



#### Safety data sheet

According to ABNT NBR 14725:2023, corrected version 28/02/2024

#### Polivalente super gray adhesive mortar

Date of first edition: 10/14/2024 Safety data sheet dated 10/14/2024

Revision 00

# **Section 1: Product and Company Identification**

#### 1.1 - Product identification

Commercial Name: Polivalente Super gray adhesive mortar

Commercial code: K90196.01

#### 1.2 - Other ways of identification

No additional relevant information available

#### 1.3 - Recommended uses of the chemical and restrictions on use

Recommended use: Mortar for laying ceramic tiles.

Restrictions on use: Uses other than the recommended use

# 1.4 - Supplier details

Kerakoll do Brasil indústria e comércio LTDA. – Unidade Jundiaí

CNPJ: 23.854.115/0002-20

Av. Antonieta Piva Barranqueiros, 2400

Galpões 1 e 2

Distrito industrial - Jundiaí - SP

Cep: 13213-008

Kerakoll do Brasil indústria e comércio LTDA. - Unidade Charqueada

CNPJ: 23.854.115/0005-72

Via Vicente Verdi, 808

Distrito industrial - Charqueada - SP

Cep: 13518-070

Kerakoll do Brasil indústria e comércio LTDA. - Unidade Marialva

CNPJ: 23.854.115/0003-00

San Michel – Rua projetada D, 150 Parque industrial – Marialva – PR

Cep: 86990-000





#### 1.5 - Emergency telephone number

Pró química 0800 110 8270

Operates 24 hours a day, 7 days a week

#### **Section 2: Hazard identification**





## 2.1 - Classification of substances and mixtures

Skin irritation, category 2 Causes skin irritation.

Eye damage, category 1 Causes serious eye damage.

Skin sensitization. 1B May cause an allergic skin reaction.

Single exposure, category 3 May cause respiratory tract irritation.

Physico-chemical effects harmful to human health and the environment:

No other risk

## 2.2 - GHS labeling elements, including precautionary phrases

Danger pictogram:





# Warning word: Danger

#### Danger phrases:

H315 causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H335 May cause respiratory tract irritation.

# **Precautionary statements:**

P260 Do not breathe dust.

P280 wear protective gloves and protect eyes.

P302+P352 if it comes into contact with the skin: rinse thoroughly with water.

P305+P351+P338 if in eyes: Rinse thoroughly with water. If you wear contact lenses, remove them if possible and continue rinsing.

P501 Dispose of contents/container in accordance with regulations.





#### **Additional indications:**

N.A

#### 2.3 - Other hazards that do not result in a classification

Mixtures containing cement, in the presence of water, for example in the production of concrete or mortar, or when they get wet, produce a strongly alkaline solution (high pH due to the formation of calcium, sodium and potassium hydroxide). Mixtures containing cement can irritate the eyes, irritate the mucous membranes of the throat and respiratory system and cause coughing. Repeated inhalation of cement dust and cement-containing mixtures over a long period of time increases the risk of lung disease.

No PBT (persistent bioaccumulative and toxic), MPMB (very persistent and very bioaccumulative) or endocrine disrupting substances present at a concentration  $\geq 0.1\%$ .

### Section 3: Composition and information on ingredients

#### 3.1 - Substance

Not applicable

#### 3.2 - Mixtures

Chemical identity: Mixture, composed of the following substances:

azardous components, in	accordance with ABNT - NBR 14725:2023; Globally Harmonized System for the Classification and La (GHS), UN	belling of Chemic
CAS: 14808-60-7	Quartz (SiO2) Eye irritant category 2B.	70 - 100%
CAS:65997-15-1 EC:266-043-4	Ciment Portland Causes skin irritation. 2, H315; Causes serious eye damage. 1, H318; May cause an allergic skin reaction. 1B, H317; Causes respiratory tract irritation 3, H335	≥20- <50%
CAS:1305-78-8 EC:215-138-9	Calcium oxide  Causes skin irritation. 2, H315;  Causes serious eye damage. 1, H318;  May cause an allergic skin reaction. 1B, H317;  Causes respiratory tract irritation 3, H335	<0.05 %

### Section 4: First aid measures

#### 4.1 - Description of necessary first aid measures

In case of inhalation: In case of inhalation consult a doctor immediately, if possible show the safety data sheet.

In case of skin contact: Remove contaminated clothing immediately, wash skin with plenty of soap and water, if there is any indication of irritation or redness, seek medical advice.

In case of contact with eyes: In case of contact with eyes consult a doctor immediately, if possible show the safety data sheet.

In case of swallowed: If swallowed, consult a doctor immediately, if possible show the safety data

# 4.2 - Most important symptoms and effects, acute or delayed

Eye damage and irritation Skin irritation and erythema





#### 4.3 - Indication of immediate medical attention and special treatment required

In the event of an accident or discomfort, consult a doctor immediately. If possible, present the instructions for use on the safety data sheet.

# Section 5: Fire-fighting measures

#### 5.1 - Extinguishing media

Water.

Carbon dioxide (CO2).

### 5.2 - Specific hazards arising from the substance or mixture

Do not inhale gases produced by explosion and combustion.

Combustion produces heavy smoke.

#### 5.3 - Special protective measures for firefighting personnel

Wear suitable protective gloves, protective clothing and eye protection.

Collect the contaminated water used to extinguish the fire separately.

Do not discharge into the sewage system.

If possible in the interests of safety, remove undamaged containers from the immediate danger area.

#### Section 6: Control measures for spills or leaks

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

#### 6.1.1 - For personnel who are not part of the emergency service

Wear personal protective equipment.

If exposed to vapors/powders/aerosols, wear breathing apparatus.

Provide adequate ventilation.

The use of a disposable semi-face respirator with a dust filter is recommended.

Refer to the protective measures set out in points 7 and 8.

#### 6.1.2 - For emergency service personnel

Wear personal protective equipment.

### 6.2 - Environmental precautions

Prevent spillage on the ground/subsoil.

Prevent run-off into surface water or the sewage system.

Retain contaminated washing water and dispose of it.

In the event of spillage into watercourses, soil or the sewage system, inform the responsible authorities.

# 6.3 - Methods and materials for concentration and cleaning

Vacuum cleaning;

Use an industrial vacuum cleaner to extract or suck up dust;

Do not lift the dust during cleaning;

The use of a blower is not permitted.

#### Section 7: Handling and storage

#### 7.1 - Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapors and mists.

Use localized ventilation systems.

Do not use empty containers before they have been cleaned.

Before transfer operations, ensure that there are no incompatible residual materials.

Contaminated instruments must be replaced before entering the dining areas.





Do not eat or drink during work. See paragraph 8 for recommended protective equipment.

## 7.2 - Safe storage conditions, including any

The product must be stored in impermeable, dry, clean conditions and protected from contamination.

Do not use aluminum containers due to the incompatibility of the materials.

Indication for environments: Adequately ventilated environments.

# Section 8: Exposure control and personal protection 8.1 - Control parameters

Components whose exposure value in the workplace should be monitored			
Quartzo (SIO2) - CAS:14808-60-7 - ACGIH			
LT	Long-term exposure value: 0,1mg/m³ (8h)		
Ciment Portland - CAS: 65997-15-1 - ACGIH			
LT	Long-term exposure value: 1,0mg/m³ (8h)		
	calcium oxide - CAS: 1305-78-8 - ACGIH		
LT	Long-term exposure value: 2,0mg/m³ (8h)		

#### **Exposure limit values (PNEC)**

Quartz (SIO2) - CAS:14808-60-7
 No further relevant information

Portland cement - CAS: 65997-15-1
 No further relevant information

Calcium oxide CAS: 1305-78-8

Exposure route: Fresh water; PNEC Limit:  $370 \mu g/I$ 

Exposure route: Intermittent versions (Freshwater); PNEC Limit: 370 µg/l Exposure route: Seawater;

PNEC Limit: 240 µg/l

Exposure route: Intermittent versions (seawater); PNEC Limit: 240 µg/l

Exposure route: Microorganisms in purification treatments; PNEC Limit: 2.27 mg/l Exposure route:

Soil; PNEC Limit: 817 mg/kg

#### **Derived No Effect Level (DNEL)**

Quartz (SIO2) - CAS:14808-60-7
 No further relevant information

Portland cement - CAS: 65997-15-1
 No further relevant information





Calcium oxide CAS: 1305-78-8

Route of exposure: By human inhalation;

Frequency of exposure: Long-term, local effects Professional worker and consumer: 1 mg/m<sup>3</sup>.

Route of exposure: By human inhalation;

Frequency of exposure: Short-term, local effects Professional worker and consumer: 1 mg/m3.

#### 8.2 - Engineering control measures

Keep concentrations of the mixture in the air below occupational exposure limits;

Use a general ventilation system, dust collection filters or a local exhaust system when the product is being produced.

### 8.3 - Personal protection measures

Eye protection: Wear closed safety visors, do not wear eye lenses.

Skin protection: Wear clothing that guarantees total skin protection, e.g. cotton, rubber, PVC or Viton clothing.

Hand protection: Wear protective gloves that guarantee total protection, e.g. PVC, Neoprene or rubber gloves.

Respiratory protection: Wear a suitable respiratory protection device.

Thermal risks:

N.A.

Control of environmental exposure:

N.A.

Hygiene measures and techniques:

Vacuum cleaning;

Use an industrial vacuum cleaner to extract or suck up dust;

Do not pick up dust during cleaning

Blowers are not allowed

#### Section 9: Physical and chemical properties

#### 9.1 - Basic physical and chemical properties

Physical state: Solid

Color: grey Odor: N.A.

Odor threshold: N.A.

pH in aqueous medium: 11.0 to 13.5

Kinematic viscosity: N.A.
Melting point/freezing point: N.A.

Boiling point or initial boiling point and boiling range: N.A.

Flash point: N.A.

Upper and lower explosive limit: N.A.

Relative vapor density: N.A. Vapor pressure: N.A.

Density and/or relative density: 1,40 - 1,60g/cm3

Water solubility: Partially soluble

Solubility in oil: N.A.

Partition coefficient n-octanol/water (logarithmic value): N.A.

Autoignition temperature: N.A. Decomposition temperature: N.A.

Flammability: N.A.

Volatile Organic Compounds - VOC = 0%; 0g/l





#### Particle characteristics:

Particle size: 2,10µm.

# 9.2 - Relevant data regarding physical hazard classes (additional)

There is no other relevant information

#### 9.3 - Other safety characteristics (additional)

No other relevant information

#### Section 10: Stability and reactivity

#### 10.1 - Reactivity

Stable under normal conditions

#### 10.2 - Chemical stability

The product is stable for a long time as long as it is stored appropriately (see Section 7).

The wet product is alkaline and incompatible with acids, ammonium salts, aluminum and other non-noble metals. Mixtures containing cement, in contact with hydrofluoric acid, decompose producing corrosive silicon tetrafluoride gas. Mixtures containing cement react with water to form silicates and calcium hydroxide. The silicates in cement react with powerful oxidizers such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride and oxygen difluoride.

The integrity of the packaging and compliance with the storage methods mentioned in section 7.2 (closed containers, cool, dry place and absence of ventilation) are essential conditions for maintaining the effectiveness of the reducing agent during the storage period specified on the bag.

### 10.3 - Possibility of hazardous reactions

None.

#### 10.4 - Conditions to avoid

Stable under normal conditions.

### 10.5 - Incompatible materials

Acids, ammonium salts, aluminum or other non-noble metals. The uncontrolled use of aluminum powder in products containing wet cement should be avoided as hydrogen develops.

### 10.6 - Dangerous composition products

None.

#### Section 11: Toxicological information

a) Acute toxicity not classified

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

b) Skin corrosion/irritation

The product is classified: causes skin irritation. 2 (H315)

c) Serious eye damage/eye irritation

The product is classified: causes serious eye damage. 1 (H318)

d) Respiratory or skin sensitization

The product is classified: may cause an allergic skin reaction. 1B (H317)





- e) Germ cell mutagenicity. Based on the available data, the classification criteria are not met.
- f) Carcinogenicity Not classified Based on available data, the classification criteria are not met.
- g) Reproductive toxicity Not classified Based on available data, the classification criteria are not met.
- h) Specific target organ toxicity single exposure The product is classified: may cause respiratory tract irritation 3 (H335)
- i) Specific target organ toxicity (STOT) repeated exposure not classified Based on available data, the classification criteria are not met.
- j) Aspiration hazard not classified Based on available data, the classification criteria are not met.

### Toxicological information on the main substances found in the product:

- Quartz (SIO2) CAS:14808-60-7
   a) Acute toxicity:
   LD50 Oral Rat > 5000 mg/kg
   LD50 Skin Rat > 5000 mg/kg
  - b) Skin corrosion/irritation: Not available
  - c) Serious eye damage/irritation: Not available
  - d) Respiratory or skin sensitization Not available
- Portland cement CAS: 65997-15-1
   a) Acute toxicity:
   Not available
  - b) Skin corrosion/irritation: Not available
  - c) Serious eye damage/irritation: Not available
  - d) Respiratory or skin sensitization Not available
- Calcium oxide
   a) Acute toxicity:
   LD50 Oral Rat > 2000 mg/kg
   LC50 Inhalation dust Rat > 6.04 mg/l 4h
   LD50 Skin Rabbit > 2500 mg/kg 24h
  - b) Skin corrosion/irritation: Irritating to skin Rabbit Positive





- c) Serious eye damage/irritation: Irritating to eyes Rabbit Yes
- d) Respiratory or skin sensitization Skin sensitization Negative in rat

# Section 12: Ecological information 12.1 – Ecotoxicity

Component: Quartz (SIO2)

Identification number: CAS:14808-60-7

No other relevant information

**Component: Portland cement** 

Identification number: CAS: 65997-15-1

No further relevant information

Component: Calcium oxide

Identification number: CAS: 1305-78-8 - EINECS: 215- 138-9

- a) Acute aquatic toxicity: LC50 Rainbow trout Fish = 50.6 mg/L 96h OECD 203
- b) Acute aquatic toxicity: LC50 Daphnia Daphnia magna <= 49.1 mg/L 48h OECD 202
- c) Acute aquatic toxicity: EC50 Algae Pseudokirchneriella subcapitata = 1848.57 mg/L 72h, OECD Guideline 201 (Algae, Growth Inhibition Test)
- d) Acute aquatic toxicity: EC50 Activated sludge = 300.4 mg/L 3h, OECD Guideline 209 (Activated sludge, respiration inhibition test)
- e) Terrestrial toxicity: NOEC Worm Eisenia fetida = 2000 mg/kg OECD Test OECD Guideline 207
- f) Plant toxicity: NOEC = 1080 mg/kg OECD guideline 208 (Terrestrial plant test: seedling emergence and growth test) 21 days

#### 12.2 - Persistence and degradability

N.A.

#### 12.3 - Bioaccumulative potential

N.A.

# 12.4 - Mobility in soil

N.A.

## 12.5 - Other adverse effects

There are no PBT/vPvB components.





# Section 13: Final disposal considerations

### 13.1 - Recommended methods for final disposal

#### **Recommendation:**

Do not dispose of with household waste.

Avoid release into the environment

Dispose of contents (mortar) in accordance with current legislation

#### Contaminated packaging:

Do not reuse empty packaging, it may contain remnants of the product and should be closed and sent for appropriate recycling in accordance with current legislation.

#### Section 14: Transport information

Product not

## Section 15: Regulatory information

- ABNT Regulatory Standard NBR 14725:2024)
- Resolution No. 5.232, of 14/12/2016 National Land Transport Agency (ANTT)
- Decree No. 96.044, of 18/05/1998 Regulations for the transportation of dangerous goods by road
- Decree No. 98.973, of 21/02/1990 Regulations for the transportation of dangerous goods by road
- Regulatory Standard 26, of 06/07/1978 Ministry of Labor
- Decree No. 10.936, of 12/01/2022 National solid waste policy
- Law No. 12.305, of 02/08/2010 National solid waste policy
- Law No. 14.803, of 26/06/2008 Integrated construction waste management plan
- IN No. 13, of December 18, 2012 Brazilian solid waste list
- D.O.U Section 1, nº 245, 20/12/2012 Brazilian solid waste list

# Section 16: Other information Code and Description

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H335 May cause respiratory tract irritation.

# Code Hazard class and hazard category Description

3.2/2 Skin irritation, Category 2

3.3/1 Serious eye damage, Category 1

3.4.2/1B Skin sensitization, Category 1B

3.8/3 Specific target organ toxicity - single exposure, Category 3

# Classification and procedure used to determine the classification of mixtures in accordance with ABNT NBR 14725:2023

### Classification in accordance with ABNT NBR 14725:2023 Classification procedure

Causes skin irritation. 2, H315 Calculation method

Causes serious eye damage. 1, H318 Calculation method

May cause an allergic skin reaction. 1B, H317 Calculation method

May cause respiratory tract irritation.3, H335 Calculation method





This document has been prepared by an appropriately trained person.

Main bibliographic sources:

https://gestis-database.dguv.de/

https://echa.europa.eu/ ABNT NBR 14725:2023

 ${\tt ECDIN - Environmental\ Chemicals\ Data\ and\ Information\ Network\ -\ United\ Research\ Center}, \\ {\tt Commission\ of\ the\ European\ Communities}}$ 

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS (PROPRIEDADES PERIGOSAS DE MATERIAIS INDUSTRIAIS da SAX) - Eighth Edition - Van Nostrand Reinold

The information contained herein is based on our knowledge as of the date indicated above. It refers exclusively to the product indicated and does not constitute a particular guarantee of quality.

The user is obliged to ensure that this information is appropriate and complete with regard to the specific use for which it is intended. This sheet cancels and replaces all previous editions.

#### Legend for the abbreviations and acronyms used in this safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists

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

AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ATE: Acute Toxicity Estimate

ATEmix: Acute Toxicity Estimate (Mixtures)

BCF: Bioconcentration factor BEI: Biological Exposure Index BOD: Biochemical oxygen demand

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

CAV: Poisons Center EC: European Community

CLP: Classification, labeling, packaging. CMR: Carcinogenic, Mutagenic and Reprotoxic

COD: Chemical Oxygen Demand VOC: Volatile Organic Compound CSA: Chemical Safety Assessment CSR: Chemical Safety Report

DMEL: Derived Minimal Exposure Level DNEL: Derived No Effect Exposure Level DPD: Dangerous Preparations Directive DSD: Dangerous Substances Directive

EC50: Average Maximum Effective Concentration

ECHA: European Chemicals Agency

EINECS: European Inventory of Existing Commercial Chemical Substances

ES: Exposure Scenario

GefStoffVO: Hazardous Substances Ordinance, Germany

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association

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

IC50: Average Maximum Inhibitory Concentration ICAO: International Civil Aviation Organization

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

IMDG: International Maritime Dangerous Goods Code. INCI: International Nomenclature of Cosmetic Ingredients.

IRCCS: Scientific Institute for Research, Hospitalization and Medical Care





KAFH: Keep Away From Heat KSt: Coefficient of Explosion

LC50: Lethal concentration for 50% of the test population

LD50: Lethal dose for 50% of the test population.

LDLo: Low Lethal Dose N.A.: Not Applicable N/A: Not Applicable

N/A: Not defined / Not available

NA: Not available

NIOSH: National Institute for Occupational Safety and Health

NOAEL: No Observed Adverse Effect Level

OSHA: Occupational Safety and Health Administration

PBT: Persistent, bioaccumulative and toxic

PGK: Packaging instructions

PNEC: Predicted No Effect Concentration

PSG: Passengers

RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.

STEL: Short-term exposure limit STOT: Specific Target Organ Toxicity

TLV: Threshold Limit Value

TWATLV: Threshold limit value for time-weighted average - 8 hours/day (ACGIH Standard)

vPvB: Very persistent, very bioaccumulative

WGK: Water hazard class - Germany