Safety data sheet
according to 1907/2006/EC, Article 31

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

1.1 Product identifier

Trade name:

Fixit 203

Finish coat with hydraulic lime

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

Life cycle stages
C/PW Consumer use / Widespread use by professional workers

Sector of Use
SU19 Building and construction work

Product category
PC9b Fillers, putties, plasters, modelling clay

Process category
PROC11 Non industrial spraying
PROC19 Manual activities involving hand contact

Environmental release category
ERC10a / ERC11a Widespread use of articles with low release

Article category
AC4 Stone, plaster, cement, glass and ceramic articles

Application of the substance / the preparation
Plaster - Product for an industrial, technical and private use for mixing with water and subsequent processing on buildings. For all other uses is advised against/ not recommended.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

FIXIT AG
Im Schachen 416
5113 Holderbank AG
Switzerland

Tel. +41 (0)62 887 51 51
Fax +41 (0)62 887 53 53
info@fixit.ch
fixit.ch

Further information obtainable from:
Product safety department (on working days 8:00 - 16:00)

1.4 Emergency telephone number

National poisons information centre: +44/(0)171 - 635 9191
National Health Service: 111
European emergency call: 112

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SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Skin Irrit. 2 H315 Causes skin irritation.
Eye Dam. 1 H318 Causes serious eye damage.
Skin Sens. 1 H317 May cause an allergic skin reaction.

Additional information:
The classification in terms of skin and eye irritation is based on the results of animal studies, see section 16 literature [4], [11] and [12].

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008
The product is classified and labelled according to the GB CLP regulation.

Hazard pictograms



GHS05 GHS07

Signal word
Danger

Hazard-determining components of labelling:
Portland cement clinker
Natural hydraulic lime
Calcium dihydroxide

Hazard statements
H315 Causes skin irritation.
H318 Causes serious eye damage.
H317 May cause an allergic skin reaction.

Precautionary statements

P102	Keep out of reach of children.
P261	Avoid breathing dust.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing 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.
P315	Get immediate medical advice/attention.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P501	Dispose of contents/container in keeping with local and national regulations.

2.3 Other hazards

As soon as the dry mixture comes into contact with water or humidity, a strongly alkaline solution will be formed. Wet mortar may cause skin and eye irritation due to the high alkalinity. Especially with prolonged contact (e.g. knees in wet mortar) the risk of serious skin damage increases due to the alkalinity.

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The part of respirable, cristaline siliciumdioxide amounts below 1%. The product ist no subject to a declaration obligation. However, the use of breathing protection is advisable.

Dust from the dry mixture can cause respiratory irritation. Frequent inhalation of large amounts of dust increases the risk of developing lung diseases.

The mixture is chromate reduced and therefore is no risk of sensitization by chromate. The ready to use form after addition of water contains in maximum 0,0002% of soluble chromium(VI) based on the dry weight of the cement. Proper dry storage and compliance with the maximum storage time is required for an effective chromate reduction.

Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.1 Chemical characterization: Substances
This product is a mixture.

3.2 Mixtures

Description:
Mixture of inorganic binders, fillers and nonhazardous additions

Dangerous components:		
CAS: 65997-15-1 EINECS: 266-043-4 REACH: ¹	Portland cement clinker Consisting of: 12168-85-3 Tricalcium silicate (45 - 70%); 10034-77-2 Dicalcium silicate (5 - 25%); 12042-78-3 Tricalcium aluminate (0 - 10%); 12612-16-7 Calcium aluminate ferrite (0 - 10%) Eye Dam. 1, H318; Skin Irrit. 2, H315; Skin Sens. 1, H317; STOT SE 3, H335 Specific concentration limits: Skin Irrit. 2; H315: C ≥ 1 % Eye Dam. 1; H318: C ≥ 1 %	5 - 10%
CAS: 85117-09-5 EINECS: 285-561-1 REACH: 01-2119475523-36	Natural hydraulic lime Consisting of: 1305-62-0 Calcium dihydroxide (15 - 65%); 10034-77-2 Dicalcium silicate (10 - 45%); 1317-65-3 Limestone (Calcium carbonate) (10 - 40%) Eye Dam. 1, H318; Skin Irrit. 2, H315; STOT SE 3, H335 Specific concentration limits: Skin Irrit. 2; H315: C ≥ 1 % Eye Dam. 1; H318: C ≥ 1 %	1 - 2.5%
CAS: 1305-62-0 EINECS: 215-137-3 REACH: 01-2119475151-45	Calcium dihydroxide Eye Dam. 1, H318; Skin Irrit. 2, H315; STOT SE 3, H335 Specific concentration limits: Skin Irrit. 2; H315: C ≥ 1 % Eye Dam. 1; H318: C ≥ 1 %	1 - 2.5%

Other components (>20%):		
CAS: 1317-65-3 EINECS: 215-279-6 REACH: ¹	Limestone (Calcium carbonate) Consisting of: 471-34-1 Calcium carbonate (> 90%); 16389-88-1 Calcium/Magesium carbonate (0 - 10%); 14808-60-7 Quartz (SiO_2) (0 - 10%); 37244-96-5 Feldspar (0 - 5%); 12001-26-2 Mica - Potassium aluminum silicate (Muscovite) (0 - 5%)	50 - < 100%

Additional information:
For the wording of the listed hazard phrases refer to section 16.

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[1] Not subject to registration in accordance with EC 1907/2006 Annex V (point 7) or Article 2.

SECTION 4: First aid measures

4.1 Description of first aid measures



First aid

General information:
For first responder no special personal protective equipment is required. First responder should avoid contact with the product.

After inhalation:
Remove dust source and provide fresh air or bring the person in fresh air. If discomfort, cough or persistent irritation, seek medical attention.

After skin contact:
Immediately wash with water and soap and rinse thoroughly. Immediately remove all soiled and contaminated clothing. Wash contaminated clothes before reuse. Clean contamionated shoes before reuse. If skin irritation continues, consult a doctor.

After eye contact:
Do not rub eyes because additional damage to eyes can be caused by mechanical stress. If necessary, remove contact lenses and flush the eye immediately while holding eyelids open to water for at least 20 minutes. If possible, isotonic eyewash solution (e. g. 0,9% NaCl). Always consult an occupational physician or ophthalmologist.

After swallowing:
Do not induce vomiting. If conscious rinse mouth with water and drink plenty of water. Consult a physician or poison control center.

4.2 Most important symptoms and effects, both acute and delayed
Symptoms and effects are described in section 2 and 11.
Eye contact with the product may cause serious and potentially permanent damage.
The product in the dry state by prolonged contact can also have an irritant effect on moist skin. The contact with moist skin may cause skin irritation, dermatitis or other serious skin damage.

4.3 Indication of any immediate medical attention and special treatment needed
If a physician is to be consulted, as per possibillity he should be presented this safety data sheet.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents:
The mixture is flammable neither in the delivery condition not in mixed conditions. Extinguisher and fire fighting are therefore adjusted to the surrounding fire.

5.2 Special hazards arising from the substance or mixture
This product is neither explosive nor flammable, and non-oxidizing with other materials. Inorganic dust can appear in case of fire. Avoid formation of dust. Reacts alkaline with water.

5.3 Advice for firefighters
No special measures required. Collect contaminated fire fighting water separately. It must not enter the sewage system. Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Avoid formation of dust. Avoid inhalation, eye and skin contact. If appropriate, reference must be made to exposure controls and personal protection (see section 8).

6.2 Environmental precautions
Do not allow product to reach water because an increase of pH may be caused. Ecotoxicological effects may occur when the pH-value is above 9. National regulations for waste water and groundwater are to be observed.

6.3 Methods and material for containment and cleaning up
Collect spilled dry material dry and use if possible. Avoid formation of dust. For cleaning use at least industrial vacuum dust class M (DIN EN 60335-2-69). Do not dry sweep. Never use compressed air for cleaning. If, during a dry cleaning dust is formed, then it is necessary to use personal protective equipment. Avoid inhalation of emerging dust and contact with skin. Dispose of the material collected according to regulations.

Let the mixed mortar solidify and dispose of (see section 13.1).

6.4 Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling:
Ensure good ventilation/exhaustion at the workplace. Prevent formation of dust. Avoid contact with the eyes and skin. Wear protective clothing. Washing facilities / Water for cleaning eyes and skin should be available. Persons, who tend to skin diseases or other hypersensitivity reactions of the skin, should not handle the product. Do not eat, drink, smoke or sniff while working.

Do not use products after the specified storage period any more, because the effect of the reducing agent contained decreases and the content of soluble chromium (VI) may exceed those limits mentioned in section 2.3. In these cases may develop an allergic Chromate dermatitis with prolonged contact due to the water-soluble chromate contained in the product.

Information about fire - and explosion protection:
No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles:
Keep out of reach of children. Store in cool, dry place in tightly closed receptacles. Do not use light alloy receptacles.

Information about storage in one common storage facility:
Keep away from foodstuffs, beverages and feed.

Further information about storage conditions:
Store dry. Prevent ingress of water and moisture. Always keep in original container. Improper storage (ingress of moisture) or exceeding the maximum storage period, can subside the effect of contained chromate reducer (see section 7.1).

Miniumum storage life:
Minimum storage life (story dry, up to 20°C): See indication on package.

Storage class: 13

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7.3 Specific end use(s)
No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:	
65997-15-1 Portland cement clinker	
WEL (Great Britain)	Long-term value: 10* 4** mg/m³ *inhalable dust **respirable dust
1305-62-0 Calcium dihydroxide	
WEL (Great Britain)	Short-term value: 4* mg/m³ Long-term value: 5 1* mg/m³ *resprable fraction
IOELV (EU)	Short-term value: 4 mg/m³ Long-term value: 1 mg/m³ Respirable fraction

DNELs		
85117-09-5 Natural hydraulic lime		
Inhalative	Systemic - Long term exposure	1 mg/m³ (Consumer) 1 mg/m³ (Employee)
	Systemic - Short term exposure	4 mg/m³ (Consumer) 4 mg/m³ (Employee)
1305-62-0 Calcium dihydroxide		
Inhalative	Systemic - Long term exposure	1 mg/m³ (Consumer) 1 mg/m³ (Employee)
	Systemic - Short term exposure	4 mg/m³ (Consumer) 4 mg/m³ (Employee)

PNECs	
85117-09-5 Natural hydraulic lime	
Freshwater	0.49 mg/l (Water)
Marine water	0.32 mg/l (Water)
Soil	1,080 mg/kg (Soil)
Sewage plant	3 mg/l (not specified)

Ingredients with biological limit values:
Void

Additional Occupational Exposure Limit Values for possible hazards during processing:	
Components with general dust limit	
MAK (Great Britain)	Long-term value: 4 A 10 E mg/m³
14808-60-7 Quartz (SiO_2)	
BOELV (EU)	Long-term value: 0.1* mg/m³ *respirable fraction
1305-62-0 Calcium dihydroxide	
WEL (Great Britain)	Short-term value: 4* mg/m³ Long-term value: 5 1* mg/m³ *resprable fraction

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IOELV (EU)	Short-term value: 4 mg/m³ Long-term value: 1 mg/m³ Respirable fraction

A - Alveoles passing particles E - Respirable particles (DIN EN 481)

Additional information:
The lists valid during the making were used as basis.

8.2 Exposure controls

8.2.1. Individual protection measures, such as personal protective equipment

General protective and hygienic measures:
Keep away from foodstuffs, beverages and feed. Remove contaminated clothing immediately and thoroughly clean it before using it again. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin. Do not eat, drink, smoke or sniff while working. Use skin protection cream for skin protection. Ensure that washing facilities are available at the work place.

Respiratory protection:



Particle filtering half mask (FFP2 according to EN 149)

Compliance with the Occupational Exposure Limits is to be ensured through effective dust-technical measures, such as local exhaust ventilation. If there is a risk of exceeding the exposure limits, e. g. the open fiddling with the powdered dry product or during processing by splash, an appropriate respirator must be used.

Hand protection:



Hand protection: Chemical resistant protective gloves according EN ISO 374

Wear waterproof, abrasion and alkali-resistant protective gloves with CE marking. leather gloves are not suitable on the basis of their water permeability and can release chromate-containing compounds.

Material of gloves:
When preparing and processing the ready-mix, no chemical-resistant gloves (Cat. III) are necessary. Studies have shown that nitrilge-soaked cotton gloves (layer thickness about 0.15 mm) offer over a period of 480 min adequate protection. Change damp gloves. Keep gloves ready for change.

Penetration time of glove material:
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

For the permanent contact gloves made of the following materials are suitable:
Polychloroprene (material thickness ≥ 0.5 mm ; breakthrough time ≥ 480 min.)
Nitrile rubber (material thickness ≥ 0.35 mm ; breakthrough time ≥ 480 min.)
Butyl rubber (material thickness ≥ 0.5 mm ; breakthrough time ≥ 480 min.)
Fluororubber (material thickness ≥ 0.4 mm ; breakthrough time ≥ 480 min.)
Neoprene protective gloves with a material thickness of ≥ 0.5 mm are recommended.

Not suitable are gloves made of the following materials:
Non-liquid-tight gloves made of fabric, leather or similar materials.

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Eye/face protection:



In case of dust development or splash risk use tightly fitting safety goggles according to EN 166.

Body protection:



Wear closed long-sleeved clothing and tight shoes. If contact with fresh mortar is unavoidable, the protective clothing should also be waterproof. Make sure that no fresh mortar from above gets into the shoes or boots.

Risk management measures:
An operator training/guidance in the correct use of personal protective equipment is necessary to ensure the required level of effectiveness.

8.2.2. Information about design of technical facilities
For reduction of the dust formation, closed systems (e. g. silo with conveyor) local exhaust or other engineering controls such as plastering machines or continuous mixers with special additional equipment for dust detection should be used.

8.2.3. Environmental exposure controls
Do not allow product to reach water because an increase of pH may be caused. Ecotoxicological effects may occur when the pH-value is above 9. National regulations for waste water and groundwater are to be observed.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information	
Physical state	Solid
Appearance:	
Form:	Powder
Colour:	Light grey
Odour:	Odourless
Odour threshold:	Not safety relevant
pH at 20 °C (68 °F)	> 11 Saturated aqueous solution
Change in condition	
Melting point/freezing point:	> 1,300 °C (> 34.300 °F) (ISO 3016)
Boiling point or initial boiling point and boiling range	Not applicable
Flammability	Product is not flammable.
Flash point:	Not applicable
Ignition temperature:	Not applicable
Decomposition temperature:	> 825°C to CaO and CO_2
Oxidising properties:	None
Explosive properties:	Product does not present an explosion hazard.
Auto-ignition temperature:	Product is not selfigniting.
Density and/or relative density	
Density:	Not determined
Bulk density:	1,200 - 1,400 kg/m³
Particle size	
Solubility	
Water:	Slightly soluble

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Solids content:	100.0 %
VOC without water (EC):	0.00 g/l
VOC with water (EC):	-0.00 g/l
VOC with water (EC):	0.000 %

9.2 Other information

Information with regard to physical hazard classes	
Explosives	Void
Flammable gases	Void
Aerosols	Void
Oxidising gases	Void
Gases under pressure	Void
Flammable liquids	Void
Flammable solids	Void
Self-reactive substances and mixtures	Void
Pyrophoric liquids	Void
Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit flammable gases in contact with water	Void
Oxidising liquids	Void
Oxidising solids	Void
Organic peroxides	Void
Corrosive to metals	Void
Desensitised explosives	Void

SECTION 10: Stability and reactivity

10.1 Reactivity
Reacts alkaline with water. A proposed reaction takes place in contact with water, during which the product hardens and forms a solid mass, which does not react with the environment.

10.2 Chemical stability:
The product is stable as long as it is stored properly and dry.

Thermal decomposition / conditions to be avoided:
No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions
No dangerous reactions known (see 10.5).

10.4 Conditions to avoid
Prevent entry of water and moisture during storage (the mixture reacts with moisture alkaline and hardens).

10.5 Incompatible materials
Reacts exothermically with acids. The wet product is alkaline and reacts with acids, ammonium salts and base metals e.g. aluminum, zinc or brass. The reaction with base metals produces hydrogen.

10.6 Hazardous decomposition products
No decomposition if used and stored according to specifications.

Miniumum storage life:
Minimum storage life (story dry, up to 20°C): See indication on package.

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Additional information:
The mixture is chromate reduced. The ready for use preparation after addition of water contains in maximum 2 mg/kg dissolvable chrom(VI) related to the dry mass. Presupposition for the chromate reduction is the appropriate storage under consideration of the maximum storage life.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
The product was not investigated. The statement is derivated from the properties of the single components.

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

LD/LC50 values relevant for classification:		
1317-65-3 Limestone (Calcium carbonate)		
Oral	LD_{50}	6,450 mg/kg (Rat) (RTECS Data)
65997-15-1 Portland cement clinker		
Oral	LD_{50}	> 2,000 mg/kg (Mouse) In animal studies with cement dust no acute toxicity was observed. On the basis of the available data, the classification criteria are not fulfilled.
Dermal	LD_0 (no lethality)	> 2,000 mg/kg (Rabbit) (Limit test 24h [4]) On the basis of the available data, the classification criteria are not fulfilled.
Inhalative	LD_0 (no lethality)	5 mg/m³ (Rat) (Limit test [10]) On the basis of the available data, the classification criteria are not fulfilled.
85117-09-5 Natural hydraulic lime		
Oral	LD_{50}	7,340 mg/kg (Rat) (OECD 425)
1305-62-0 Calcium dihydroxide		
Oral	LD_{50}	7,340 mg/kg (Rat) (OECD 425) > 2,500 mg/kg (Rabbit) (OECD 402)
Dermal	LD_{50}	> 2,500 mg/kg (Rabbit) (OECD 402)

Other information (about experimental toxicology):		
85117-09-5 Natural hydraulic lime		
Irritation of skin	OECD 404 (skin)	(Rabbit) irritant
Irritation of eyes	OECD 405 (eye)	(Rabbit) corrosive

On the skin:
Cement has a skin and mucous irritant effect. Dry cement in contact with moist skin or skin in contact with moist or wet cement may lead to different irritant and inflammatory skin reactions, e. g. As redness and cracking. Prolonged contact in combination with abrasion can cause serious skin damage, see section 16 literature [4].

Calcium dihydroxide is irritating to skin (in vivo, rabbit). As a result of studies of calcium dihydroxide is classified as irritating to skin (H315 - Causes skin irritation).
Causes skin irritation.

On the eye:
In the in vitro test showed Portland cement clinker varying degrees of impact on the cornea. The calculated "irritation index" is 128. Direct contact with cement may lead by mechanical reaction, irritation and inflammation to corneal damage. Direct contact with larger amounts of dry or wet

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cement may cause effects ranging from moderate eye irritation to serious eye damage and blindness, see Section 16 References [11] and [12].

As a result of studies (in vivo, rabbit) calcium dihydroxide can cause serious eye damage (H318 - Causes serious eye damage).
Causes serious eye damage.

Sensitization:
May cause an allergic skin reaction.

Specific target organ toxicity - single exposure (STOT SE):
Cement dust exposure may cause irritation of the respiratory system. Coughing, sneezing, and shortness of breath may be the result if exposure above the occupational exposure limit, see Section 16 References [1].
Calcium dihydroxide is irritating to the respiratory tract (STOT SE 3 / H335 - May cause respiratory irritation).

Specific target organ toxicity - repeated exposure (STOT RE):
Long term exposure to respirable dust in excess of occupational exposure limit may result in coughing, shortness of breath and chronic obstructive changes in the respiratory tract. At low concentrations, no chronic effects were observed, see section 16 literature [17]. Based on the available data, the classification criteria are not fulfilled.
Cement may aggravate existing skin disorders, eye and respiratory tract, e. g. with emphysema or asthma.
Frequent inhalation of large amounts of dust increases the risk of developing lung diseases.

Practical experience
No further relevant information available.

General comments
See section 16 (literature and references).

Subacute to chronic toxicity:
Can cause serious skin damages in conjunction with skin-humidity at long term exposure.
The contact with wet cement may cause skin eczema on some individuals. This can be triggered either by the pH (irritant contact dermatitis) or by immunological reaction of water soluble chromium(VI) (allergic contact dermatitis), see section 16 literature [5] and [13].

11.2 Information on other hazards

Endocrine disrupting properties
None of the ingredients is listed.

SECTION 12: Ecological information

12.1 Toxicity
The product was not investigated. The statement is derivated from the properties of the single components.

Aquatic toxicity:	
1317-65-3 Limestone (Calcium carbonate)	
LC_{50} (96h)	> 100 mg/l (Rainbow trout - oncorhynchus mykis) (OECD 203)
LC_{50} (48h)	> 100 mg/l (Water flea - daphnia magma) (OECD 202)
EC_{50}	> 14 mg/l (Algae - desmodesmus subspicatus) (OECD 201)
	> 1,000 mg/l (Activated sewage sludge) (OECD 209)
65997-15-1 Portland cement clinker	
LC_{50}	mg/l (Water flea - daphnia magma) (low effect [6,8])
	mg/l (Algae - selenastrum coli) (low effect [7,8])
	mg/l (Sediments) (low effect [9])

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85117-09-5 Natural hydraulic lime	
LC_{50} (96h Marine water)	457 mg/l (Fish)
	158 mg/l (Invertebrate)
LC_{50} (96h Freshwater)	50.6 mg/l (Fish)
EC_{50} (48h)	49.1 mg/l (Invertebrate)
EC_{50} (72h)	184.57 mg/l (Algae)
NOEC (72h)	48 mg/l (Algae)
NOEC (14d)	32 mg/l (Invertebrate)
NOEC (21d)	1,080 mg/kg (General plants)
EC_{10}/LC_{10} (NOEC)	12,000 mg/kg (Soil microorganisms)
	2,000 mg/kg (Soil macroorganisms)
1305-62-0 Calcium dihydroxide	
LC_{50} (96h Marine water)	457 mg/l (Fish)
	158 mg/l (Invertebrate)
LC_{50} (96h Freshwater)	33.884 mg/l (African catfish - clarias gariepinus)
	50.6 mg/l (Fish)
EC_{50} (48h)	49.1 mg/l (Invertebrate)
EC_{50} (72h)	184.57 mg/l (Algae)
NOEC (72h)	48 mg/l (Algae)
NOEC (14d)	32 mg/l (Invertebrate)
NOEC (21d)	1,080 mg/kg (General plants)
NOEC (96h)	56 mg/l (Guppy - poecilia reticulata)
EC_{10}/LC_{10} (NOEC)	12,000 mg/kg (Soil microorganisms)
	2,000 mg/kg (Soil macroorganisms)

12.2 Persistence and degradability
Anorganic product, is not removable from water by biological cleaning process

12.3 Bioaccumulative potential
Does not accumulate in organisms

12.4 Mobility in soil
Slightly soluble

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.
vPvB: Not applicable.

12.6 Endocrine disrupting properties
The product does not contain substances with endocrine disrupting properties.

12.7 Other adverse effects

Literature
See section 16 (literature and references).

Ecotoxical effects:
Only by increasing the pH value during application of large quantities.

Behaviour in sewage processing plants:
No further relevant information available.

Remark:
Ecotoxicological tests with Portland cement on Daphnia magna (US EPA, 1994a, see Section 16 References [6]) and Selenastrum Coli (US EPA, 1993, see section 16 literature [7]) have shown little toxicological effect. Therefore, the LC50 and EC50 values could not be determined, see section 16 literature [8]. There were also no toxic effects on sediments are found, see section 16 literature

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[9]. The addition of large quantities of cement in water can cause a pH increase and thus be toxic to aquatic life under special circumstances.

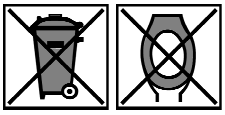
Additional ecological information:

General notes:
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation:



Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Gather dry, store in labeled containers and re-use if possible, taking into account the maximum storage time or mix residual amounts while avoiding any skin contact and exposure to dust with water. Moisture products or product slurry to harden and dispose of according to local regulatory regulations.

Dispose of contents/container in accordance with local/regional/national/international regulations.

16 03 03 for residual amounts of unprocessed product
17 09 04 for the water mixed and setted product
15 01 01 for the completely emptied packaging

13.2 Uncleaned packaging

Recommendation:
Disposal must be made according to official regulations.
Recycle only completely emptied packaging.

SECTION 14: Transport information

14.1 UN number or ID number **ADR, ADN, IMDG, IATA**	Void
14.2 UN proper shipping name **ADR, ADN, IMDG, IATA**	Void
14.3 Transport hazard class(es) **ADR, ADN, IMDG, IATA** **Class**	Void
14.4 Packing group **ADR, IMDG, IATA**	Void
14.5 Environmental hazards **Marine pollutant:**	No
14.6 Special precautions for user	Not applicable

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14.7 Maritime transport in bulk according to IMO instruments	Not applicable
UN "Model Regulation":	Void

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SECTION 15: Regulatory information

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

Directive (EU) 2012/18
Named dangerous substances - ANNEX I :
None of the ingredients is listed.

Biozide ingredients (98/8/EG):
Data based on recipe and information on the raw materials from the supply chain.

None of the ingredients is listed.

Classification according 2004/42/EG: Not applicable.

15.2 Chemical safety assessment
A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Reasons for changes:
* Data compared to the previous version altered.

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

Advice for instructions:
Additional trainings, which go beyond the prescribed training in activities involving hazardous substances are not required.

Literature and the data sources:
[1] Portland Cement Dust-Hazard assessment document EH75/7, UK Health and Safety Executive, 2006: http://www.hse.gov.uk/pubns/web/portlandcement.pdf.
[2] Technische Regel für Gefahrstoffe „Arbeitsplatzgrenzwerte“, 2009, GMBI Nr.29 S.605.
[3] MEASE 1.02.01 Exposure assessment tool for metals and inorganic substances, EBRC Consulting GmbH für Eurometaux, 2010
[4] Observations on the effects of skin irritation caused by cement, Kietzman et al, Dermatosen, 47, 5, 184-189 (1999).
[5] Epidemiological assessment of the occurrence of allergic dermatitis in workers in the construction industry related to the content of Cr (VI) in cement, NIOH, Page 11, 2003.
[6] U.S. EPA, Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, 3rd ed. EPA/600/7-91/002, Environmental Monitoring and Support Laboratory, U.S. EPA, Cincinnati, OH (1994a).
[7] U.S. EPA, Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, 4th ed. EPA/600/4-90/027F, Environmental Monitoring and Support Laboratory, U.S. EPA, Cincinnati, OH (1993).
[8] Environmental Impact of Construction and Repair Materials on Surface and Ground Waters. Summary of Methodology, Laboratory Results, and Model Development. NCHRP report 448, National Academy Press, Washington, D.C., 2001.

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[9] Final report Sediment Phase Toxicity Test Results with Corophium volutator for Portland clinker prepared for Norcem A.S. by AnalyCen Ecotox AS, 2007.
[10] TNO report V8801/02, An acute (4-hour) inhalation toxicity study with Portland Cement Clinker GB CLP/GHS 03-2010-fine in rats, August 2010.
[11] TNO report V8815/09, Evaluation of eye irritation potential of cement clinker G in vitro using the isolated chicken eye test, April 2010.
[12] TNO report V8815/10, Evaluation of eye irritation potential of cement clinker W in vitro using the isolated chicken eye test, April 2010.
[13] European Commission's Scientific Committee on Toxicology, Ecotoxicology and the Environment (SCTEE) opinion of the risks to health from Cr (VI) in cement (European Commission, 2002): http://ec.europa.eu/health/archive/ph_risk/committees/sct/documents/out158_en.pdf.
[14] Investigation of the cytotoxic and proinflammatory effects of cement dusts in rat alveolar macrophages, Van Berlo et al, Chem. Res. Toxicol., 2009 Sept; 22(9):1548-58
[15] Cytotoxicity and genotoxicity of cement dusts in A549 human epithelial lung cells in vitro; Gminski et al, Abstract DGPT conference Mainz, 2008.
[16] Comments on a recommendation from the American Conference of governmental industrial Hygienists to change the threshold limit value for Portland cement, Patrick A. Hessel and John F. Gamble, EpiLung Consulting, June 2008.
[17] Prospective monitoring of exposure and lung function among cement workers, Interim report of the study after the data collection of Phase I-II 2006-2010, H. Notø, H. Kjuus, M. Skogstad and K.-C. Nordby, National Institute of Occupational Health, Oslo, Norway, March 2010.
[18] Anonymous, 2006: Tolerable upper intake levels for vitamins and minerals Scientific Committee on Food, European Food Safety Authority, ISBN: 92-9199-014-0 [SCF document]
[19] Anonymous, 2008: Recommendation from the Scientific Committee on Occupational Ex-posure Limits (SCOEL) for calcium oxide (CaO) and calcium dihydroxide (Ca(OH)2), European Commission, DG Employment, Social Affairs and Equal Opportunities, SCOEL/SUM/137 February 2008

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Abbreviations and acronyms:
MAK: Maximale Arbeitsplatz-Konzentration (maximum concentration of a chemical substance in the workplace, Austria/ Germany)
PBT: persistent, bioaccumulative and toxic properties
vPvB: very persistent, bioaccumulatice properties
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
DNEL: Derived No-Effect Level (UK REACH)
PNEC: Predicted No-Effect Concentration (UK REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Skin Sens. 1: Skin sensitisation – Category 1
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Further information:
The information in this safety data sheet describe the safety requirements of our product and is based on our current state of our knowledge. They provide no assurance of product quality. Existing laws, ordinances and regulations, including those that are not mentioned in this data sheet must be

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observed by the recipient of our products in their own responsibility.