structure-Activity Relationships
RTGD (United Nations) Recommendations on the Transport of Dangerous Goods
RTECS Registry of Toxic Effects of Chemical Substances
SVHC Substance of Very High Concern
Toxline Toxicology Literature Online database
TOXNET Toxicology Data Network
UFI Unique Formula Identifier
US EPA United States Environmental Protection Agency
vPvB very Persistent and very Bioaccumulative

This SDS was prepared in accordance with Commission Regulation (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

Classification of the product was based on the content of ingredients and according to Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008.

Training
Before handling with the product, the user should be familiar with the principles of health and safety regarding the handling of chemicals, and in particular undergo appropriate workplace training.

References to key literature and data sources
The safety data sheet for this product has been create on the basis of a safety data sheets of product components, literature data, online databases and possessed knowledge and experience, taking into account the currently applicable to actual legislation.

Recommendation and restriction of use:
Use according to label instructions.

Changes from the previous version of the safety data sheet:
Version 1.1 – adaptation to requirements of regulation 2020/878, minor editorial changes

The above information is based on currently available data characterizing the product as well as the experience and knowledge possessed by the manufacturer in this topic. It do not constitute a quality description of the product or promise of specific properties. It should be treated as an aid for safe handling during transport, storage and use of the product. This does not release the user from liability for incorrect use of the above information and from compliance with all legal regulations in this area.

END OF SAFETY DATA SHEET