

Revision Date: July 2019

According to Regulation (EC) No 1907/2006, Annex II, as amended. Commission Regulation (EU) No 2015/830 of 28 May 2015 Triton Systems Units 3-5 Crayford Commercial Centre, Greyhound Way Crayford, Kent DA1 4HF Tel: 01322 318830 Fax: 01322 524017 www.tritonsystems.co.uk info@tritonsystems.co.uk

1. PRODUCT NAME:



Emergency Telephone Number: 01322 318830 Hours of Operation: 9.00am-17.00pm Mon-Fri

Relevant identified uses of the substance or mixture and uses advised againstIdentified usesIntegral Waterproofing by Crystallisation

2. HAZARD IDENTIFICATION

Classification of the substance or mixture Classification (EC 1272/2008) Physical Hazards Health Hazards

Environmental Hazards

Label Elements Hazard Pictograms



Signal Word Hazard Statements

Precautionary Statements

Not Classified Skin Irrit. 2 – H315 Eye Dam. 1 – H318 Skin Sens. 1 – H317 STOT SE 2 – H371 STOT SE 3 – H335 Not Classified

Danger

Danger
H315 Causes skin irritation
H318 Causes serious eye damage.
H317 May cause an allergic skin reaction.
H371 May cause damage to organs.
H335 May cause respiratory irritation.
P260 Do not breathe dust.
P261 Avoid breathing dust.
P264 Wash contaminated skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P272 Contaminated work clothing should not be allowed out of
the workplace.
P280 Wear protective gloves/ protective clothing/ eye
protection/ face protection.
P302+P352 IF ON SKIN: Wash with plenty of water.
P304+P340 IF INHALED: Remove person to fresh air and keep
comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for
several minutes. Remove contact lenses, if present and easy to
do. Continue rinsing.
P308+P311 IF exposed or concerned: Call a POISON
CENTER or doctor.
P310 Immediately call a POISON CENTRE/ doctor.
P312 Call a POISON CENTRE/ doctor if you feel unwell.
P321 Specific treatment (see medical advice on this label).
P332+P313 If skin irritation occurs: Get medical
advice/attention.



P333+P313 If skin irritation or rash occurs: Get medical advice/ attention. P362+P364 Take off contaminated clothing and wash it before reuse. P403+P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up. P501 Dispose of contents/ container in accordance with national regulations. Portland Cement, CALCIUM HYDROXIDE Supplementary precautionary P261 Avoid breathing vapour/ spray. P264 Wash contaminated skin thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P272 Contaminated work clothing should not be allowed out of the workplace. P310 Immediately call a POISON CENTER/ doctor. P312 call a POISON CENTRE/ doctor if you feel unwell. P321 Specific treatment (see medical advice on this label). P333+P313 If skin irritation or rash occurs: Get medical advice/ attention. P362+P364 Take off contaminated clothing and wash it before reuse. P405 Store locked up. P501 Dispose of contents/ container in accordance with national regulations.

Other Hazards HSNO Classification

Contains

statements

3. COMPOSITION/ INFORMATION ON INGREDIENTS Mixtures

Portland Cement CAS number: 65997-15-1	EC number: 266-043-4	60-100%
Classification Skin Irrit. 2 – H315 Eye Dam. 1 – H318 Skin Sens. 1 – H317 STOT SE 3 – H335		
Sodium Carbonate CAS number: 497-19-8	EC number: 207-838-8	10-30%
Classification Eye Irrit. 2 – H319		
Fumaric Acid CAS number: 110-17-8	EC number: 203-743-0	10-30%
Classification Eye Irrit. 2 – H319		



Calcium Dihydroxide CAS number: 1305-62-0	EC number: 215-137-3	5-10%
Classification Skin Irrit. 2 – H315 Eye Dam. 1 – H318 STOT SE 1 – H370 STOT SE 3 – H335		

4. FIRST AID MEASURES

Description of first aid measures	
General Information	Move affected person to fresh air and keep warm and at
	rest in a position comfortable for breathing. Get medical
	attention. Treat symptomatically.
Inhalation	IF INHALED: Get medical attention immediately. Move affected
Initiation	
	person to fresh air and keep warm and at rest in a position
	comfortable for breathing. Do not induce vomiting.
Ingestion	IF SWALLOWED: Get medical attention immediately. If throat
	irritation or coughing persists, proceed as follows. Rinse mouth
	thoroughly with water. Promptly get affected person to drink
	large volumes of water to dilute the swallowed chemical. Stop if
	the affected person feels sick as vomiting may be dangerous. If
	vomiting occurs, the head should be kept low so that vomit
	does not enter the lungs.
Skin Contact	IF ON SKIN (or hair): Rinse immediately with plenty of water.
	Continue to rinse for at least 10 minutes. Get medical attention
	if irritation persists after washing. Remove contaminated
	clothing.
Eye Contact	IF IN EYES: Remove any contact lenses and open eyelids wide
	apart. Continue to rinse for at least 15 minutes and get medical
	attention. Get medical attention if irritation persists after
	washing.
Protection of first aiders	First aid personnel should wear appropriate protective
	equipment during any rescue.
Most important symptoms and effects, both	
General Information	Treat symptomatically. See section 11 for additional information
	on health hazards.
Inhalation	Irritating.
Ingestion	May cause stomach pain or vomiting. May cause irritation.
	Gastrointestinal symptoms, including upset stomach.
Skin Contact	May cause skin irritation.
Eye Contact	Causes skin and eye irritation.
Indication of any immediate medical attentio	
Notes for the doctor	Treat symptomatically.
Specific Treatments	Treat symptomatically.
5. FIRE-FIGHTING MEASURES	
Extinguishing Media	
Suitable Extinguishing Media:	Use fire-extinguishing media suitable for the surrounding fire.
	Extinguish with alcohol-resistant foam, carbon dioxide, or dry
	powder.
• • • • • • • • • • • • •	 .
Special Hazards Arising from the Substance	or Mixture
Specific Hazards	The product is not flammable. The product is non-combustible.
Hazardous Combustion Products	None known.



Advice for Firefighters Protective Actions During Firefighting

Special Protective Equipment For Firefighters No action shall be taken without appropriate training or involving any personal risk. Evacuate area.

Use air-supplied respirator, gloves and protective goggles.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment	t and emergency procedures
Personal Precautions	No action shall be taken without appropriate training or involving any personal risk. Keep unnecessary and unprotected personnel away from the spillage. Avoid contact with skin, eyes and clothing. Follow precautions for safe handling described in this safety data sheet. Avoid inhalation of dust.
Environmental Precautions	
Environmental Precautions	Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.
Methods and material for containment and	cleaning up
Methods for Cleaning Up	If leakage cannot be stopped, evacuate area. Move containers from spillage area. Large spillages: Collect and place in suitable waste disposal containers and seal securely. Absorb small quantities with paper towels and evaporate in a safe place. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Remove spillage with vacuum cleaner or collect with a shovel and broom, or similar.
Reference to Other Sections	
Reference to other sections	For personal protection, see section 8. For waste disposal, see section 13. See section 11 for additional information on health hazards. See section 12 for additional information on ecological hazards.
7. HANDLING AND STORAGE Precautions for Safe Handling	
Advice on General Occupational Hygiene	For professional users only. Do not handle until all safety precautions have been read and understood. Use only in well- ventilated areas. Protect from moisture. Keep container dry. Container must be kept tightly closed when not in use. Do not eat, drink or smoke when using this product. Do not eat, drink or smoke when using this product. Provide eyewash station. Wash promptly with soap and water if skin becomes contaminated. Promptly remove any clothing that
	becomes contaminated.
Conditions for Safe Storage. Including any	
Conditions for Safe Storage, Including any Storage Precautions	



Specific end use(s) Specific end use(s)

The identified uses for this product are detailed in section 1.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION Control Parameters

Occupational Exposure Limits

Portland Cement Long-term exposure limit (8-hour TWA): WEL 10mg/m³ inhalable dust Long-term exposure limit (8-hour TWA): WEL 4mg/m³ respirable dust

Sodium Carbonate

Long-term exposure limit (8-hour TWA): EH40 (United Kingdom (UK)). 10mg/m³ total inhalable dust Long-term exposure limit (8-hour TWA): EH40 (United Kingdom (UK)). 4mg/m³ respirable dust The COSHH definition of a substance hazardous to health includes dust of any kind when present at a set Concentration in air. Fuller definitions and explanatory material are given in MDHS14/3 (EH40, UK).

Silica Sand

Long-term exposure limit (8-hour TWA): Silica, crystalline (SiO2) 0.1 mg/m³ respirable crystalline

Calcium Dihydroxide

Long-term exposure limit (8-hour TWA): SCOEL recommendation (SCOEL/SUM/137 February 2008): 1 mg/m³ respirable dust of calcium dihydroxide Short-term exposure limit (15-minute): 4 mg/m³ respirable dust of calcium dihydroxide WEL=Workplace Exposure Limit

CALCIUM DIHYDROXIDE (CAS: 1305-62-0)

- Aqua; Short term 490 µg/l

- Soil/ groundwater; 1080 mg/l

PNEC

Exposure Controls Protective Equipment



Appropriate Engineering Controls Personal Protection Eye/face Protection

Hand Protection

Other Skin and Body Protection Hygiene Measures

Respiratory Protection

Environmental Exposure Controls

Provide adequate ventilation.

Use protective clothing, hand gloves and goggles. Use safety glasses (with side shields). Safety glasses (with side shields) should be consistent with EN 166 or equivalent.

To protect hands from chemicals, gloves should comply with European Standard EN374. It is recommended that gloves are made of the following material: Nitrile rubber. Butyl rubber.

Wear appropriate clothing to prevent skin contamination. Wash hands thoroughly after handling. Promptly remove any clothing that becomes contaminated. Do not eat, drink or smoke when using this product.

If ventilation is inadequate, suitable respiratory protection must be worn.

Keep container tightly sealed when not in use.



9. PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties Appearance Colour Odour **Odour Threshold** pН **Melting Point** Initial Boling Point and Range Flash Point **Evaporation Rate Evaporation Factor** Flammability (solid, gas) **Upper/ Lower Flammability** or Explosive Limits Other Flammability Vapour Pressure Vapour Density **Relative Density Bulk Density** Solubility(ies) Partition Coefficient **Auto-ignition Temperature Decomposition Temperature Explosive Properties Explosive Under the** Influence of a Flame **Oxidising Properties**

Powder. Grey. Almost odourless. Not determined. Not applicable. Not applicable. Not determined. Not determined. Not determined. Not determined. Not applicable. Not applicable. Not applicable.

Not determined. Not determined. Not applicable. 1190 - 1250 kg/m³ Not determined. Not determined. Not determined. Not determined. Not applicable. Not considered to be explosive.

Not applicable.

10. STABILITY AND REACTIVITY Reactivity

Reactivity	Reacts with water and moisture in the air.
<u>Chemical Stability</u> Stability	Stable at normal ambient temperatures and when used as recommended.
Possibility of Hazardous Reactions Possibility of Hazardous Reactions	No potentially hazardous reactions known.
Conditions to Avoid Conditions to Avoid	Avoid exposure to high temperatures or direct sunlight. When exposed to air, this product will absorb moisture.
Incompatible Materials Materials to Avoid	Avoid contact with the following materials: Strong acids. Water, moisture.
Hazardous Decomposition Products Hazardous Decomposition Products	Carbon dioxide (CO2). Carbon monoxide (CO). Nitrous gases (NOx).

11. TOXICOLOGICAL INFORMATION Information on Toxicological Effects

Acute Toxicity – Oral Notes (Oral LD50)

Based on available data the classification criteria are not met.



Acute Toxicity – Dermal Notes (Dermal LD50)

Acute Toxicity – Inhalation Notes (Inhalation LC50)

Skin Corrosion/ Irritation Skin Corrosion/ Irritation Human Skin Model Test Based on available data the classification criteria are not met.

Based on available data the classification criteria are not met.

Causes skin irritation. Cement in contact with wet skin may cause thickening, cracking or fissuring of the skin. Prolonged contact in combination with abrasion may cause severe burns.

Serious Eye Damage/ Irritation Serious Eye Damage/ Irritation

Respiratory Sensitisation Respiratory Sensitisation

Skin Sensitisation Skin Sensitisation

<u>Germ Cell Mutagenicity</u> Genotoxicity – in vitro Genotoxicity – in vivo

Carcinogenicity Carcinogenicity

Based on available data the classification criteria are not met.

Based on available data the classification criteria are not met.

Based on available data the classification criteria are not met.

Based on available data the classification criteria are not met.

<u>Reproductive Toxicity</u> Reproductive Toxicity – Fertility

Based on available data the classification criteria are not met.

 Specific Target Organ Toxicity – Single Exposure

 STOT – Single Exposure
 May cause respiratory irritation. May cause damage to organs if inhaled.

Causes serious eye damage.

May cause an allergic skin reaction.

Specific Target Organ Toxicity – Repeated ExposureSTOT – Repeated ExposureBased on available data the classification criteria are not met.

Aspiration Hazard Aspiration Hazard

Based on available data the classification criteria are not met.

Toxicological Information on Ingredients.

Portland Cement

Acute Toxicity – Oral Notes (Oral LD50)

Based on available data the classification criteria are not met.



<u>Acute Toxicity – Dermal</u> Notes (Dermal LD50)	Based on available data the classification criteria are not met.
<u>Acute Toxicity – Inhalation</u> Notes (Inhalation LC50)	Based on available data the classification criteria are not met.
Skin Corrosion/ Irritation Skin Corrosion/ Irritation Human Skin Model Test	Based on human occupational exposure data. Cement in contact with wet skin may cause thickening, cracking or fissuring of the skin. Prolonged contact in combination with abrasion may cause severe burns.
Serious Eye Damage/ Irritation Serious Eye Damage/ Irritation	Cornea score: 128, Calculated Irritation Index
Respiratory Sensitisation Respiratory Sensitisation	Based on available data the classification criteria are not met.
<u>Skin Sensitisation</u> Skin Sensitisation	May cause allergic contact eczema. Eczema/contact dermatitis.
<u>Germ Cell Mutagenicity</u> Genotoxicity – in vitro	Based on available data the classification criteria are not met.
<u>Carcinogenicity</u> Carcinogenicity	Based on available data the classification criteria are not met.
<u>Reproductive Toxicity</u> Reproductive Toxicity – Fertility	Based on available data the classification criteria are not met.
<u>Specific Target Organ Toxicity – Single </u> STOT – Single Exposure Target Organs	Exposure A single exposure may cause the following adverse effects: May cause shortness of breath, sneezing and coughing. Respiratory tract.
<u>Specific Target Organ Toxicity – Repeat</u> STOT – Repeated Exposure	ed Exposure Based on available data the classification criteria are not met.
Aspiration Hazard Aspiration Hazard	Not relevant.
Inhalation	Dust in high concentrations may irritate the respiratory system. Repeated exposure may cause chronic upper respiratory irritation. Symptoms following overexposure to dust may include the following: May cause coughing and difficulties in breathing.
Ingestion	May be harmful if swallowed.
Skin Contact	Dry cement in contact with wet skin or exposure to moist or wet



	Cement may cause thickening, cracking or fissuring of the skin. Prolonged contact in combination with abrasion can cause severe burns.
Eye Contact	Causes serious eye damage. May cause mechanical irritation. May cause chemical eye burns.
Acute and Chronic Health Hazards	If the cement contains a soluble Cr (VI) reducing agent and as long as the mentioned period of effectiveness of the chromate reduction is not exceeded, a sensitising effect is not expected.
Route of Exposure	Dermal Inhalation
Target Organs	Skin, Respiratory system, lungs.
Medical Symptoms	May cause mechanical irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Eczema/contact dermatitis.
	Sodium Carbonate
Toxicological Effects	Information given is based on data on the components and the toxicology of similar products.
<u>Acute Toxicity – Oral</u> Acute Toxicity Oral (LD50 mg/kg) Species Notes (Oral LD50) ATE Oral (mg/kg)	4,091.0 Rat Based on available data the classification criteria are not met. 4,091.0
Acute Toxicity – Inhalation Acute Toxicity Inhalation (LC50 Dust/Mist mg/l) Species Notes (inhalation LC50) ATE Inhalation (dusts/mists mg/l)	800.0 Rat Based on available data the classification criteria are not met. 800.0
Skin Corrosion/Irritation Skin Corrosion/Irritation Animal Data	Based on available data the classification criteria are not met. Not available.
Serious Eye Damage/ Irritation Serious Eye Damage/ Irritation	Causes serious eye damage.
<u>Respiratory Sensitisation</u> Respiratory Sensitisation	Based on available data the classification criteria are not met.
<u>Skin Sensitisation</u> Skin Sensitisation	Based on available data the classification criteria are not met.
<u>Germ Cell Mutagenicity</u> Genotoxicity – in vitro	Based on available data the classification criteria are not met.
<u>Carcinogenicity</u> Carcinogenicity	Based on available data the classification criteria are not met.
<u>Reproductive Toxicity</u> Reproductive Toxicity – Fertility	Based on available data the classification criteria are not met.
Specific Target Organ Toxicity – Single Ex STOT – Single Exposure	t posure Based on available data the classification criteria are not met.

Based on available data the classification criteria are not met.



Specific Target Organ Toxicity – Repeated Exposure

Specific Target Organ Toxicity – Repeated Exposure			
STOT – Repeated Exposure	Based on available data the classification criteria are not met.		
Aspiration Hazard Aspiration Hazard	Based on available data the classification criteria are not met.		
Skin Contact	Very slightly hazardous in case of skin contact (irritant).		
Eye Contact	Hazardous in case of eye contact (irritant).		
Target Organs	Respiratory System, lungs.		
	Calcium Dihydroxide		
Toxicological Effects	Calcium dihydroxide is classified as irritating to the skin and the respiratory tract and it entails a risk of serious damage to the eye. The occupational exposure limit for the prevention of local sensory irritation and decrease of lung function parameters as critical effects is OEL (8 h) = 1 mg/m ³ respirable dust.		
Other Health Effects	Toxicity endpoints – Outcome of the effects assessment. Absorption – The primary health effect of calcium dihydroxide is local irritation due to a pH shift. Therefore, absorption in not relevant parameter for the effects assessment.		
<u>Acute Toxicity – Oral</u> Acute Toxicity Oral (LD50 mg/kg) Species Notes (Oral LD50) ATE Oral (mg/kg)	2,001.0 Rat Repeated dose toxicity – Toxicity of calcium via the oral route is Addressed by upper intake levels (UL) for adults determined by the Scientific Committee on food (SCF), being UL = 2500 mg/d, corresponding to 36 mg/kg bw/d (70 kg person) for calcium. 2,001.0		
Acute Toxicity – Dermal Acute Toxicity Dermal (LD50 mg/kg) Species Notes (Dermal LD50) ATE Dermal (mg/kg)	2,501.0 Rabbit Repeated dose toxicity – Toxicity of Ca(OH)2 via the dermal route is not considered as relevant in view of the anticipated insignificant absorption through skin and due to local irritation as the primary health effect (pH shift). 2,501.0		
<u>Acute Toxicity – Inhalation</u> Notes (Inhalation LC50)	Repeated dose toxicity – Toxicity of Ca(OH)2 via inhalation (local effect, irritation of mucous membranes) is addressed by an 8-h TWA determined by the Scientific Committee on Occupational Exposure Limits (SCOEL) of 1 mg/m ³ respirable dust. Therefore classification of Ca(OH)2 for toxicity upon prolonged exposure is not required.		
Skin Corrosion/Irritation Animal Data	Calcium dihydroxide is irritating to skin (in vivo rabbit).		



Serious Eye Damage/ Irritation Serious Eye Damage/ Irritation

Calcium dihydroxide entails a risk of serious damage to the eye (eye irritation studies in vivo, rabbit).

Respiratory Sensitisation Respiratory Sensitisation

Respiratory irritation: From human data it is concluded that Ca(OH)2 is irritating to the respiratory tract.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Information given is based on data of the components and of similar products.

Ecological Information on Ingredients

Ecotoxicity

Portland Cement The product is not expected to be hazardous to the environment. The product may affect the acidity (pH) of water which may have hazardous effects on aquatic organisms.

<u>Toxicity</u> Toxicity

Ecological Information on Ingredients

Toxicity

Persistence and Degradability Persistence and Degradability

Ecological Information on Ingredients

Persistence and Degradability

Bioaccumulative Potential Bioaccumulative Potential

Partition Coefficient

Ecological Information on Ingredients

Bioaccumulative Potential

Mobility in Soil Mobility

Ecological Information on Ingredients

Mobility

Results of PBT and vPvB Assessment Ecological Information on Ingredients

Results of PBT and vPvB Assessment Portland Cement Based on available data the classification criteria are not met.

Based on available data the classification criteria are not met.

There is no data available on the mixture itself.

<u>Portland Cement</u> The product reacts with water to form a solid, insoluble reaction product which is not biodegradable.

The product does not contain any substances expected to be bioaccumulating. Not determined.

Portland Cement No Specific test data are available.

The product hardens to a solid, immobile substance.

<u>Portland Cement</u> The product reacts with water to form a solid, insoluble reaction product which is not biodegradable.

Portland Cement

This product does not contain any substances classified as PBT or vPvB.



Other Adverse Effects Ecological Information on Ingredients

Other Adverse Effects

Portland Cement None known.

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods General Information

Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Waste should be treated as controlled waste. Dispose of contents/container in accordance with national regulations. Waste should be treated as controlled waste.

Disposal Methods

14. TRANSPORT INFORMATION General

The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

UN Number

Not applicable.

UN Proper Shipping Name

Not Applicable.

Transport Hazard Class(es)

No transport warning sign required.

Packing Group

Not applicable.

Environmental Hazards Environmentally Hazardous Substance/Marine Pollutant No.

Special Precautions for User Not applicable.

Transport in Bulk According to Annex II of MARPOL and the IBC CodeTransport in Bulk According toNot applicable.Annex II of MARPOL and theIBC Code

15. REGULATORY INFORMATION

National Regulations	Control of Substances Hazardous to Health Regulations 2002 (as amended).
	EH40/2005 Workplace exposure limits.
	Health and Safety at Work etc. Act 1974 (as amended).
	The Chemicals (Hazard Information and Packaging for Supply)
	Regulations 2009 (SI 2009 No. 716).
EU Legislation	Commission Decision 2000/532/EC as amended by Decision 2001/118/EC establishing a list of wastes and hazardous waste pursuant to Council Directive 75/442/EEC on waste and Directive 91/689/EEC on hazardous waste with amendments. Commission Directive 2000/39/EC of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of



the health and safety of workers from the risks related to chemical agents at work (as amended).

Commission Regulation (EU) No 453/2010 of 20 May 2010. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). Regulation (EC) No 1907/2006 of the European Parliament and of the council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

Guidance

Workplace Exposure Limits EH40.

No specific restrictions on use are known for this product.

Restrictions (Annex XVII Regulation 1907/2006)

Chemical Safety Assessment No chemical safety assessment has been carried out.

Inventories EU – EINECS/ELINCS All the ingredients are listed or exempt.

16. OTHER INFORMATION

Abbreviations and Acronyms Used in the Safety Data Sheet	ATE: Acute Toxicity Estimate. CAS: Chemical Abstracts Service. GHS: Globally Harmonized System. REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006. LD50: Lethal Dose to 50% of a test population (Median Lethal
	Dose). vPvB: Very Persistent and Very Bioaccumulative. PBT: Persistent, Bioaccumulative and Toxic Substance.
Classic Abbreviations and Acronyms	Eye Dam. = Serious eye damage Skin Sens. = Skin sensitisation Skin Irrit. = Skin irritation
General Information	Only trained personnel should use this material.

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Key Literature References And Sources for Data 1. Portland Cement Dust – Hazard assessment document EH75/7, UK Health and Safety Executive, 2006

2. Observations on the effects of skin irritation caused by cement, Kietzman et al, Dermatosen, 47, 5, 184-189 (1999)

3. 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)

4. 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

5. U.S. EPA Short term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, 4th ed. EPA/600/7-91-002, Environmental Monitoring and Support Laboratory, U.S. EPA, Cincinnati, OH (1944a) and 4th ed. EPA-821-R-02-013 US EPA, office of water, Washington D.C. (2002)

6. US EPA, Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms. 4th ed EPA/600/4-93/027F, Environmental Monitoring and Support Laboratory US EPA Cincinnati, OH (1993) and 5th ed. EPA-821-R-02-012 US EOA, office of water Washington D.C. (2002)

7. Environmental Impact of Construction and Repair Materials on Surface and Ground Waters, Summary of Methodology, Laboratory Results, and Model Development, NCHRP report 488, National Academy Press, Washington D.C. 2001

8. Final Report Sediment Phase Toxicity Test Results with Corophiumvolutator for Portland clinker prepared for Norcem AS by AnalyCenEcotox AS 2007

9. TNO Report V8801/02, A acute (4-hour) inhalation toxicity study with Portland Cement Clinker CLP/GHS 03-2010-fine in rats, August 2010

10. TNO Report V8815/9, Evaluation of eye irritation potential of cement clinker W in vitro using the isolated chicken eye test April 2010

11. TNO Report V8815/10, Evaluation of eye irritation potential of cement clinker W in vitro using the isolated chicken eye test, 2010

12. Investigation of the cytotoxic and proinflammatory effects of cement dusts in rat alveolar

Changes to section 11 Changes to section 12

Revision Date 15/05/2019

Revision

Revision Comments

Supersedes Date

30/10/2018 4937

2.1

SDS Number



Hazard Statements in Full

H315 Causes skin irritation.

- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H335 May cause respiratory irritation.
- H370 Causes damage to organs.
- H371 May cause damage to organs.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.