EUCOCHEM
PASSION FOR CONSTRUCTION & CHEMISTRY

Trade name: EUCOPROOF MORTAR THIX
Version: 1
Revision date: 25.08.2020

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

1.1. Product identification
EUCOPROOF MORTAR THIX

1.2. Relevant identified uses of the substance or mixture and uses advised against
Use of the substance / mixture
The product is intended for professional use. Building products. Mortar made from special cements.

Uses advised against
No identified use.

1.3. Details of the supplier of the safety data sheet
EUCOCHEM BV
ESPERANTOLAAN 13/7
B-3300 TIENEN
BELGIUM
Tel.: +32.16.81.11.52
E-Mail: office@eucochem.com

1.4. Emergency telephone number
+32 70 245 245

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Classification according to Regulation (EC) n° 1272/2008 (CLP)

Skin corrosion / irritation	Category 2	H315
Serious eye damage / eye irritation	Category 1	H318
Specific target organ toxicity (single exposure)	Category 3	H335

Other information
The explanation of the listed hazard warnings can be found in Section 16.

2.2. Label elements
Classification according to Regulation (EC) n° 1272/2008 (CLP)
Hazardous components for labelling
Portland cement clinker, calcium dihydroxide

Signal word: Danger

Warning pictograms


Hazard warnings

H315	Causes skin irritation
H318	Causes serious eye damage
H335	May cause respiratory irritation

Safety instructions

P261	Avoid breathing dust / smoke / gas / mist / vapour / aerosol.
P280	Wear protective gloves / protective clothing / eye protection / face protection.
P301+P310	After ingestion: Immediately call poison information centre / doctor
P302+P352	After skin contact: Wash with plenty of water and soap.
P305+ P351+P338	After contact with eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if possible. Continue rinsing.
P333+P313	If skin irritation or rash occurs: Get medical advice / attention.

2.3. Other hazards

Possible particular risks to human and possible symptoms

The product develops an alkaline pH value with moisture and can be irritating. Wear safety gloves. The cement / binding agent contained in the premixed dry mortars does not meet the criteria for PBT or vPvB.

SECTION 3: Composition / Information on ingredients

3.2. Mixture

Chemical characterization

Mixture of cement, mineral additives and additives.

Hazardous ingredients

CAS-N°	EC-N°	Designation / classification	Proportion
65997-15-1	266-043-4	Portland cement clinker	≥ 20 - ≤ 50%
		Skin Irrit. 2, H315; Skin Sens. 1, H317; Eye Dam. 1, H318; STOT SE 3, H335	
1305-62-0	215-137-3	Calcium dihydroxide REACH registration number: 01-2119475151-45	≥ 1 -< 10%
		Skin Irrit. 2, H315; Eye Dam. 1, H318; STOT SE 3, H335	

The explanation of the listed hazard warnings can be found in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

No special personal protective equipment is required for first aiders. However, first aiders should avoid contact with dry or wet mortar mixtures.

After eye contact

Do not rub the eye dry because the mechanical stress may cause additional damage to the cornea. If necessary, remove contact lenses and rinse the eye immediately with the eyelid wide open under running water for at least 20 minutes to remove all particles. If possible, use an isotonic eye wash solution (0.9% NaCl). Always consult an occupational doctor or ophthalmologist.

After inhalation

Provide fresh air. Dust from the throat and nose area should be removed quickly. Consult a doctor in the even of complaints such as malaise, coughing or persistent irritation.

After skin contact

Remove dry mortar mixture and rinse with plenty of water. Rinse off the damp mortar mixture with plenty of water. Remove soaked clothing, shoes, watches, etc. Thoroughly clean them before re-use. Consult a doctor in case of skin complaints.

After ingestion

Do not induce vomiting. If conscious, rinse out mouth and drink plenty of water. Consult a doctor or poison control centre.

Self-protection of the first aider

First aiders: Pay attention to self-protection!

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

Eyes

Eye contact with the mortar mixture (dry or wet) can cause serious and possible permanent eye damage.

Skin

The dry mortar mixture an have an irritating effect on damp skin (as a result of sweating or humidity) through prolonged contact. Contact between the mortar mixture and damp skin can cause skin irritation, dermatitis, or serious skin damage.

Inhalation

Repeated inhalation of large amounts of dry mortar mixture over a long period of time increases the risk of lung diseases.

Environment

With normal use, premixed dry mortar is not dangerous to the environment.

4.3. Indication of any immediate medical attention or special treatment

If a doctor is consulted, please present this safety data sheet.

SECTION 5: Fire fighting measures

5.1. Extinguishing agents

The product is not flammable.

5.2. Specific hazards arising from the substance or mixture

The product is neither explosive nor flammable and also not fire-promoting with other materials.

5.3. Advice for fire-fighters

No special measures are necessary as the product does not pose any fire hazard. Dispose of contaminated extinguishing water in accordance with the local official regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personnel not trained for emergencies must wear protective clothing as described in Section 8. It must follow the instructions for safe handling as described in Section 7. Emergency plans are not required for emergency services. However, respiratory protection is required when exposed to high levels of dust.

6.2. Environmental protection measures

Do not allow the product to enter drains, surface or ground water.

6.3. Methods and materials for containment and cleaning up

Absorb spilled product dry and use if possible. Use as dry a method as possible for cleaning, e.g. vacuum suction (portable devices with highly efficient filter systems, e.g. EPA and HEPA filters or equivalent techniques that do not generate dust). Never use compressed air for cleaning. If dust is generated during dry cleaning, personal protective equipment must be used. Avoid inhalation of the product and skin contact. Put spilled material back into the container. Later use is possible. Pick up the mixed mortar mechanically, let it harden on a foil pad or in a container and dispose of it according to Section 13.

6.4. Reference to other sections

Information on safe handling, see section 7.

Information on personal protective equipment, see section 8.

Information on disposal, see section 13.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice for safe handling

Avoid eye contact. Avoid generating dust and use dry methods for cleaning. Do not kneel in the fresh mortar during processing. Do not eat, drink or smoke at work. Wear a respiratory mask and protective goggles in a dusty atmosphere. Wear protective gloves to avoid skin contact.

Measures to prevent aerosol and dust formation

Do not sweep. For cleaning, use methods that are as dry as possible, such as vacuum suction, that do not generate dust. When processing bagged goods ans using open mixing containers, first fill in water, then carefully run in the dry mortar. Keep drop height low. Let the mixer start up slowly. Do not compress empty bags or do so in another bag.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and containers

The product should be stored in dry, watertight conditions, clean and protected from contamination and damage. Minimize condensation in the containers. Store only in closed original containers. Do not use aluminium containers.

Further information on storage conditions

Storage class according to TRGS 510: 13 (non flammable solids that cannot be assigned to any of the aforementioned LGK)

7.3. Specific end uses

Construction chemical applications

7.4. Control of the content of water-soluble chromium (VI)

In the case of dry mortar containing chromate reducers, it should be noted that the effectiveness of the reducing agent decreases over time. Therefore, the outer packaging of the premixed dry mortar and/or delivery documents contain information on the minimum period of validity. Within this time, the content of water-soluble chromium (VI) remains below 0.0002% (according to EN 196-10). The manufacturer's instructions for proper storage must be followed. In case of improper storage (ingress of moisture) or overlaying, the chromate reducer contained may lose its effectiveness prematurely and a sensitizing effect of the cement/binding agent on skin contact cannot be ruled out.

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SECTION 8: Exposure controls / Personal protection

8.1. Control parameters

Occupational exposure limit values (TRGS 900)

Designation	Assessment value	Peak limitation
General dust limit value	1,25 mg/m³ A (8 h)	2 (II)
General dust limit value	10 mg/m³ E	20 E (15 min)
Water-soluble chromium (VI)	2 ppm in cement	

A: respirable fraction, B: inhalable fraction

DNEL / DMEL values

CAS-N°	Designation		
DNEL type	**Route of exposure**	**Effect**	**Value**
1305-62-0	Calcium dihydroxide		
Worker, short-term	inhalation	locally	1 mg/m³ A
Worker, long-term	inhalation	locally	4 mg/m³ A

A: respirable fraction, B: inhalable fraction

PNEC values

CAS-N°	Designation	Environmental compartment	Value
1305-62-0	Calcium dihydroxide	Water	490 µg/l
		Soil	1,080 mg/l
		Ground water	1,080 mg/l

8.2. Exposure controls / personal protective equipment

Appropriate technical control equipment

Measures to avoid dust formation, e.g. Through suitable ventilation systems and cleaning methods that do not stir up dust.

Protective and hygiene measures

Wash hands and, if necessary, shower to remove adhering cement/binding agent. Avoid contact with eyes and skin. After working with premixed dry mortar, workers should wash or shower and use skin care products. Clean contaminated clothing, shoes, watches, etc. before using again.

Eye / face protection

Tightly fitting protective goggles according to DIN EN 166 if there is a risk of dust and splashing.

Respiratory protection

If the exposure limit values are exceeded (e.g. when handling the powdery product in the open), a suitable breathing mask must be used (e.g. in accordance with EN 149, EN 140, EN 14387, EN 1827). As a rule, particle-filtering half masks or full-face masks with particle filters of the type FFP2 or FFP3 are to be used.

Skin / body protection
Wear protective clothing, e.g. alkali-resistant and dust-impermeable safety shoes EN ISO 20345, long-sleeved work clothes with tightly fitting cuffs. The clothing should completely cover the skin. Use skin protection products.

Hand protection
Wear waterproof, abrasion and alkali-resistant protective gloves. For example, nitrile-soaked cotton gloves with CE mark are suitable. Note the maximum wearing time. Leather gloves are not suitable due to their water permeability; they can release chromate-containing compounds.

Limitation and supervision of environmental exposure
Do not allow the product to enter the groundwater or sewer system.

SECTION 9: Physical and chemical properties

9.1. Information on basis physical and chemical properties

Physical state:	solid
Colour:	grey
Odour:	odourless
Melting point:	> 1.000 °C
Density:	approx. 0,85 - 1,65 g/cm³ at 20 °C
pH value:	11 - 13,5
Water solubility:	Up to 3,0 g/l at 20 °C

SECTION 10: Stability and reactivity

10.1. Reactivity
Has an alkaline reaction with water, whereby an intended hydration reaction takes place. A solid mass is created that does not react with the environment.

10.2. Chemical stability
Stable when the recommended rules for storage and handling are applied. Avoid contact with incompatible materials (acids, ammonium salts, aluminium and other base metals, hydrofluoric acid).

10.3. Possibility of hazardous reactions
No information available.

10.4. Conditions to avoid
Ingress of moisture during storage can lead to clumping and loss of product quality.

10.5. Incompatible materials

The moist product is alkaline and reacts with acids, ammonium salts, aluminium and other base metals. The reaction with base metals produces hydrogen.

10.6. Hazardous decomposition products

No dangerous decomposition products known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Information on Portland cement

Acute toxicity

Route of exposure: dermal
Dose: Limit Test - 2.000 mg/kg - 24 h
Species: Rabbit
Result: no lethality
Route of exposure: inhalative
Dose: Limit Test - 5 g/m³
Species: Rat
Result: no acute toxicity (study was carried out with Portland cement clinker)
Route of exposure: oral
Result: No acute oral toxicity was found in animal studies with cement oven dusts and cement dusts.

Irritant and corrosive effects on the skin

The product irritates the skin and mucous membranes. Dry product in contact with moist skin or skin in contact with moist/wet product may lead to irritating and inflammatory reactions of the skin (reddening, cracking). Continued contact in connection with mechanical abrasion may lead to serious skin damage.

Serious eye damage / eye irritation

In the in vitro test, Portland cement clinker (the main component of cement) had different effects on the cornea. The calculated “irritation index” is 128. Direct contact with cement may lead to corneal damage, on the one hand through mechanical impact and on the other hand through immediate or later irritation or inflammation. Direct contact with large amounts of dry cement or splashes of wet cement may have effects ranging from moderate eye irritation (e.g. Conjunctivitis or eyelid inflammation) to serious eye damage and blindness.

Skin sensitization

Skin eczema may develop in individual persons after contact with damp cement. These can be triggered either by the pH value (irritating contact dermatitis) or by immunological reactions with water-soluble chromium (VI) (allergic contact dermatitis). The following applies to the latter: As long as the product’s use-by date is not exceeded, the cement is not expected to have a sensitizing effect.

Respiratory sensitization
There is no evidence of respiratory sensitization. Based on the available date, the classification criteria are not fulfilled.

Germ cell mutagenicity
No evidence of germ cell mutagenicity. Based on the available date, the classification criteria are not fulfilled.

Carcinogenicity
A causal relationship between cement and cancer has not been established. Epidemiological studies did not allow any conclusions to be drawn about an association between exposure to cement and cancer. Portland cement is not classified as a human carcinogen according to ACGIH A4: Substances that cannot be conclusively assessed with regard to human carcinogenicity due to insufficient data. In vitro tests or animal experiments do not provide sufficient evidence of carcinogenicity to assign this substance to another classification. Portland cement contains over 90% Portland cement clinker. Based on the available date, the classification criteria are not fulfilled.

Reproductive toxicity
Based on the available date, the classification criteria are not fulfilled.

Specific target organ toxicity after single exposure
Exposure to cement dust may irritate the respiratory system (throat, lungs). Coughing, sneezing and shortness of breath can result if exposure is above the workplace limit value. Occupational exposure to cement dust may lead to impaired respiratory functions. However, there is currently insufficient knowledge to be able to derive a dose-effect relationship.

Specific target organ toxicity after repeated exposure
Long-term exposure to respirable cement dust above the occupational exposure limit may lead to coughing, shortness of breath and chronic obstructive changes in the airways. No chronic effects were observed at low concentrations. Based on the available date, the classification criteria are not fulfilled.

Aspiration hazard
Not applicable, as cement is not available as an aerosol.

Information on calcium dihydroxide
Acute toxicity
Route of exposure: dermal
Dose: LD50 - > 2.500 mg/kg (OECD 402)
Species: Rabbit
Result: Based on the available date, the classification criteria are not fulfilled.
Route of exposure: oral
Dose: LD50 - > 2.000 mg/m³ (OECD 425)
Species: Rat
Result: Based on the available date, the classification criteria are not fulfilled.

Irritant and corrosive effects on the skin
As a result of studies (in vivo, rabbits), calcium dihydroxide can cause serious eye damage.

Serious eye damage / eye irritation
As a result of studies (in vivo, rabbits), calcium dihydroxide can cause serious eye damage.

Skin sensitization
Calcium dihydroxide is not classified as a skin sensitizer due to its mode of action (pH change) and the importance of calcium in human nutrition.

Respiratory sensitization
There is no evidence of respiratory sensitization. Based on the available date, the classification criteria are not fulfilled.

Germ cell mutagenicity
No evidence of germ cell mutagenicity. Based on the available date, the classification criteria are not fulfilled.

Carcinogenicity
Calcium (administered as Ca-lactate) is not carcinogenic (experiment result, rat). There is no carcinogenic risk due to the pH effect of calcium dihydroxide (epidemiological date from humans available).

Reproductive toxicity
Based on the available date, the classification criteria are not fulfilled.

Specific target organ toxicity after single exposure
Calcium dihydroxide irritates the airways.

Specific target organ toxicity after repeated exposure
Based on the available date, the classification criteria are not fulfilled.

SECTION 12: Environmental information

12.1. Toxicity

General effect
Acute pH effect. Although this product can be used to neutralize over-acidic water, water organisms can be damaged if 1 g/l is exceeded. A pH value >12 will decrease rapidly due to dilution and carbonation.

Information on Portland cement
The Portland cement contained in the premixed dry mortar is not considered to be dangerous for the environment. Ecotoxicological studies with Portland cement on Daphnia magna (U.S. EPA, 1994a) and Selenastrum Coli (U.S. EPA, 1993) have shown only a slight toxic effect. Therefore the LC50 and EC50 values could not be determined. No toxic effects on sediments could be found either.

The release of large quantities of Portland cement in water can, however, lead to an increase in the pH value and thus, under special circumstances, be toxic to aquatic life.

Information on calcium dihydroxide

Acute / long-term fish toxicity
LC50 (96 h) - 50,6 mg/l for freshwater fish
LC50 (96 h) - 457 mg/l for marine fish

Acute / long-term daphnia toxicity
EC50 (48 h) - 49,1 mg/l for freshwater invertebrates
LC50 (96 h) - 158 mg/l for marine invertebrates

Chronic daphnia toxicity
NOEC (14 h) - 32 mg/l for marine invertebrates

Acute / long-term algae toxicity
EC50 (72 h) - 184.57 mg/l for freshwater algae
NOEC (72 h) - 48 mg/l for freshwater algae

Acute / long-term bacterial toxicity
At high concentrations, calcium dihydroxide causes an increase in temperature and pH value. This is used to sanitize sewage sludge.

Acute / long-term soil toxicity
EC10/LC10 or NOEC - 2.000 mg/kg for soil macro organisms
EC10/LC10 or NOEC - 12.000 mg/kg for soil micro organisms

Acute / long-term plant toxicity
NOEC (21 d) - 1.080 mg/kg for plants

12.2. Persistence and degradability
No information available.

12.3. Bioaccumulative potential
No information available.

12.4. Mobility in soil
No information available.

12.5. Results of the PBT and vPvB assessment
No information available.

12.6. Other harmful effects
No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product disposal

Pick up dry and if possible reuse / recycle. Waste treatment techniques are not required. Do not dispose of into sewage or surface water. Recommendation for non-reusable residues: Mix with water and allow to harden.

Waste code: 17 09 04: Building rubble

Packaging disposal

Treat contaminated packaging like the substance. Completely emptied packaging can be recycled.

SECTION 14: Transport information

14.1. Land transport (ADR(RID))

Not hazardous according to these transportation regulations.

14.2. Inland waterway transport (ADN)

Not hazardous according to these transportation regulations.

14.3. Sea transport (IMDG)

Not hazardous according to these transportation regulations.

14.4. Air transport (IATA)

Not hazardous according to these transportation regulations.

SECTION 15: Regulatory information

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

National regulations

Water hazard class

Water hazard class: 1 - slightly hazardous to water

Giscode

GISCODE: ZP1

15.2. Safety assessment

A chemical safety assessment was not carried out.

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SECTION 16: Other information

Explanation of the H and EUH statements (number and full text)

H315	Causes skin irritation
H317	May cause allergic reactions to the skin.
H318	Causes serious eye damage.
H335	May cause respiratory irritation

Additional information

The information in this safety data sheet corresponds to the best of our knowledge at the time of printing. The information is intended to provide guidelines for the safe handling of the product named in this safety data sheet during storage, processing, transport and disposal. The details are not transferable to other products. If the product is mixed or processed with other materials, the information in this safety data sheet cannot be transferred to the new material produced in this way, unless otherwise stated. The information is based on our current level of knowledge, but does not represent any assurance of product properties and does not establish a contractual legal relationship. It is the responsibility of the recipient of our products to observe existing laws and regulations.