according to Regulation (EU) 2020/878 of 18 June 2020



## **MULTIELASTIK, POWERBETON**

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### SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Product name: MULTIELASTIK, POWERBETON

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

Identified uses: Tile adhesive - Product for industrial, craft and private use intended to be mixed with water for rapid use for construction purposes.

Uses advised against: All uses other than those mentioned above.

## 1.3. Details of the supplier of the safety data sheet

Stegu sp. z o.o. ul. Dworcowa 8 46-025 Jełowa

### 1.4. Emergency telephone number

Emergency number: 112

#### **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

## Classification according to Regulation (EC) No 1272/2008 (CLP)

Eye Dam. 1

H318 Causes serious eye damage.

Skin Irrit. 2

H315 Causes skin irritation.

Skin Sens. 1

**H317** May cause an allergic skin reaction.

STOT SE 3

H335 May cause respiratory irritation.

## 2.2. Label elements

Labeling according to Regulation (EC) No 1272/2008

Signal word: DANGER

**Pictograms:** 



## Substances to be listed on the label

Contain: Portland cement

## **Hazard statements**

H318 Causes serious eye damage.

**H315** Causes skin irritation.

**H317** May cause an allergic skin reaction.

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**H335** May cause respiratory irritation.

#### **Precautionary statements**

General

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

Prevention

**P261** Avoid breathing dust.

**P271** Use only outdoors or in a well-ventilated area.

**P280** Wear protective gloves/protective clothing/eye protection.

Response

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.

Storage none Disposal

**P501** Dispose of contents/container to properly labeled waste containers in accordance

with local regulations.

### 2.3. Other hazards

Endocrine disrupting properties: no data PBT and vPvB assessment results:

PBT: Not applicable. vPvB: Not applicable

Upon contact of the dry mixture with water, a strongly alkaline solution is formed. The strong alkalinity of wet mortar can cause skin and eye irritation. Especially in case of prolonged exposure (e.g. kneeling in wet mortar) serious skin injuries may occur due to the alkalinity

First aid supplies should be available on the workplace premises to provide immediate assistance.

The proportion of respirable crystalline silicon oxides is less than 1%. The product therefore does not need to be labelled. The use of respiratory protective equipment is recommended nonetheless.

Dust from the dry mixture can irritate the respiratory tract. Repeated inhalation of larger amounts of dust increases the risk of developing lung diseases.

The mixture has a low chromium content and is therefore non-sensitising. After mixing with water, the soluble chromium(VI) content is a maximum of 0.0002% of the dry weight of the resulting cement. A prerequisite for the effectiveness of the chromium reducer is proper storage in a dry place and observance of the maximum shelf life.

## **SECTION 3: Composition/information on ingredients**

#### 3.2 Mixture

Chemical nature: Mixture of inorganic binders, fillers and non-hazardous admixtures.

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Name of substance	Identifier	Classification 12	272/2008	% weight
Portland cement <sup>[2]</sup>	Index: CAS: 65997-15-1 EC: 266-043-4 REACH: 02-2119682167-31	Skin Irrit. 2 Eye Dam. 1 Skin Sens. 1 STOT SE 3	H315 H318 H317 H335	< 40

#### **Notes**

The full meaning of the risk phrases H included in the section 16

- [1] Specific concentration limits
  - -
- [2] Substance for which there are national occupational exposure limit values
- [3] Substance with a Union workplace exposure limit
- [4] SVHC: substances included in the list established in accordance with Article 59 (1)

#### **SECTION 4: First aid measures**

### 4.1. Description of first aid measures

#### Inhalation:

If inhalation of vapors occurs, remove casualty to fresh air. Provide the person with warmth and peace. In the event of loss of consciousness, lay down in a recovery position and seek medical attention immediately. If symptoms persist, seek medical attention.

#### Ingestion:

Do not induce vomiting. If swallowed, rinse mouth with water. In the event of loss of consciousness, lay down in a recovery position and seek medical attention immediately.

If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Provide the person with warmth and peace Immediately seek medical advice and present label/safety data sheet of the preparation.

### Eye contact:

Immediately flush eyes with large amounts of water for at least 20 minutes while holding the eyelids open to ensure that the entire surface is flushed. Do not use high current, risk of (mechanical) damage to the cornea. Seek medical advice.

## Skin contact:

Remove contaminated clothes and shoes. Wash skin with plenty of soap and water. If symptoms persist, seek medical advice.

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

<u>After inhalation</u>: chronic inflammation of the mucous membranes of the nose, throat and larynx, bronchial asthma, pneumoconiosis and emphysema.

Skin contact; Irritation, dry skin.

**Eye contact**: may damage the cornea of the eye.

Ingestion: nausea, burns to the oral cavity and oesophagus.

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

First aid supplies should be available on the workplace premises to provide immediate assistance.

The decision on how to proceed is made by the doctor after assessing the condition of the injured person.

## **SECTION 5: Firefighting measures**

## 5.1. Extinguishing media

## Suitable extinguishing media:

Water mist, foam, CO2 fire extinguishers, ABC or BC dry powder fire extinguishers and other commonly used fire extinguishers, depending on the environment. Use appropriate extinguishing media to extinguish fires in the vicinity.

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### Unsuitable extinguishing media:

Water jet

## 5.2. Special hazards arising from the substance or mixture

The product is not flammable. In the event of a fire, toxic products of combustion of the packaging may be released or decomposition products, e.g. carbon oxides (CO, CO2) and other decomposition products. Contact of the product with water a strongly alkaline solution is formed.

## 5.3. Advice for firefighters

Protective equipment: Wear self-contained respiratory protective device. Use water spray to keep fire-exposed containers cool.

Do not allow run-off from fire fighting to enter drains and waterholes.

#### **Additional information**

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations. Appropriate breathing apparatus may be required.

#### SECTION 6: Accidental release measures

## 6.1. Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Avoid contact with cloths, eyes and skin. Wear appropriate protective equipment (Use protective clothing, gloves, protection of the respiratory system against dust). Avoid direct contact with the released product. all sources of ignition. Keep all persons not equipped with personal protection equipment away. Do not allow the unnecessary and unsecured personnel to enter.

In case of a discharge of a significant volume of the mixture, warn its users and order all bystanders to leave the contaminated area.

#### 6.2. Environmental precautions

Product hardens on contact with water.

Prevent environmental contamination. Protect drains.

In case of serious contamination of soil, watercourse or sewage system, notify the appropriate authorities.

## 6.3. Methods and material for containment and cleaning up

Cover the scattered material and prevent any further raising of dust.

Collect mechanically, e.g. with an industrial hoover fitted with a filter (e.g. HEPA type). Transfer for disposal or recovery. Do not apply water. The material hardens on contact with water and can be disposed of as construction debris approximately 10-12 hours after drying.

## 6.4. Reference to other sections

Section 8 in order to obtain information on personal protective equipment

Section 13 in order to obtain information on waste disposal

## SECTION 7: Handling and storage

## 7.1. Precautions for safe handling

# Recommendations for handling the mixture

Provide adequate ventilation.

Avoid contact with eyes and skin.

The usual precautionary measures when handling chemicals must be observed.

Avoid exposure - read instructions for use (safety data sheet) before use.

Don't consume.

Ensure adequate ventilation.

Avoid generating dust.

Avoid inhaling dust.

## General industrial health and safety regulations

Do not eat, drink or smoke when using this product.

Wash hands thoroughly after handling.

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Replace contaminated clothing.

Wash contaminated clothing before reusing.

## 7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers in cool, dry and well-ventilated places.

Protect from sources of heat, ignition and direct sunlight.

Store only in the original packaging.

Keep away from food, drink and animal feedingstuffs.

Shelf life: 12 months from date of manufacture.

Store only in the original container. Follow the instructions on the label.

Do not allow packaging to be damaged.

Follow the manufacturer's strict recommendations and carry out the work in accordance with the rules of the construction trade.

If stored with other materials, the product can be stored only with materials of the same hazard classification. Storage temperature: 5 - 25°C.

Protect from moisture.

#### 7.3. Specific end use(s)

The product consists of cement with reduced Cr (VI) content. In cements with a reduced Cr (VI) content in accordance with the regulations outlined in section 15, the properties of the reduced content change over a certain period of time. Therefore, the product packaging and/or transport documents should contain information on the reducer's operating time. The conditions and storage period should be suitably adjusted to maintain the properties of the reducer and to keep the soluble Cr (VI) content below the level of 0.0002% calculated on the total dry weight of the cement according to EN 196-10. Cement contained in the product reacts with water.

## **SECTION 8: Exposure controls/personal protection**

### 8.1. Control parameters

Ingredients with limit values that require monitoring at the workplace

Name of the chemical	Limit values					
agent	CAS	Lor	Long-term		Short-term	
		$mg/m^3$	ppm	$mg/m^3$	ppm	
Portland cement	65997-15-1					
inhalable dust		10				
respirable dust		4				

DNEL - there is no data available for the product

### For cement

DNEL inhalation (8 hours): 2 mg/m3

DNEL skin Not applicable

**DNEL** inclusion Not mentioned

The DNEL refers to respirable dust. The tool used for risk assessment (MEASE) referred to the respirable fraction

### 8.2. Exposure controls

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#### **Appropriate engineering controls:**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Emissions from ventilation systems and process equipment should be inspected to determine their compliance with the requirements of environmental laws. It is recommended to follow basic rules for the use of machinery and equipment.

### Personal protective equipment:

#### General protective and hygienic measures:

Do not eat, drink, smoke or sniff while working. Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.

### Eye protection



Wear safety goggles in accordance with the EN 166 standard. If dust is formed: tightly fitting safety goggles. The need for use and choice of appropriate personal protective equipment should take into account the type of hazard presented by the product, the conditions in the workplace and the handling of the product.

#### Hand protection:



The selected protective gloves have to meet the requirements of EN 374

Gloves must always be replaced if they are damaged or if the breakthrough time (usability) is exceeded. Recommended glove material: nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) and others.

Breakthrough time (maximum wearing time): >240 min

Prepare gloves for a change.

The need for use and choice of appropriate personal protective equipment should take into account the type of hazard presented by the product, the conditions in the workplace and the handling of the product

### **Body Protection**

Wear suitable protective clothing when working

#### **Respiratory protection**

Use respiratory protection where ventilation is insufficient or exposure is prolonged e.g. Dust respirator, type recommended filter type: A-Filter P2 filter type A-P. However, if the permissible dust concentrations in the workplace are exceeded, respiratory protection in the form of a mask or a respirator with a dust-absorbing respirator must be used in an emergency.

## Limitation and monitoring of environmental exposure

Emission from ventilation systems and process equipment should be checked for compliance with environmental regulations. It is advisable to observe the basic rules for the use of machines and devices.

## **Environmental exposure controls**

Do not discharge into drains and groundwater. Emissions from ventilation systems and process equipment should be inspected to determine their compliance with the requirements of environmental laws.

#### General health and safety guidelines

Follow good personal hygiene practices.

## **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

**Physical state** 

Powder of homogeneous colour, free of clumps and mechanical impurities

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Colour Gray

Odour Characteristic Melting point/freezing point > 1250°C (cement) No data available

Boiling point or initial boiling point and boiling

**Flammability** No data available Lower and upper explosion limit No data available No data available Flash point **Auto-ignition temperature** No data available **Decomposition temperature** No data available

На 10-13 after mixing with water, water to product ratio

1:2, at 20°C (cement)

Kinematic viscosity No data available Solubility Miscible with water Partition coefficient n-octanol/water (log value) No data available Vapour pressure No data available Density and/or relative density No data available **Relative vapour density** No data available

9.2. Other information

Information with regard to physical hazard classes

No data available

Other safety characteristics

No data available

## **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

When stored and used correctly, the mixture has no chemical reactivity.

#### 10.2. **Chemical stability**

Wet cement is alkaline, incompatible with acids, ammonium salts, aluminium and other base metals. Cement dissolves in hydrofluoric acid producing a corrosive gas (silicon tetrafluoride). Cement reacts with water forming silicates and calcium hydroxide.

#### 10.3. Possibility of hazardous reactions

Does not cause hazardous reactions.

#### 10.4. **Conditions to avoid**

Protect from overheating, sunlight and frost. Avoid storing outside the recommended temperature range, protect from humidity, do not allow to freeze. The product reacts with water and hardens. Application temperature: +5 to +25°C.

#### 10.5. **Incompatible materials**

Wet mixture is alkaline and reacted with the acid, ammonium salts, aluminum and other non-precious metals.

#### 10.6. **Hazardous decomposition products**

No data

## **SECTION 11: Toxicological information**

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

#### **Acute toxicity**

Acute oral toxicity:

Portland cement clinker CAS 65997-15-1

 $LD_{50}$  Oral > 2,000 mg/kg (Mouse)

 $LD_o$  (non-toxic) dermal > 2,000 mg/kg (rabbit)

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LD<sub>o</sub> (non-toxic) inhalation 5 mg/m3 (rat)

#### Skin corrosion/irritation

Causes skin irritation.

#### Serious eye damage/irritation

Causes serious eye damage.

### Respiratory or skin sensitisation

May cause an allergic skin reaction.

#### 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

May cause respiratory irritation.

### 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.

## 11.2. Information on other hazards

#### **Endocrine disrupting properties**

No data

#### Other information

In case of contact with eyes: During in vitro tests, Portland cement clinker showed different strong effects on the cornea

The calculated 'irritation index' is 128. Direct contact with the cement can lead to corneal damage through mechanical action, irritation or inflammation. Direct contact with larger quantities of dry or wet cement can have effects ranging from mild eye irritation to visual damage and blindness.

### In case of contact with skin:

Prolonged exposure to cement dust entering the lungs with values exceeding the limits for the workplace can lead to coughing, shortness of breath and chronic obstructive airway changes. No chronic effects were observed at low concentrations.

Cement can worsen existing skin, eye and respiratory diseases, such as emphysema or asthma.

Repeated inhalation of larger amounts of dust increases the risk of developing lung diseases.

Some people may develop rash on the skin after contact with the cement. They are caused by the pH value (irritant dermatitis) or by immune reactions after contact with soluble chromium(VI) (allergic dermatitis).

#### **SECTION 12: Ecological information**

## 12.1. Toxicity

#### **Acute toxicity**

Portland cement clinker CAS 65997-15-1

LC<sub>50</sub> mg/l (Daphnia Magma) (low effect [6,8])

mg/l (algae - Selenastrum coli) (low effect [7,8])

mg/l (sediments) (minor effect [9])

## 12.2. Persistence and degradability

Product is not biodegradable.

### 12.3. Bioaccumulative potential

No information available.

## 12.4. Mobility in soil and water

Product is not mobile in soil. The mixture reacts alkaline with moisture and hardens.

# 12.5. Results of PBT and vPvB assessment

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No data

#### 12.6. **Endocrine disrupting properties**

Not applicable

#### 12.7. Other adverse effects

However, the release of larger quantities of cement into the water may lead to an increase in the pH value and thus may be toxic to aquatic organisms under certain conditions.

### **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

#### **Product:**

Dispose of in accordance with current regulations. Do not store with municipal waste. Collect dry, store in labelled containers and use up if possible, taking into account maximum storage time, or mix residue with water while avoiding any contact with skin and exposure to dust. Leave wet products or product sludge to cure and, once cured, dispose of in accordance with local and official regulations.

## **Recommendation:**

Disposal of the cured product such as concrete waste and concrete slurry. Waste code according to the Waste List Ordinance depending on the origin:

**16 03 03\*** inorganic wastes containing dangerous substances

17 09 04 mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03

15 01 01 paper and cardboard packaging

HP4 Irritant — Skin irritation and eye damage

HP5 Specific Target Organ Toxicity (STOT)/Aspiration Hazard

HP13 sensitizing

### **SECTION 14: Transport information**

14.1.	UN number or ID number	not applicable
14.2.	UN proper shipping name	not applicable
14.3.	Transport hazard class(es)	not applicable
	Label no. :	not applicable
14.4.	Packing group	not applicable
14.5.	Environmental hazards	not applicable
14.6.	Special precautions for user	Always transport in closed containe

Always transport in closed containers, which are kept vertically and sealed. Make sure that the people transporting the product know what to do in the event

of an accident. not applicable

#### 14.7. Maritime transport in bulk according to IMO instruments

# **Overland transport**

ADR

Limited quantities (LQ) not applicable Transport category not applicable Tunnel restriction code not applicable

## **SECTION 15: Regulatory information**

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

#### **European Union regulations:**

- Regulation (EC) No 1272/2008 (CLP) 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 (REACH).
- REGULATION (EC) No 1907/2006 OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation 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.
- 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)

## 15.2. Chemical safety assessment

No chemical safety assessment of the mixture has been performed.

## **SECTION 16: Other information**

## Full text of H-phrases mentioned in section 3:

H315 Causes skin irritation.

**H317** May cause an allergic skin reaction.

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

#### Training

Before handling the product, the user should become familiar with the health and safety regulations for handling chemicals and, in particular, receive appropriate training. Persons involved in the transport of dangerous goods under the ADR agreement should receive appropriate training for their duties (general training, on-the-job training and safety training.

#### **Abbreviations and Acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

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

ICAO: International Civil Aviation Organization

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

PP: Severe Marine Pollutant

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

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

## **Recommended Usage and Limitations**

Existing national and local laws regarding chemicals must be observed.

#### Note to readers

The product described in the safety data sheet should be stored and used in accordance with good industrial practices and in compliance with all applicable legal regulations.

The information contained in the safety data sheet is based on the current state of knowledge and is intended to describe the product in terms of health, safety and environmental regulations. It should not be considered a guarantee of any specific product properties.

We cannot make any representations or warranties regarding the accuracy or completeness of any information provided or the quality or specifications of any products, substances or mixtures discussed herein.

The user is responsible for creating conditions for the safe use of the product and for the consequences of its misuse.

Przedsiębiorstwo EKOS S.C.

according to Regulation (EU) 2020/878 of 18 June 2020



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