Cemex Hrvatska d.d
Dr. F.Tuđmana 45
HR-21212 Kaštel Sućurac

Phone 0800 9161
Fax +385 (21) 201109
www.cemex.hr

SAFETY DATA SHEET
In Accordance with (EZ) number 1907/2006

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1.	Product identifier	
	Trade name:	**CEM I 42,5 R (Dalmacijacement Ultimo)** Portland cement CEM I **52,5 R** Portland cement **CEM I 52,5 R (Dalmacijacement Bijeli)** White Portland cement **CEM II/B-S 42,5 N** Portland-slag cement **CEM II/B-M (S-LL) 42,5 N (Dalmacijacement Strukto)** Portland-composite cement **CEM II/B-M (S-LL) 32,5 N (Dalmacijacement Optimo**) Portland-composite cement **CEM III/A 42,5 N LH** Blast furnace cement, low heat of hydration **CEM III/B 32,5 N SR-LH (Dalmacijacement SulfacemS)** Sulphate resistant cement, low heat of hydration
	Chemical name:	-
	Stock number:	-
1.2.	Relevant identified uses of the substance or mixture and uses advised against	
	Uses:	Common cement is used as a hydraulic binder to produce concrete, mortars, grouts, etc., and preparation of well casing.
	Uses advised against:	It is recommended to use methods listed in the previous section.
	Note:	This MSDS covers many types of cement. Individual composition of hazardous constituents will vary between types of cement.
	Reason why uses advised against:	-
1.3.	Details of the supplier of the safety data sheet	
	Supplier:	CEMEX Hrvatska d.d.
	Address:	F. Tuđmana 45, HR-21212 Kaštel Sućurac
	Telephone number:	0800 9161
	Telefax:	+385 (21) 201-109
	e-mail of competent person:	hr.info@cemex.com
	National contact:	
1.4.	Emergency telephone	
	National Protection and Rescue Directorate:	112
	Medical information:	-
	Other data:	-

Trade name:	CEM I 42,5 R (Dalmaciajcement Ultimo) Portland cement CEM I 52,5 R portlandski cement CEM I 52,5 R (Dalmacijacement Bijeli) White Portland cement CEM II/B-S 42,5 N Portland-slag cement CEM II/B-M (S-LL) 42,5 N (Dalmacijacement Strukto) Portland-composite cement CEM II/B-M (S-LL) 32,5 N (Dalmacijacement Optimo) Portland-composite cement CEM III/A 42,5 N LH Blast furnace cement, low heat of hydration CEM III/B 32,5 N SR-LH (Dalmacijacement SulfacemS) Sulphate resistant cement, low heat of hydration				
Product code:		Date issued:	28.01.2019.	Version::	6

SECTION 2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

2.1.1. Classification according to Regulation (EC) no. 1272/2008 (CLP)

Hazard classification and code of category:	Hazard Mark *:
3.8. – Specific organ toxicity- single exposure, category 3. resp, may cause respiratory irritation	H335
3.2. – Corrosive / irritant to skin, category 2.	H315
3.3. – Serious eye injury / eye irritation, category 1.	H318
3.4. – Cause hypersensitivity - skin, category 1.	H317

2.1.2. Additional information:

-

* For full text of Hazard- and EU Hazard-statements: see SECTION 16

2.2. Label elements

Product identification:	CEM I 42,5 R (Dalmacijacement Ultimo) Portland cement CEM I 52,5 R portlandski cement CEM I 52,5 R (Dalmacijacement Bijeli) White Portland cement CEM II/B-S 42,5 N Portland-slag cement CEM II/B-M (S-LL) 42,5 N (Dalmacijacement Strukto) Portland-composite cement CEM II/B-M (S-LL) 32,5 N (Dalmacijacement Optimo) Portland-composite cement CEM III/A 42,5 N LH Blast furnace cement, low heat of hydration CEM III/B 32,5 N SR-LH (Dalmacijacement SulfacemS) Blast furnace sulphate resistant cement, low heat of hydration
Identification number:	-
Authorization number:	-
Hazard pictograms:	GHS05  GHS07 
Signal words:	Danger
Hazard statements:	H335 May cause respiratory irritation. H315 Causes skin irritation. H318 Causes serious eye damage. H317 May cause an allergic skin reaction.

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Product code:		Date issued:	28.01.2019.	Version::	6

	Precautionary statement:	P261 Avoid breathing dust. P271 Use only outdoor or in a well-ventilated area. P280 Wear protective gloves, protective clothing and eye or face protection. P312 Call a POISON CENTER or doctor/physician if you feel unwell. P362 Remove contaminated clothing and wash before reuse. P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P304 + P340 IF INHALED: Remove to fresh air and keep at rest in a position 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. P333 + P313 If skin irritation or rash occurs: Get medical advice/attention P337 + P313 If eye irritation persists: seek medical advice / attention. P405 Store under lock and key. P403 + P233 Store in well ventilated place. Protect in tightly closed container. P501 Dispose of Contents and container to authorised waste disposal facility
	Additional hazard information:	-
2.3.	Other hazards:	
	Cement does not meet the criteria for PBT or vPvB in accordance with Annex XIII of REACH (Regulation (EC) No 1907/2006). The content of soluble chromium (VI) of the total dry weight of the cement in the hydrated form is less than 0.0002% (Regulation (EC) No. 1907/2006 REACH Annex XVII point 47).	

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

CAS/ EC/ Index number	Registration Number by REACH	% mass	Name	Classification according to (EZ)1272/2008 (CLP)
266-043-4/ 65997-15-1/ -	-	20 - 96	Portland cement clinker	H315 Skin irritation 2. H317 Skin Sens. 1. H318 Eye damage 1. H335 STOT 3
266-002-0/ 65996-69-2/ -	01-2119487456-25-0026	10 - 80	slag	-

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SECTION 4. FIRST AID MEASURES

4.1.	Description of first aid measures	
	General notes:	In all doubt cases, or when symptoms do not disappear, one should seek for medical attention. Persons in unconscious do not give anything in the mouth. If person is unconscious, put her on side position and seek for medical attention.
	Following inhalation:	Take the individual to fresh air, seek medical assistance “asap”.
	Following skin contact:	Remove contaminated clothing and shoes. The affected area rinse with water and mild suds approximately 10-15 minutes, and if the symptoms retain search for medical help.
	Following eye contact:	Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention if symptoms are still present.
	Following ingestion:	Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur.
	Self-protection of the first aider	-
4.2.	Most important symptoms and effects, both acute and delayed	
	Following inhalation:	Inhalation of dust may cause coughing, chest pain, tightness in the throat, breathing difficulties.
	Following skin contact:	May cause redness, burning, dermatitis, itching, drying and cracking skin, sensitization.
	Following eye contact:	May cause severe redness, tearing, strong pain, blurred vision.
	Following ingestion:	May cause nausea, vomiting, abdominal pains, and gastrointestinal irritation.
4.3.	Indication of any immediate medical attention and special treatment needed	
	Show the label from the packaging or STL.	

SECTION 5. FIRE-FIGHTING MEASURES

5.1.	Extinguishing media	
	Suitable extinguishing media:	Not flammable. Means for extinguishing adapt to surrounding materials (carbon dioxide, dry powder, water spray).
	Unsuitable extinguishing media:	-

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5.2.	Special hazards arising from the substance or mixture	
	Hazardous combustion products:	Thermal decomposition can lead to release of irritating gases and vapours.
5.3.	Advice for fire fighters	
	In case of fire in an enclosed space use self-contained breathing apparatus, for example, compressed air (EN 137) and insulating clothing (EN 943). Adapted to other chemicals in the warehouse. Using water mist and spray cooling surface undamaged containers exposed to heat and to protect people. Only persons trained in fire protection may use water spray.	
5.4.	Additional information	
	Contaminated firefighting water must be provided in accordance with local regulations.	

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1.	Personal precautions, protective equipment and emergency procedures	
6.1.1.	For non-emergency personnel	
	Protective equipment:	Use personal protective equipment from the section 8 to prevent inhalation and contact with skin, eyes and clothing when is cleaning.
	Accident prevention methods:	-
	Emergency procedures:	Keep away all unprotected persons. Avoid contact with eyes and skin. Do not breathe dust. Prevent the dust lifting.
6.1.2.	For emergency responders:	
	-	
6.2.	Environmental precautions:	
	Avoid releases to air, water and soil.	
6.3.	Methods and materials for prevention expansion and clean-up:	
6.3.1.	Bonding, covering of drains; capping procedures:	-
6.3.2.	Cleaning up:	Materials pick mechanically, with shovels, vacuum or industrial vacuum cleaner, etc. and disposed in appropriate containers. Avoid cleaning with compressed air. The rest of collection, rinse with water and store in a tank.
6.3.3.	Other info:	Open windows and doors and thoroughly ventilate the room.
6.4.	Reference to other sections:	
6.3.2.	More details in sections 8 and 13.	

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SECTION 7. HANDLING AND STORAGE

7.1.	Precautions for safe handling	
7.1.1.	Protection measures	
	Measures to prevent fire:	-
	Measures to prevent aerosol and dust generation:	Use the product in a well-ventilated area.
	Measures to protect the environment:	-
	Other measures:	
7.1.2.	Advice on general occupational hygiene:	
	Implement the usual precautions when working with chemicals, do not eat, drink, smoke, take off contaminated clothing and wash thoroughly, wash your hands before every break.	
7.2.	Conditions for safe storage, including any incompatibilities:	
	Technical measures and storage conditions:	Keep tightly closed in the original packaging, in dry, well-ventilated area at room temperature away from children.
	Packaging materials:	Bagged cement should be stored in the original packaging manufacturers in a convenient dry place, while bulk cement in silos.
	Requirements for storage rooms and vessels:	-
	Advices for storage equipment:	-
	Further information on storage conditions:	Do not store near incompatible materials (SECTION 10), or moisture.
7.3.	Special end use(s):	
	Recommendations:	-
	Industrial sector specific solutions:	-
7.4.	Control of soluble chromium Cr (VI):	
	For cement treated to lower concentrations of soluble chromium Cr (VI) to the regulations under section 15, the effect of reducing agents is reduced over time. Accordingly, bags and / or delivery documents contain information about the time of packaging, storage conditions and duration of reducing agent in which the concentration of soluble chromium below 0.0002%.	

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Substance	CAS No	Occupational exposure limit values/short term values		Biological limit values
		ppm	mg/m^3	
Portland cement dust	65997-15-1	-	10 (U) 4 (R)	

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Substance:				
EC No:		CAS No:		
DNEL				
Industrial				
Route of exposure:	Acute effect local	Acute effect systemic	Chronic effect local	Chronic effect systemic
Oral				
Inhalation				
Dermal				
Critical physical parameters: solubility, flammability, corrosivity:				
Consumer				
Route of exposure:	Acute effect local	Acute effect systemic	Chronic effect local	Chronic effect systemic
Oral				
Inhalation				
Dermal				

PNEC	
Environmental protection target	**PNEC**
Fresh water	
Freshwater sediments	
Marine water	
Marine sediments	
Food chain	
Microorganisms in sewage treatment	
Soil (agricultural)	
Air	

8.2.	Exposure controls
8.2.1.	Appropriate engineering controls

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	Substance/mixture related measures to prevent exposure during identified uses:	Monitoring of the atmosphere in the workplace in order to determine the efficiency of ventilation and the necessity to use respiratory protective equipment at work (according to EN 689). Where the substance is odourless or when its odour threshold higher than the exposure limit and in the event of an emergency or when exposure levels are unknown, or when the concentration of oxygen in the workplace is lower than 17% in volume, to put self- contained breathing apparatus with an open circuit compressed air (EN 137) or breathing apparatus for use with fresh air, the mask full-face mask or mouthpiece assembly (EN 138).
	Structural measures to prevent exposure:	-
	Organizational measures to prevention exposure:	Do not breathe dust; avoid contact with eyes and skin. Implement the usual precautions when working with chemicals, while working with the product do not eat, drink, smoke, take off contaminated clothing and wash thoroughly, wash your hands before every break and after work.
	Technical measures to prevent exposure:	It is necessary to ensure adequate ventilation. This should be achieved by using local exhaust ventilation and good general extraction. If this is not enough to maintain the concentration under the GVI, must wear appropriate respiratory protection.
8.2.2.	Personal protection equipment:	
8.2.2.1.	Eye and Face Protection:	Goggles who snugly on the face. (EN 166)
8.2.2.2.	Skin Protection	
	Hand Protection	Rubber gloves. (EN 374)
	Other skin protection:	Cotton work clothes with long sleeves (EN 340) and protective work boots (EN 345), and if the work clothes have a greater amount of wet cement, it is necessary to replace it with dry.
8.2.2.3.	Respiratory protection:	In the case of elevated concentrations of dust, use a filter mask to protect against particles. (EN 149).
8.2.2.4.	Thermal hazards:	-
8.2.3.	Environmental exposure controls	
	Substance/mixture related measures to prevent exposure:	According to section 6.
	Structural measures to prevent exposure:	According to section 6.
	Organizational measures to prevent exposure:	According to section 6.
	Technical measures to prevent exposure:	According to section 6.

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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1.	Information on basic physical and chemical properties		
		Value	Method
	Physical state:	Powder	
	Colour:	Grey / White	
	Odour:	No smell or uncharacteristic smell	
	Odour threshold:		
	pH:	11-14	
	Melting point/freezing point:	-	
	Initial boiling point and boiling range:	-	
	Flash point:	-	
	Evaporation rate:	-	
	Flammability (solid, gas):	-	
	Upper/lower flammability or explosive limits:	-	
	Vapour pressure:	-	
	Vapour density:	-	
	Relative density:	-	
	Bulk density:	900 – 1800 kg/m^3	
	Solubility(ies):	0,1-1% g/L	
	Partition coefficient: n-octanol/water (log Kow):	-	
	Auto-ignition temperature:	-	
	Decomposition temperature:	-	
	Viscosity:	-	
	Explosive properties:	-	
	Oxidising properties	-	
9.2.	Other information		
	-		

SECTION 10. STABILITY AND REACTIVITY

10.1.	Reactivity:	When the concrete is mixed with water, it hardens to a stable substance, which is not reactive in normal environments.

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10.2.	Chemical stability:	The product is stable with the prescribed conditions of use and storage (SECTION 7) and is compatible with all other building materials. Must be stored in dry conditions.
10.3.	Possibility of hazardous reactions:	-
10.4.	Conditions to avoid:	Protect from moisture. Wet cement is alkaline material and must not come in contact with acids, ammonium salts, aluminium and other precious metals, the risk of the formation of hydrogen. In the case of thawing of cement in fluoride acid may grow toxic gas silicon tetra fluoride.
10.5.	Incompatible materials:	Acids, ammonium salts, aluminium or other non-noble metals.
10.6.	Hazardous decomposition products:	-

SECTION 11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity:

Route of exposure:	Method	Species	Effective Dose LD_{50}/LC_{50}	Exposure time	Results
Oral:					
Dermal:					
Inhalation:					

Not classified as an acutely toxic substance.

Specific target organ toxicity - single exposure (STOT SE):

	Specific effects:	Exposed organ:	Remark:
Oral:	-	-	-
Dermal:	-	-	-
Inhalation:	-	-	-

Aspiration hazard:

-

Irritation and corrosive:

	Exposure time	Species	Evaluation	Method	Note
Skin corrosion/irritation	-	-	-	-	-
Serious eye damage/irritation	-	-	-	-	-

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Sensitization	
Skin sensitization:	Causes sensitization.
Respiratory sensitization:	-

Symptoms related to the physical, chemical and toxicological characteristics	
Oral exposure:	May cause nausea, vomiting, abdominal pain, gastrointestinal disturbances
Dermal exposure:	May cause irritation, drying and cracking of the skin, allergic reactions, hypersensitivity.
Inhalation exposure:	Inhalation of dust may cause irritation of the upper airway, breathing difficulties. Often inhalation of large quantities of cement increases the risk of lung disease.
Eye exposure:	May cause severe irritation, severe pain, and injury to the eyes.

Repeated dose toxicity (subacute, sub chronic, chronic)

	Dose	Exposure time	Species	Method	Evaluation	Note
Subacute oral	-	-	-	-	-	-
Subacute dermal	-	-	-	-	-	-
Subacute inhalation	-	-	-	-	-	-
Sub chronic oral	-	-	-	-	-	-
Sub chronic dermal	-	-	-	-	-	-
Sub chronic inhalation	-	-	-	-	-	-
Chronic oral	-	-	-	-	-	-
Chronic dermal	-	-	-	-	-	-
Chronic inhalation	-	-	-	-	-	-

Specific target organ toxicity – repeated exposure (STOT RE):

	Specific effects	Target organ	Note
Subacute oral			
Subacute dermal			
Subacute inhalation			
Sub chronic oral			
Subchronic dermal			
Subchronic inhalation			
Chronic oral			

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Chronic dermal			
Chronic inhalation			

	CMR effects (carcinogenicity, mutagenicity, reproductive toxicity)	
	Carcinogenicity:	-
	Mutagenicity *in-vitro*:	-
	Genotoxicity:	-
	Mutagenicity *in-vivo*:	-
	Germ cell mutagenicity:	-
	Reproductive toxicity:	-
	Summary of evaluation of the CMR properties:	-

11.2.	Practical experience:	
	Classification observations:	-
	Other observations:	-

11.3.	General notes:
	-

SECTION 12. ECOLOGICAL INFORMATION

12.1.	Toxicity

The product is not hazardous to the environment. Ecotoxicology tests with Portland cement and Daphnia magna and Selenastrum coli have proven insignificant toxicological effect. Therefore, it has not been possible to establish values for LC50 og EC50. There are no indications for toxicity in the sediment phase. However, addition of large quantities of concrete to water can increase the pH and therefore the concrete could be toxic for aquatic organisms under certain conditions.

12.2.	Persistence and degradability

Not relevant as concrete is an inorganic material. No toxicity risk is present after the concrete is cured.

12.3.	Bio accumulative potential

Not relevant as concrete is an inorganic material. No toxicity risk is present after the concrete is cured.

12.4.	Mobility in soil

Not relevant as concrete is an inorganic material. No toxicity risk is present after the concrete is cured.

12.5.	Results of PBT and vPvB assessment

Not relevant as concrete is an inorganic material. No toxicity risk is present after the concrete is cured.

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12.6.	Other adverse effects
-	

SECTION 13. DISPOSAL CONSIDERATIONS

13.1.	Waste treatment methods	
The generation of waste should be avoided or minimized wherever possible. Waste from residues of products not empty into drains; do not discard the municipal waste than submit to the competent authorities for the collection of hazardous waste.		
13.1.1.	Product/Packaging disposal:	
	The rest of product collected and disposed in accordance with local regulations. Waste packaging should be recycled. Incineration and landfill come into consideration only when recycling is not feasible.	
13.1.2.	Waste codes/waste designations according to Law:	
	15 01 01 packaging of paper and paperboard 15 01 05 multilayer (composite) packaging 10 13 14 concrete waste and concrete sludge 17 01 01 concrete	
13.1.3.	Waste treatment – relevant information:	
	packaging of paper and paperboard multilayer (composite) packaging concrete waste and concrete sludge concrete	thermal waste treatment and disposal thermal waste treatment and disposal waste disposal waste disposal
13.1.4.	Sewage disposal – relevant information:	
	Avoid wastage / spillage spilled / spilled material and runoff and contact with soil, waterways, drains and sewers.	
13.1.5.	Other disposal recommendations:	
	Comply with: Waste Act, Decree on amending the law on waste ordinance on the types of waste; Ordinance on waste species, Regulation on categories, types and classification of waste with a waste catalogue and list of hazardous waste.	
13.1.6.	Relevant Community provisions:	

SECTION 14. TRANSPORT INFORMATION

Cement is not covered by the international regulation on the transport of dangerous goods (ADR - Transporting/shipment by road, RID - Transporting/shipment by rail, ADN - Transporting/shipment by inland waterways, IMDG - Transporting/shipment by sea, ICAO-TI/IATA-DGR - Transporting/shipment

Trade name:	CEM I 42,5 R (Dalmaciajcement Ultimo) Portland cement CEM I 52,5 R portlandski cement CEM I 52,5 R (Dalmacijacement Bijeli) White Portland cement CEM II/B-S 42,5 N Portland-slag cement CEM II/B-M (S-LL) 42,5 N (Dalmacijacement Strukto) Portland-composite cement CEM II/B-M (S-LL) 32,5 N (Dalmacijacement Optimo) Portland-composite cement CEM III/A 42,5 N LH Blast furnace cement, low heat of hydration CEM III/B 32,5 N SR-LH (Dalmacijacement SulfacemS) Sulphate resistant cement, low heat of hydration				
Product code:		Date issued:	28.01.2019.	Version::	6

by air), therefore no classification is required.	
UN number:	-
UN proper shipping name:	-
Transport hazard class(es):	-
Packing group:	-
Environmental hazards:	-
Transport in bulk according to Annex II of MARPOL73/78 and the IBC code:	-
Special precautions for user:	-
Further information:	Regulation on the transport of dangerous goods.

SECTION 15. REGULATORY INFORMATION

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

Cement is a mixture according to REACH and is not subject to registration. Cement clinker is exempt from registration (Art 2.7 (b) and Annex V.10 of REACH). use of cement is subject to a restriction on the content of soluble Cr (VI) (REACH Annex XVII point 47 Chromium VI compounds):

1. Cement and cement-containing mixtures shall not be placed on the market, or used, if they contain, when hydrated, more than 2 mg/kg (0,0002 %) soluble chromium VI of the total dry weight of the cement.

2. If reducing agents are used, then without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances and mixtures, suppliers shall ensure before the placing on the market that the packaging of cement or cement containing mixtures is visibly, legibly and indelibly marked with information on the packing date, as well as on the storage conditions and the storage period appropriate to maintaining the activity of the reducing agent and to keeping the content of soluble chromium VI below the limit indicated in paragraph 1.

3. By way of derogation, paragraphs 1 and 2 shall not apply to the placing on the market for, and use in, controlled closed and totally automated processes in which cement and cement-containing mixtures are handled solely by machines and in which there is no possibility of contact with the skin.

EU regulations:

EC Regulation br.1906/2007 European Parliament and Council

EC Regulation br.1272/2008 European Parliament and Council

EU directivas:

Hazardous chemicals Directive (DSD) 67/548/EEC

Dangerous Preparation Directive (DPD) 1999/45/EC

Border values exposure to work place Directive 2000/39/EC

Professional Protective Equipment Directive 89/686/EEC

Classification of different mode Directive 96/35/EC and 2000/18/EC

Authorization and / or restrictions in use:

Trade name:	CEM I 42,5 R (Dalmaciajcement Ultimo) Portland cement CEM I 52,5 R portlandski cement CEM I 52,5 R (Dalmacijacement Bijeli) White Portland cement CEM II/B-S 42,5 N Portland-slag cement CEM II/B-M (S-LL) 42,5 N (Dalmacijacement Strukto) Portland-composite cement CEM II/B-M (S-LL) 32,5 N (Dalmacijacement Optimo) Portland-composite cement CEM III/A 42,5 N LH Blast furnace cement, low heat of hydration CEM III/B 32,5 N SR-LH (Dalmacijacement SulfacemS) Sulphate resistant cement, low heat of hydration				
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	Authorization:	-
	Restrictions:	-
	Other EU regulations:	-
	Information according 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-guideline): -	
	National legislation:	The laws of chemicals and his subordinate legislation on classification labelling, marking and packaging chemical. Regulation about limit values of exposure to dangerous substances at work and on biological limit values.
15.2.	Chemical Safety Assessment:	
	-	

SECTION 16. OTHER INFORMATION

16.1.	Indication of changes:	6th edition. Amendments have been in accordance with REACH. Product label changed
16.2.	Abbreviations and acronyms:	ATE- The acute toxicity estimate ADR- European agreement concerning the international road transport of dangerous goods ADNE- European agreement concerning the international road transport of dangerous goods. Inland waterways. CLP- Regulation on classification, labelling and packaging; Regulation EC no. 1272/2008 CAS – Chemical abstract service number CMR- carcinogenic, mutagenic, reproductive toxic DPD – Dangerous preparation directive 1999/45/EC DSD – Dangerous substances directive 67/548/EEC EC number – EINECS and ELINCS number IATA – International air transport association ICAO-TI – Technical instructions for the safe transport of dangerous goods by air IMDG- International transport of dangerous goods by sea LC_{50}- Lethal concentration for 50% of tested organism LD_{50}- Lethal dose for 50% of the tasted organism PBT- Persistently, bio accumulative, toxic PNEC(s)- Predicted no effect concentration RID- Regulation concerning the international carriage of dangerous goods by rail vPvB- very persistently and very bio accumulative
16.3.	Key literature references and source of data:	http://esis.jrc.ec.europa.eu http://echa.europa.eu
16.4.	Classification and procedure used to derive the classification for mixture according to Regulation (EC) 1272/2008 (CLP)	

Trade name:	CEM I 42,5 R (Dalmaciajcement Ultimo) Portland cement CEM I 52,5 R portlandski cement CEM I 52,5 R (Dalmacijacement Bijeli) White Portland cement CEM II/B-S 42,5 N Portland-slag cement CEM II/B-M (S-LL) 42,5 N (Dalmacijacement Strukto) Portland-composite cement CEM II/B-M (S-LL) 32,5 N (Dalmacijacement Optimo) Portland-composite cement CEM III/A 42,5 N LH Blast furnace cement, low heat of hydration CEM III/B 32,5 N SR-LH (Dalmacijacement SulfacemS) Sulphate resistant cement, low heat of hydration				
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Classification	Classification procedure
-	-

16.5.	Relevant H statements (number and full text)		
	H:	H315 Causes skin irritation	3.2. – Corrosive / irritant to skin (Category 2)
		H317 May cause an allergic skin reaction	3.4. Hypersensitivity - skin (Category 1)
		H318 Causes serious eye damage.	3.3. – Serious eye damage/irritation, (Category 1)
		H335 May cause respiratory irritation.	3.8. – Specific organ toxicity - single exposure, Category 3. May cause respiratory irritation.
16.6.	Training advice:		-
16.7.	Further information:		-

INSERT:
EXPOSURE SCENARIOS RESULTING TO CHEMICAL SAFETY ASSESSMENT