

## Safety Data Sheet

According to Annex II to REACH - Regulation 2020/878 and to Annex II to UK REACH

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

#### 1.1. Product identifier

Product name **STUCCO ROMANO**  
UFI : **T220-303S-C00R-JNJ2**

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

Intended use **Decorative wall coating based on lime plaster. Professional and Commercial Use.**

**Uses advised against Uses other than those indicated**

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

Name **OIKOS S.P.A. A SOCIO UNICO**  
Full address **Via Cherubini 2**  
District and Country **47043 Gatteo Mare (FC)**  
**Italia**  
Tel. **0547 681412**  
Fax **0547 681430**

e-mail address of the competent person responsible for the Safety Data Sheet **certificazioniprodoti@oikos-group.it**

#### 1.4. Emergency telephone number

For urgent inquiries refer to **NHS National Health Service 111**

**OIKOS S.P.A. a socio unico Company emergency number: 0547 681412**  
**Technical support - Monday to Friday from 8.00-13.00; 13:30 to 16:30**

### SECTION 2. Hazards identification

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

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Serious eye damage, category 1	H318	Causes serious eye damage.
Skin irritation, category 2	H315	Causes skin irritation.

#### 2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:



Signal words: **Danger**

Hazard statements:  
**H318** Causes serious eye damage.  
**H315** Causes skin irritation.

## SECTION 2. Hazards identification ... / &gt;&gt;

**EUH208** Contains: Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one[EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)  
May produce an allergic reaction.

## 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 / face protection.  
**P302+P352** IF ON SKIN: wash with plenty of water / . . .  
**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 / doctor / . . .  
**P501** Dispose of contents / container in accordance with local regulation.

**Contains:** Calcium dihydroxide

## VOC (Directive 2004/42/EC) :

Decorative effect coatings.

VOC given in g/litre of product in a ready-to-use condition : 5,00  
Limit value: 200,00

## 2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage  $\geq$  than 0,1%.

The product does not contain substances with endocrine disrupting properties in concentration  $\geq$  0.1%.

## SECTION 3. Composition/information on ingredients

## 3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification (EC) 1272/2008 (CLP)
<b>Calcium dihydroxide</b>		
INDEX	$10 \leq x < 15$	Eye Dam. 1 H318, Skin Irrit. 2 H315, STOT SE 3 H335
EC	215-137-3	
CAS	1305-62-0	
REACH Reg.	01-2119475151-45	
<b>Ethane-1,2-diol</b>		
INDEX	$0,085 \leq x < 0,09$	Acute Tox. 4 H302, STOT RE 2 H373
EC	203-473-3	STA Oral: 500 mg/kg
CAS	107-21-1	
REACH Reg.	01-2119456816-28	
<b>Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one[EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)</b>		
INDEX	$0,00025 \leq x < 0,0012$	Acute Tox. 1 H330, Acute Tox. 2 H310, Acute Tox. 3 H301, Skin Corr. 1B H314, Eye Dam. 1 H318, Skin Sens. 1 H317, Aquatic Acute 1 H400 M=100, Aquatic Chronic 1 H410 M=100
EC	611-341-5	Skin Corr. 1C H314: $\geq 0,6\%$ , Skin Irrit. 2 H315: $\geq 0,06\%$ , Skin Sens. 1 H317: $\geq 0,0015\%$ , Eye Irrit. 2 H319: $\geq 0,6\%$
CAS	55965-84-9	LD50 Oral: $>64$ mg/kg bw, STA Dermal: 50,001 mg/kg, STA Inhalation vapours: 0,05 mg/l
REACH Reg.	01-2120764691-48	

The full wording of hazard (H) phrases is given in section 16 of the sheet.

## SECTION 4. First aid measures

## 4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

**SECTION 4. First aid measures ... / >>**

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Wash contaminated clothing before using it again.  
INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately.  
INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

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

Specific information on symptoms and effects caused by the product are unknown.

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

Information not available

**SECTION 5. Firefighting measures****5.1. Extinguishing media****SUITABLE EXTINGUISHING EQUIPMENT**

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

**UNSUITABLE EXTINGUISHING EQUIPMENT**

None in particular.

**5.2. Special hazards arising from the substance or mixture****HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE**

Do not breathe combustion products.

**5.3. Advice for firefighters****GENERAL INFORMATION**

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

**SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS**

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

**SECTION 6. Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

**6.2. Environmental precautions**

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

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

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

**6.4. Reference to other sections**

Any information on personal protection and disposal is given in sections 8 and 13.

**SECTION 7. Handling and storage****7.1. Precautions for safe handling**

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering

### SECTION 7. Handling and storage ... / >>

places in which people eat.

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

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

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

Information not available

### SECTION 8. Exposure controls/personal protection

#### 8.1. Control parameters

Regulatory References:

DEU	Deutschland	Technischen Regeln für Gefahrstoffe (TRGS 900) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte. MAK- und BAT-Werte-Liste 2020, Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe, Mitteilung 56
ESP	España	Límites de exposición profesional para agentes químicos en España 2021
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
POL	Polska	Rozporządzenie ministra rozwoju, pracy i technologii z dnia 18 lutego 2021 r. Zmieniające rozporządzenie w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
EU	OEL EU	Directive (EU) 2022/431; Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC.
	TLV-ACGIH	ACGIH 2021

#### Ethane-1,2-diol

##### Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	26	10	52	20	SKIN
MAK	DEU	26	10	52	20	SKIN
VLA	ESP	52	20	104	40	SKIN
VLEP	FRA	52	20	104	40	SKIN
VLEP	ITA	52	20	104	40	SKIN
NDS/NDSch	POL	15		50		SKIN
WEL	GBR	52	20	104	40	SKIN
OEL	EU	52	20	104	40	SKIN
TLV-ACGIH			25		50	
TLV-ACGIH				10		INHAL

##### Predicted no-effect concentration - PNEC

Normal value in fresh water	10	mg/l
Normal value in marine water	1	mg/l
Normal value for fresh water sediment	37	mg/kg/d
Normal value for marine water sediment	3,7	mg/kg/d
Normal value for water, intermittent release	10	mg/l
Normal value of STP microorganisms	199,5	mg/l
Normal value for the terrestrial compartment	1,53	mg/kg/d

##### Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation			7 mg/m3				35 mg/m3	
Skin				53 mg/kg bw/d			106 mg/m3	106 mg/kg bw/d

## SECTION 8. Exposure controls/personal protection ... / &gt;&gt;

## Calcium dihydroxide

## Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	
MAK	DEU	1		2		INHAL
VLA	ESP	1		4		
VLEP	FRA	1		4		
VLEP	ITA	1		4		RESP
NDS/NDSch	POL	2		6		INHAL
NDS/NDSch	POL	1		4		RESP
WEL	GBR	5				INHAL
WEL	GBR	1		4		RESP
OEL	EU	1		4		RESP
TLV-ACGIH		5				

## Predicted no-effect concentration - PNEC

Normal value in fresh water	0,49	mg/l
Normal value in marine water	0,32	mg/l
Normal value for water, intermittent release	0,49	mg/l
Normal value of STP microorganisms	3	mg/l
Normal value for the terrestrial compartment	1080	mg/kg

## Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation	4		1		4		1	
	mg/m <sup>3</sup>		mg/m <sup>3</sup>		mg/m <sup>3</sup>		mg/m <sup>3</sup>	

## Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one[EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

## Predicted no-effect concentration - PNEC

Normal value in fresh water	3,39	µg/l
Normal value in marine water	3,39	µg/l
Normal value for fresh water sediment	27	µg/kg
Normal value for marine water sediment	27	µg/kg
Normal value of STP microorganisms	230	µg/l

## Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		110		90				
		µg/kg bw/d		µg/kg bw/d				
Inhalation	40	NPI	20	NPI	40	NPI	20	NPI
	µg/m <sup>3</sup>		µg/m <sup>3</sup>		µg/m <sup>3</sup>		µg/m <sup>3</sup>	
Skin		NPI	NPI	NPI		NPI	NPI	NPI

## Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified ; LOW = low hazard ; MED = medium hazard ; HIGH = high hazard.

## 8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

## HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

## SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

## EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

**SECTION 8. Exposure controls/personal protection ... / >>**
**RESPIRATORY PROTECTION**

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

**ENVIRONMENTAL EXPOSURE CONTROLS**

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

**SECTION 9. Physical and chemical properties**
**9.1. Information on basic physical and chemical properties**

Properties	Value	Information
Appearance	pasty liquid	
Colour	White and the colour chart shades	
Odour	Hydraulic binder	
Melting point / freezing point	not available	
Initial boiling point	> 100 °C	
Flammability	not flammable	
Lower explosive limit	not applicable	
Upper explosive limit	not applicable	
Flash point	> 60 °C	
Auto-ignition temperature	not applicable	
Decomposition temperature	not available	
pH	12-13	
Kinematic viscosity	not available	
Dynamic viscosity	80000 cps	
Solubility	Mixable in water	
Partition coefficient: n-octanol/water	not available	
Vapour pressure	not available	
Density and/or relative density	1,6	
Relative vapour density	not available	
Particle characteristics	not applicable	

**9.2. Other information**

## 9.2.1. Information with regard to physical hazard classes

Information not available

## 9.2.2. Other safety characteristics

VOC (Directive 2004/42/EC) :	0,39 % - 6,31	g/litre
VOC (volatile carbon)	0,08 % - 1,28	g/litre
Explosive properties	not applicable	
Oxidising properties	not applicable	

**SECTION 10. Stability and reactivity**
**10.1. Reactivity**

There are no particular risks of reaction with other substances in normal conditions of use.

## Ethane-1,2-diol

In the air absorbs moisture. Decomposes at temperatures above 200°C/392°F.

**10.2. Chemical stability**

**SECTION 10. Stability and reactivity** ... / >>

The product is stable in normal conditions of use and storage.

**10.3. Possibility of hazardous reactions**

No hazardous reactions are foreseeable in normal conditions of use and storage.

Ethane-1,2-diol

Risk of explosion on contact with: perchloric acid. May react dangerously with: chlorosulphuric acid, sodium hydroxide, sulphuric acid, phosphorus pentasulphide, chromium (III) oxide, chromyl chloride, potassium perchlorate, potassium dichromate, sodium peroxide, aluminium. Forms explosive mixtures with: air.

**10.4. Conditions to avoid**

None in particular. However the usual precautions used for chemical products should be respected.

Ethane-1,2-diol

Avoid exposure to: sources of heat, naked flames.

**10.5. Incompatible materials**

Information not available

**10.6. Hazardous decomposition products**

Ethane-1,2-diol

May develop: hydroxyacetaldehyde, glyoxal, acetaldehyde, methane, carbon monoxide, hydrogen.

**SECTION 11. Toxicological information**

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**Metabolism, toxicokinetics, mechanism of action and other information

Calcium dihydroxide

**ABSORPTION**

The primary effect of calcium dihydroxide on health is local irritation caused by pH variation. Therefore, absorption is not a relevant parameter for the assessment of the effects of the substance.

Information on likely routes of exposure

Ethane-1,2-diol

WORKERS: inhalation; contact with the skin.

POPULATION: inhalation of ambient air; contact with the skin of products containing the substance.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Ethane-1,2-diol

Ingestion initially stimulates the central nervous system; later replaced by a phase of depression. There may be kidney damage, with anuria and uremia. Over-exposure symptoms are: vomiting, drowsiness, difficulty in breathing, convulsions. The lethal dose for humans is approx. 1.4 ml/kg.

Interactive effects

Information not available

ACUTE TOXICITY

ATE (Inhalation) of the mixture:

Not classified (no significant component)

ATE (Oral) of the mixture:

Not classified (no significant component)

ATE (Dermal) of the mixture:

Not classified (no significant component)

Ethane-1,2-diol

LD50 (Dermal):

3500 mg/kg Rat

LD50 (Oral):

> 7712 mg/kg Rat

LC50 (Inhalation vapours):

2,5 mg/l/4h

**SECTION 11. Toxicological information ... / >>**

Calcium dihydroxide  
LD50 (Dermal): > 2500 mg/kg Rabbit (OCSE 402)  
LD50 (Oral): > 2000 mg/kg Rat (OECD 425)

Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

LD50 (Dermal): 1008 mg/kg bw (rat)  
STA (Dermal): 50,001 mg/kg estimate from table 3.1.2 of Annex I of the CLP  
(figure used for calculation of the acute toxicity estimate of the mixture)  
LD50 (Oral): > 64 mg/kg bw 64-561 (rat)  
LC50 (Inhalation vapours): > 171 mg/m<sup>3</sup> 171-2360 (rat)

**SKIN CORROSION / IRRITATION**

Causes skin irritation

Calcium dihydroxide  
Causes skin irritation

**SERIOUS EYE DAMAGE / IRRITATION**

Causes serious eye damage

Calcium dihydroxide  
Causes severe eye injury

**RESPIRATORY OR SKIN SENSITISATION**

May produce an allergic reaction.

Contains:

Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

Calcium dihydroxide  
Does not meet the classification criteria for this danger class

**GERM CELL MUTAGENICITY**

Does not meet the classification criteria for this hazard class

Calcium dihydroxide  
Reverse Bacterial Mutation Essay (Ames Test, OECD 471): Negative  
Testing chromosomal aberrations on mammal cells: negative  
Given that calcium is an omnipresence and essential element and that any variation of the lime-induced pH in watery means has no relevance, calcium dihydroxide is ovially devoidant of any genotoxic potential. Classification by function of genotoxicity is not justified.

**CARCINOGENICITY**

Does not meet the classification criteria for this hazard class

Ethane-1,2-diol  
Available studies have shown no carcinogenic potential. In a carcinogenicity study lasting two years, carried out by the US National Toxicology Program (NTP), in which ethylene glycol was administered in the feed, "no evidence of carcinogenic activity" in male and female B6C3F1 mice was observed (NTP, 1993).

Calcium dihydroxide  
Calcium (administered in the form of lactate) is not carcinogenic (experimental result, rat). The effect on pH on the product of calcium diid dioxide is free of any carcinogenic potential. classification on the basis of carcinogenicity is not justified.

**REPRODUCTIVE TOXICITY**

Does not meet the classification criteria for this hazard class

Calcium dihydroxide  
Calcium (administered in the form of Ca carbonate) is not toxic for reproduction (experimental result, mouse). The effect on pH does not give rise to any reproductive risk. Human epidemiological data confirm that calcium diid dioxide is free of any potential toxicity. In both animal and clinical trials on different calcium salts, no effect has been identified on reproductive and developmental toxicity. v. also the Scientific Committee of Human Food (Anonymous, 2006). Therefore, calcium diidide is not toxic for reproduction and/or development.



**SECTION 11. Toxicological information ... / >>**

Classification on the basis of reproductive toxicity according to Regulation 1272/2008 is not necessary.

**STOT - SINGLE EXPOSURE**

Does not meet the classification criteria for this hazard class

Calcium dihydroxide  
It can irritate the airways

**STOT - REPEATED EXPOSURE**

Does not meet the classification criteria for this hazard class

Calcium dihydroxide  
The toxicity of calcium through the oral exposure pathway is demonstrated by the increase in maximum tolerable intake levels (UL) for adults determined by the Scientific Committee of Human Food (SCF), where UL-2500 mg/die, equal to 38 mg/kg of weight/die, equal to 38 mg/kg of weight/die (individual weighing 70 kg) for calcium.  
The toxicity of Ca(OH)<sub>2</sub> through contact with the skin is not considered relevant by virtue of the expected insignificant absorption through the skin and the fact that local irritation is the primary effect for health (pH variation).  
The toxicity of Ca(OH)<sub>2</sub> by inhalation (local effect, mucous irritation), taking into account an average time weighed for an 8-hour shift, was determined by the Scientific Committee for Occupational Exposure Limits (SCOEL) in 1 mg/m<sup>3</sup> of breathable dust.  
Therefore, the classification of Ca(OH)<sub>2</sub> on the basis of toxicity as a result of prolonged exposure is not necessarily

**ASPIRATION HAZARD**

Does not meet the classification criteria for this hazard class

Calcium dihydroxide  
Does not meet the classification criteria for this danger class

Calcium dihydroxide is classified as irritating to the skin and airways, and carries the risk of serious eye injury. The limit of occupational exposure for the prevention of sensory irritation at the local level and the reduction of lung function parameters as effects is OEL (8 hours) - 1 mg/m<sup>3</sup> of breathable dust.

**11.2. Information on other hazards**

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

**SECTION 12. Ecological information**

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

**12.1. Toxicity**

Calcium dihydroxide  
LC50 (96h) on sea fish: 457 mg/l  
LC50 (96h) on sea invertebrates: 158 mg/l  
NOEC (72 hours) on freshwater algae: 48 mg/l  
TOXICITY ON MICROORGANISMS, ES BACTERIA  
At high concentration, through temperature and pH rise, calcium dihydroxide is used for disinfection of sewer sludge.  
NOEC (14 days) for sea invertebrates: 32 mg/l  
EC10/LC10 or NOEC on soil macro-organisms: 2000 mg/kg soil dw  
EC10/LC10 or NOEC on soil microorganisms: 12000 mg/kg soil dw  
NOEC (21 days) on terrestrial plants: 1080 mg/kg  
GENERAL EFFECT

Acute effect of pH. Although this substance is useful for correcting water acidity, excess over 1 g/l can be harmful to aquatic organisms. A value of pH > 12 will decrease rapidly and as a result of dilution and carbonation.

**SECTION 12. Ecological information** ... / >>

Ethane-1,2-diol	
LC50 - for Fish	72,86 mg/l/96h
EC50 - for Crustacea	100 mg/l/48h
Chronic NOEC for Fish	32000 mg/l 7 days
Chronic NOEC for Crustacea	1000 mg/l 23 days
Chronic NOEC for Algae / Aquatic Plants	100 mg/l 72 h

Calcium dihydroxide	
LC50 - for Fish	50,6 mg/l/96h freshwater fish
EC50 - for Crustacea	49,1 mg/l/48h invertebrate
EC50 - for Algae / Aquatic Plants	184,57 mg/l/72h alga

Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)

LC50 - for Fish	> 190 µg/l 190-330
EC50 - for Crustacea	> 7 µg/l 7-160
EC50 - for Algae / Aquatic Plants	> 6,3 µg/l 6,3-27,3
Chronic NOEC for Fish	46,4 µg/l 35 days
Chronic NOEC for Crustacea	> 111 µg/l 11.1-1050

**12.2. Persistence and degradability**

Ethane-1,2-diol	
Solubility in water	1000 - 10000 mg/l
Rapidly degradable	

Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)  
Rapidly degradable

**12.3. Bioaccumulative potential**

Ethane-1,2-diol	
Partition coefficient: n-octanol/water	-1,36

**12.4. Mobility in soil**

Calcium dihydroxide  
Calcium dihydroxide is a moderately soluble substance and therefore has poor mobility in most soils.

**12.5. Results of PBT and vPvB assessment**

On the basis of available data, the product does not contain any PBT or vPvB in percentage  $\geq$  than 0,1%.

**12.6. Endocrine disrupting properties**

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

**12.7. Other adverse effects**

Information not available

**SECTION 13. Disposal considerations****13.1. Waste treatment methods**

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.



**SECTION 15. Regulatory information ... / >>**

VOC (Directive 2004/42/EC) :  
Decorative effect coatings.

German regulation on the classification of substances hazardous to water (AwSV, vom 18. April 2017)  
WGK 1: Low hazard to waters

**15.2. Chemical safety assessment**

A chemical safety assessment has been performed for the following contained substances  
Calcium dihydroxide

**SECTION 16. Other information**

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

<b>Acute Tox. 1</b>	Acute toxicity, category 1
<b>Acute Tox. 2</b>	Acute toxicity, category 2
<b>Acute Tox. 3</b>	Acute toxicity, category 3
<b>Acute Tox. 4</b>	Acute toxicity, category 4
<b>STOT RE 2</b>	Specific target organ toxicity - repeated exposure, category 2
<b>Skin Corr. 1B</b>	Skin corrosion, category 1B
<b>Eye Dam. 1</b>	Serious eye damage, category 1
<b>Skin Irrit. 2</b>	Skin irritation, category 2
<b>STOT SE 3</b>	Specific target organ toxicity - single exposure, category 3
<b>Skin Sens. 1</b>	Skin sensitization, category 1
<b>Aquatic Acute 1</b>	Hazardous to the aquatic environment, acute toxicity, category 1
<b>Aquatic Chronic 1</b>	Hazardous to the aquatic environment, chronic toxicity, category 1
<b>H330</b>	Fatal if inhaled.
<b>H310</b>	Fatal in contact with skin.
<b>H301</b>	Toxic if swallowed.
<b>H302</b>	Harmful if swallowed.
<b>H373</b>	May cause damage to organs through prolonged or repeated exposure.
<b>H314</b>	Causes severe skin burns and eye damage.
<b>H318</b>	Causes serious eye damage.
<b>H315</b>	Causes skin irritation.
<b>H335</b>	May cause respiratory irritation.
<b>H317</b>	May cause an allergic skin reaction.
<b>H400</b>	Very toxic to aquatic life.
<b>H410</b>	Very toxic to aquatic life with long lasting effects.

**LEGEND:**

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds

**SECTION 16. Other information** ... / >>

- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

**GENERAL BIBLIOGRAPHY**

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
12. Regulation (EU) 2016/1179 (IX Atp. CLP)
13. Regulation (EU) 2017/776 (X Atp. CLP)
14. Regulation (EU) 2018/669 (XI Atp. CLP)
15. Regulation (EU) 2019/521 (XII Atp. CLP)
16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
17. Regulation (EU) 2019/1148
18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
22. Delegated Regulation (UE) 2022/692 (XVIII Atp. CLP)

- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

**Note for users:**

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

**CALCULATION METHODS FOR CLASSIFICATION**

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

**Changes to previous review:**

The following sections were modified:

01 / 02 / 03 / 08 / 09 / 11 / 12 / 15 / 16.