

# SAFETY DATA SHEET

according to Commission Regulation (EU) 2020/878 as amended



## RAKO GF BIO

Creation date	2017.03.20	Version	3
Revision date	2023.07.31		

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

<b>1.1. Product identifier</b>	RAKO GF BIO
Substance / mixture	mixture
UFI	K0DC-70V4-P20R-T8PC
<b>1.2. Relevant identified uses of the substance or mixture and uses advised against</b>	
Mixture's intended use	Dry-mix mortar for domestic and professional use.
Mixture uses advised against	not available
EuPCS	PC-CON-4
<b>1.3. Details of the supplier of the safety data sheet</b>	
<b>Manufacturer</b>	
Name or trade name	Cemix Hungary Kft.
Address	8200 Veszprém Házgyári út 9., Hungary
Phone	+36 88 590 500
E-mail	vevoszolgalat@cemix.hu
Web address	www.cemix.hu
<b>1.4. Emergency telephone number</b>	
International emergency number: 112; Hungarian Poison Center (ETTSZ): +36 80 201-199 (0-24)	

### SECTION 2: Hazards identification

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

##### Classification of the mixture in accordance with Regulation (EC) No 1272/2008

The mixture is classified as dangerous.

Skin Irrit. 2, H315  
Skin Sens. 1B, H317  
Eye Dam. 1, H318  
STOT SE 3, H335

Full text of all classifications and hazard statements is given in the section 16.

##### Most serious adverse effects on human health and the environment

Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. May cause respiratory irritation.

#### 2.2. Label elements

##### Hazard pictogram



##### Signal word

Danger

##### Hazardous substances

Portland cement

##### Hazard statements

H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H318 Causes serious eye damage.  
H335 May cause respiratory irritation.

##### Precautionary statements

P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.  
P280 Wear protective gloves/protective clothing/eye protection.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 Immediately call a POISON CENTER or doctor/physician.  
P302+P352 IF ON SKIN: Wash with plenty of water and soap.  
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
P261 Avoid breathing dust.  
P501 Dispose of contents/container to according to applicable regulations.

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### 2.3. Other hazards

The mixture does not contain any substance meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

The mixture does not contain any substance identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### Chemical characterization

Mixture of substances and additives specified below.

**Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment**

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
CAS: 1317-65-3 EC: 215-279-6	Limestone	10-70		1
CAS: 65997-15-1 EC: 266-043-4	Portland cement	25-40	Skin Irrit. 2, H315 Skin Sens. 1B, H317 Eye Dam. 1, H318 STOT SE 3, H335	1
CAS: 544-17-2 EC: 208-863-7	Calcium formate	1-2	Eye Dam. 1, H318	
CAS: 68475-76-3 EC: 270-659-9	Flue dust, portland cement	1-2	Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Dam. 1, H318 STOT SE 3, H335	
Index: 022-006-00-2 CAS: 13463-67-7 EC: 236-675-5	Titanium dioxide	<1	Carc. 2, H351 (inhalation)	1, 6
CAS: 1305-62-0 EC: 215-137-3	Calcium hydroxide	<0,05	Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335	1
Index: 011-002-00-6 CAS: 1310-73-2 EC: 215-185-5	Caustic soda	<0,01	Skin Corr. 1A, H314 Specific concentration limit: Skin Corr. 1B, H314: 2 % ≤ C < 5 % Skin Corr. 1A, H314: C ≥ 5 % Eye Irrit. 2, H319: 0,5 % ≤ C < 2 % Skin Irrit. 2, H315: 0,5 % ≤ C < 2 %	1
Index: 024-001-00-0 CAS: 1333-82-0 EC: 215-607-8	Chromium (VI) trioxide	<0,00008	Ox. Sol. 1, H271 Acute Tox. 3, H301, H311 Skin Corr. 1A, H314 Skin Sens. 1, H317 Acute Tox. 2, H330 Resp. Sens. 1, H334 Muta. 1B, H340 Carc. 1A, H350 Repr. 2, H361f STOT RE 1, H372 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1) Specific concentration limit: STOT SE 3, H335: C ≥ 1 %	1, 2, 3 ,4, 5

#### Notes

- 1 Substance with a Union workplace exposure limit.
- 2 Substance of very high concern - SVHC.
- 3 The substance is included in Annex XIV of the REACH Regulation
- 4 The use of the substance is restricted by Annex XVII of REACH Regulation

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- 5 Acute toxicity estimate (ATE): oral 100 mg/kg; dermal 300 mg/kg; inhalation (gas) 100 ppmV; inhalation (vapours) 0,5 mg/l; inhalation (dust/mist) 0,05 mg/l
- 6 The classification as a carcinogen by inhalation applies only to mixtures in powder form containing 1 % or more of titanium dioxide which is in the form of or incorporated in particles with aerodynamic diameter  $\leq 10 \mu\text{m}$ .

Full text of all classifications and hazard statements is given in the section 16.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet. If unconscious, put the person in the stabilized (recovery) position on his side with his head slightly bent backwards and make sure that airways are free; never induce vomiting. If the person vomits by himself, make sure that the vomit is not inhaled. In life threatening conditions first of all provide resuscitation of the affected person and ensure medical assistance. Respiratory arrest - provide artificial respiration immediately. Cardiac arrest - provide indirect cardiac massage immediately.

##### **If inhaled**

Terminate the exposure immediately; move the affected person to fresh air. Protect the person against growing cold. Provide medical treatment if irritation, dyspnoea or other symptoms persist.

##### **If on skin**

Remove contaminated clothes. Wash the affected area with plenty of water, lukewarm if possible. Soap, soap solution or shampoo should be used if there is no skin injury. Provide medical treatment if skin irritation persists.

##### **If in eyes**

Do not rub your eyes – it could lead to mechanical damage of the cornea. Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. No neutralization should be performed in any case! Rinsing should be continued for 10-30 minutes from the inner to the outer eye corner to make sure that the other eye is not involved. Depending on the situation, call medical rescue service or ensure medical treatment as promptly as possible. Everyone must be referred for treatment even if affected only a little.

##### **If swallowed**

DO NOT INDUCE VOMITING! Rinse out the mouth with water and provide 2-5 dL of water. Provide medical treatment if the person has any health problems.

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

##### **If inhaled**

Inhaling dust can cause corrosion of the breathing system. May cause respiratory irritation.

##### **If on skin**

May cause an allergic skin reaction.

##### **If in eyes**

Causes serious eye damage.

##### **If swallowed**

Corrosion of the digestion system can occur.

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

Symptomatic treatment.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

##### **Suitable extinguishing media**

Alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist.

##### **Unsuitable extinguishing media**

Not known.

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

Emergency procedures are not required.

#### 5.3. Advice for firefighters

No need for special protective equipment for fire fighters. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.

### SECTION 6: Accidental release measures

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

Use personal protective equipment for work. Follow the instructions in the Sections 7 and 8. Do not inhale dust. Prevent contact with skin and eyes.

#### 6.2. Environmental precautions

Prevent contamination of the soil and entering surface or ground water.

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

Collect the spillage in a dry state if possible through manual or mechanical means that avoid dust formation. Dispose of the collected material according to the instructions in the section 13.

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### 6.4. Reference to other sections

See the Section 7, 8 and 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Prevent formation of gases and vapours in concentrations exceeding the occupational exposure limits. Do not inhale dust. Prevent contact with skin and eyes. Wash hands and exposed parts of the body thoroughly after handling. Use only outdoors or in a well-ventilated area. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection.

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

Store in original closed packaging in dry area.

### 7.3. Specific end use(s)

not available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

The mixture contains substances for which occupational exposure limits are set.

#### European Union

#### Commission Directive (EU) 2017/164

Substance name (component)	Type	Value	Note
Calcium hydroxide (CAS: 1305-62-0)	OEL 8 h	1 mg/m <sup>3</sup>	respirable fraction
	OEL 15 min	4 mg/m <sup>3</sup>	

#### Hungary

#### 5/2020. (II. 6.) ITM commission

Substance name (component)	Type	Value	Note
Limestone (CAS: 1317-65-3)	AK 8h	10 mg/m <sup>3</sup>	
Portland cement (CAS: 65997-15-1)	AK 8h	10 mg/m <sup>3</sup>	inhalable dust
Titanium dioxide (CAS: 13463-67-7)	AK 8h	10 mg/m <sup>3</sup>	total inhalable
	AK 8h	6 mg/m <sup>3</sup>	respirable
Calcium hydroxide (CAS: 1305-62-0)	AK 8h	1 mg/m <sup>3</sup>	respirable
	CK	4 mg/m <sup>3</sup>	respirable
Caustic soda (CAS: 1310-73-2)	AK 8h	2 mg/m <sup>3</sup>	caustic material
	CK	2 mg/m <sup>3</sup>	
Chromium (VI) trioxide (CAS: 1333-82-0)	AK 8h	0,01 mg/m <sup>3</sup>	Cr (VI) inorganic compounds

### 8.2. Exposure controls

Follow the usual measures intended for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation. If exposure limits cannot be observed in this mode, suitable protection of airways must be used. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

#### Eye/face protection

Protective goggles or face shield (based on the nature of the work performed).

#### Skin protection

Hand protection: Protective gloves resistant to the product (nitril). When choosing appropriate thickness, material and permeability of the gloves, observe recommendations of their particular manufacturer. Observe other recommendations of the manufacturer. Other protection: protective workwear. Contaminated skin should be washed thoroughly.

#### Respiratory protection

Use a mask with anti-dust filter when the exposition limits of the substances are exceeded or at the place with insufficient ventilation. Recommended type: FFP2

#### Thermal hazard

Not available.

#### Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2.

## SECTION 9: Physical and chemical properties

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

Physical state	solid at 20 °C
Colour	various
Odour	odourless
Melting point/freezing point	data not available
Boiling point or initial boiling point and boiling range	not applicable

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Flammability	not flammable
Lower and upper explosion limit	not applicable
Flash point	not applicable
Auto-ignition temperature	not applicable
Decomposition temperature	not applicable
pH	11,0-12,5 (in water (70-80 w/w%; 20 °C))
Kinematic viscosity	not applicable
Solubility in water	slightly soluble
Partition coefficient: n-octanol/water (log value)	not applicable
Vapour pressure	not applicable
Density and/or relative density	1,3-1,8 g/cm <sup>3</sup>
Relative vapour density	not applicable
Particle characteristics	0,03 ± 0,05 mm (volume-based)
Density	1,3-1,8 g/cm <sup>3</sup>

### 9.2. Other information

No data

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

When mixed with water, mixture will harden within a couple of hours.

### 10.2. Chemical stability

The product is stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Unknown.

### 10.4. Conditions to avoid

The product is stable and no degradation occurs under normal use. Avoid humid conditions during storage.

### 10.5. Incompatible materials

Protect against strong acids, bases and oxidizing agents.

### 10.6. Hazardous decomposition products

Not developed under normal uses. Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire.

## SECTION 11: Toxicological information

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

No toxicological data is available for the mixture.

#### Acute toxicity

Based on available data the classification criteria are not met.

#### 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.

#### Toxicity for specific target organ - single exposure

May cause respiratory irritation.

#### Toxicity for specific target organ - repeated exposure

Based on available data the classification criteria are not met.

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### Aspiration hazard

Based on available data the classification criteria are not met.

### 11.2. Information on other hazards

#### Endocrine disrupting properties

Based on available data the classification criteria are not met.

## SECTION 12: Ecological information

### 12.1. Toxicity

#### Acute toxicity

Data for the mixture are not available.

### 12.2. Persistence and degradability

Data not available.

### 12.3. Bioaccumulative potential

Not available.

### 12.4. Mobility in soil

Not available.

### 12.5. Results of PBT and vPvB assessment

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

### 12.6. Endocrine disrupting properties

Mixture does not contain any substance identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

### 12.7. Other adverse effects

Not available.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. The spilled material can be reused after collected in dry state. After mixing with water the product hardens and can be disposed as construction (concrete) waste. Empty bags may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

#### Waste management legislation

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

#### Waste type code

170101 concrete  
170107 mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06  
170904 mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03

#### Packaging waste type code

150102 plastic packaging  
150110 packaging containing residues of or contaminated by hazardous substances \*

(\* ) - Hazardous waste according to Directive 2008/98/EC on hazardous waste

## SECTION 14: Transport information

### 14.1. UN number or ID number

not subject to ADR

### 14.2. UN proper shipping name

not available

### 14.3. Transport hazard class(es)

not available

### 14.4. Packing group

not available

### 14.5. Environmental hazards

not available

### 14.6. Special precautions for user

Reference in the Sections 4 to 8.

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

not available

### SECTION 15: Regulatory information

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

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 as amended. Environmental Protection Act 1990 as amended. Clean Air Act 1993 as amended. Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the 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 16th 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) 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

not available

### SECTION 16: Other information

#### A list of standard risk phrases used in the safety data sheet

H-	not classified as dangerous
H271	May cause fire or explosion; strong oxidiser.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H340	May cause genetic defects.
H350	May cause cancer.
H351	Suspected of causing cancer if inhaled.
H361f	Suspected of damaging fertility.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

#### Guidelines for safe handling used in the safety data sheet

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P280	Wear protective gloves/protective clothing/eye protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/physician.
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P261	Avoid breathing dust.
P501	Dispose of contents/container to according to applicable regulations.

#### Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

#### Key to abbreviations and acronyms used in the safety data sheet

ADR	European agreement concerning the international carriage of dangerous goods by road
ATE	Acute Toxicity Estimate
CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
DNEL	Derived no-effect level
EC	Identification code for each substance listed in EINECS
EC <sub>50</sub>	Concentration of a substance when it is affected 50% of the population

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EINECS	European Inventory of Existing Commercial Chemical Substances
EU	European Union
EuPCS	European Product Categorisation System
IC <sub>50</sub>	Concentration causing 50% blockade
IMO	International Maritime Organization
LC <sub>50</sub>	Lethal concentration of a substance in which it can be expected death of 50% of the population
LD <sub>50</sub>	Lethal dose of a substance in which it can be expected death of 50% of the population
LOAEC	Lowest observed adverse effect concentration
LOAEL	Lowest observed adverse effect level
log K <sub>ow</sub>	Octanol-water partition coefficient
NOAEC	No observed adverse effect concentration
NOAEL	No observed adverse effect level
NOEC	No observed effect concentration
NOEL	No observed effect level
OEL	Occupational Exposure Limits
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted no-effect concentration
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
UN	Four-figure identification number of the substance or article taken from the UN Model Regulations
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bioaccumulative

Acute Tox.	Acute toxicity
Aquatic Acute	Hazardous to the aquatic environment
Aquatic Chronic	Hazardous to the aquatic environment (chronic)
Carc.	Carcinogenicity
Eye Dam.	Serious eye damage
Eye Irrit.	Eye irritation
Muta.	Germ cell mutagenicity
Ox. Sol.	Oxidising solid
Repr.	Reproductive toxicity
Resp. Sens.	Respiratory sensitization
Skin Corr.	Skin corrosion
Skin Irrit.	Skin irritation
Skin Sens.	Skin sensitization
STOT RE	Specific target organ toxicity - repeated exposure
STOT SE	Specific target organ toxicity - single exposure
Without classification	Without classification

### Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

### Recommended restrictions of use

not available

### Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended.  
REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

### More information

Classification procedure - calculation method.

### Statement

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.