



Safety Data Sheet according to Regulation (EU) 2015/830 Date of issue: 1/6/2017 Revision date: 12/5/2018

Supersedes: 1/6/2017

Version: 2.0

SECTION 1: Identification of the	substance/mixture and of the company/undertaking
1.1. Product identifier	
Product form	: Mixture
Product name	: ARDEX X 77 S Grey / White
Product code	: 18327; 18328
1.2. Relevant identified uses of the	substance or mixture and uses advised against
1.2.1. Relevant identified uses	
Main use category	: Construction materials
ndustrial/Professional use spec	: For professional use only
Use of the substance/mixture	: Tile Adhesives
Use of the substance/mixture	: Tiling
	Installation of Natural Stones
1.2.2. Uses advised against	
No additional information available	
1.3. Details of the supplier of the sa	afety data sheet
Ardex UK Limited Homefield Road CB9 8QP Haverhill Suffolk F 01440 714939 - F 01440 716667 E-mail address of competent person respor	nsible for the SDS : <u>safetydatasheets@ardex.co.uk</u>
1.4. Emergency telephone number	
Emergency number	:+44 (0) 870 190 6777 24 <tx:_unit_hours></tx:_unit_hours>
	ROI: +353 (0)1 809 2166 (available 8am-10pm, 7 days)
SECTION 2: Hazards identification	on
2.1. Classification of the substance	e or mixture
Classification according to Regulation (I	EC) No. 1272/2008 [CLP]
	315
Serious eye damage/eye irritation,	318
Category 1 Specific target organ toxicity — Single H exposure, Category 3, Respiratory tract rritation	335
Full text of H statements : see section 16	
Adverse physicochemical, human healtl	n and environmental effects
Causes skin irritation. Causes serious eye	
2.2. Label elements	
Labelling according to Regulation (EC) I Hazard pictograms (CLP)	No. 1272/2008 [CLP]
	GHS05 GHS07
Signal word (CLP)	: Danger
Hazardous ingredients	: Portland cement
Hazard statements (CLP)	: H315 - Causes skin irritation. H318 - Causes serious eve damage

H318 - Causes serious eye damage. H335 - May cause respiratory irritation.

: P102 - Keep out of reach of children.

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	P280 - Wear eye protection, protective gloves. P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P302+P352 - IF ON SKIN: Wash with plenty of soap and water. P261 - Avoid breathing dust.
Extra phrases	: Dispose of contents/container in accordance with regional/national/international/local regulations.
2.3. Other hazards	
Other hazards not contributing to the classification	 The product contains chromate reducer, whereby the content of water-soluble chromium (VI) less than 0.0002%. With proper storage (dry) and consumption within the specified storage time, a sensitizing effect of the cement / binder by contact with skin cannot occur (H317 or EUH203 can therefor be certified).
	be omitted).
PBT: not relevant – no registration required	be omitted).

SECTIO	SECTION 3: Composition/information on ingredients				
3.1.	Substances				
Not applica	Not applicable				
20	Mixturan				
3.2. I	Mixtures				

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Portland cement	(CAS-No.) 65997-15-1 (EC-No.) 266-043-4	>= 20	Skin Sens. 1, H317 Eye Dam. 1, H318 Skin Irrit. 2, H315 STOT SE 3, H335
Comments	: Chromium (VI) compounds < 2 ppm		

Full text of H-statements: see section 16

SECTION 4: First aid measures			
4.1. Description of first aid measu	res		
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.		
First-aid measures after skin contact	: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.		
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.		
First-aid measures after ingestion	: If the person is fully conscious, make him/her drink plenty of water. Never give an unconscious person anything to drink.		
4.2. Most important symptoms an	d effects, both acute and delayed		
Symptoms/effects after skin contact	: Irritation.		
Symptoms/effects after eye contact	: Serious damage to eyes.		
4.3. Indication of any immediate m	Indication of any immediate medical attention and special treatment needed		
Treat symptomatically.			

SECTIO	ON 5: Firefighting measures				
5.1.	Extinguishing media				
Suitable	extinguishing media	:	Non flammable.		
5.2.	5.2. Special hazards arising from the substance or mixture				
Fire haza	ard	:	No fire hazard.		
Explosior	n hazard	:	None.		
Hazardou fire	us decomposition products in case of	:	None.		
5.3.	Advice for firefighters				
Precautio	onary measures fire	:	No specific measures are necessary.		
Protectio	n during firefighting	:	Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.		

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SECTION 6: Accidental release m	easures				
6.1. Personal precautions, protective	Personal precautions, protective equipment and emergency procedures				
General measures	: Absorb spillage to prevent material damage.				
6.1.1. For non-emergency personnel	611 For non-emergency personnel				
Protective equipment	: Precautions for safe handling. See Heading 7.				
Emergency procedures	: Avoid contact with skin and eyes.				
6.1.2. For emergency responders					
Emergency procedures	: No specific measures are necessary.				
6.2. Environmental precautions					
Prevent entry to sewers and public waters.					
6.3. Methods and material for contai	nment and cleaning up				
For containment	: Collect spillage.				
Methods for cleaning up	: Mechanically recover the product. Minimise generation of dust. Collect spillage. Do not use compressed air for cleaning.				
6.4. Reference to other sections					
For further information refer to section 13. Se	e Heading 8.				
SECTION 7: Handling and storage	e				
7.1. Precautions for safe handling					
Additional hazards when processed	: See Heading 8.				
Precautions for safe handling	: Ensure good ventilation of the work station. Avoid contact with skin and eyes. Wear personal protective equipment.				
Hygiene measures	: Wear protective gloves. Do not eat, drink or smoke when using this product.				
7.2. Conditions for safe storage, incl	uding any incompatibilities				
Storage conditions	Protect from moisture. Store in a dry place. The product contains chromate reducer, whereby the content of water-soluble chromium (VI) is less than 0.0002%. With proper storage (dry) and consumption within the specified storage time, a sensitizing effect of the cement / binder by contact with skin cannot occur (H317 or EUH203 can therefore be omitted).				
Incompatible materials	: Aluminium.				
Storage area	: dry.				
7.3. Specific end use(s)					

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Portland cement (65997-15-1)			
United Kingdom	Local name	Portland cement	
United Kingdom	WEL TWA (mg/m³)	10 mg/m³ 4 mg/m³	

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Personal protective equipment:

In case of splash hazard: safety glasses. Dust formation: dust mask. Gloves.

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

If the occupational exposure limit is exceeded:

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Environmental exposure controls:

Avoid release to the environment.

Other information:

Use care during processing to minimize generation of dust. Avoid creating or spreading dust.

SECTION 9: Physical and chemical	properties
9.1. Information on basic physical and	
Physical state	: Solid
Appearance	: Powder.
Colour	: Grey. white.
Odour	: odourless.
Odour threshold	: No data available
рН	: <= 11.5
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: >1250 °C
Freezing point	: Not applicable
Boiling point	: Not applicable
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable.
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: Not applicable
Density	: 2.75 - 3.2 g/cm ³
Solubility	: Water: 0.1 - 1.5 g/l @ 20°C
Log Pow	: No data available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: Not applicable
Explosive properties	: None.
Oxidising properties	: None.
Explosive limits	: Not applicable
9.2. Other information	
VOC content	: <3%
Bulk density	: 900 - 1300 kg/m³
SECTION 10: Stability and reactivit	V
10.1. Reactivity	
Reacts with water.	
10.2. Chemical stability	
Stable under normal conditions.	
10.3. Possibility of hazardous reactions	
No dangerous reactions known under normal of	conditions of use.
10.4. Conditions to avoid	
None under recommended storage and handlin	ng conditions (see section 7).
10.5. Incompatible materials	
Acids. ammonium salts. Aluminium.	
10.6. Hazardous decomposition produc	ts

10.6. Hazardous decomposition products

No hazardous decomposition products known.

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SECTION 11: Toxicological informat	ion			
11.1. Information on toxicological effects				
Acute toxicity	: Not classified			
Skin corrosion/irritation	: Causes skin irritation.			
	pH: <= 11.5			
Serious eye damage/irritation	: Causes serious eye damage. pH: <= 11.5			
Respiratory or skin sensitisation	: Not classified			
Germ cell mutagenicity	: Not classified			
Carcinogenicity	: Not classified			
Reproductive toxicity	: Not classified			
STOT-single exposure	: May cause respiratory irritation.			
STOT-repeated exposure	: Not classified			
Aspiration hazard	: Not classified			
Potential adverse human health effects and symptoms	: Irritation: severely irritant to eyes.			
SECTION 12: Ecological information				
12.1. Toxicity				
Ecology - general	The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.			
Portland cement (65997-15-1)				
LC50 fish 1	> 1000 mg/l (96 h, Pisces)			
12.2. Persistence and degradability				
ARDEX X 77 S Grey / White				
Persistence and degradability	Not applicable. Inorganic Particulate Substances.			
BOD (% of ThOD)	Not applicable			
Portland cement (65997-15-1)				
Persistence and degradability	Biodegradability: not applicable.			
Biochemical oxygen demand (BOD)	Not applicable			
Chemical oxygen demand (COD)	Not applicable			
ThOD	Not applicable			
BOD (% of ThOD)	Not applicable			
12.3. Bioaccumulative potential				
ARDEX X 77 S Grey / White				
,				
Bioaccumulative potential	No bioaccumulation.			
	No bioaccumulation.			
Bioaccumulative potential	No bioaccumulation. Bioaccumulation: not applicable.			
Bioaccumulative potential Portland cement (65997-15-1)				
Bioaccumulative potential Portland cement (65997-15-1) Bioaccumulative potential 12.4. Mobility in soil ARDEX X 77 S Grey / White	Bioaccumulation: not applicable.			
Bioaccumulative potential Portland cement (65997-15-1) Bioaccumulative potential 12.4. Mobility in soil ARDEX X 77 S Grey / White Ecology - soil				
Bioaccumulative potential Portland cement (65997-15-1) Bioaccumulative potential 12.4. Mobility in soil ARDEX X 77 S Grey / White Ecology - soil Portland cement (65997-15-1)	Bioaccumulation: not applicable.			
Bioaccumulative potential Portland cement (65997-15-1) Bioaccumulative potential 12.4. Mobility in soil ARDEX X 77 S Grey / White Ecology - soil Portland cement (65997-15-1) Ecology - soil	Bioaccumulation: not applicable. None. No (test)data on mobility of the substance available.			
Bioaccumulative potential Portland cement (65997-15-1) Bioaccumulative potential 12.4. Mobility in soil ARDEX X 77 S Grey / White Ecology - soil Portland cement (65997-15-1) Ecology - soil 12.5. Results of PBT and vPvB assessme	Bioaccumulation: not applicable. None. No (test)data on mobility of the substance available.			
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Bioaccumulative potential Portland cement (65997-15-1) Bioaccumulative potential 12.4. Mobility in soil ARDEX X 77 S Grey / White Ecology - soil Portland cement (65997-15-1) Ecology - soil 12.5. Results of PBT and vPvB assessme ARDEX X 77 S Grey / White	Bioaccumulation: not applicable. None. No (test)data on mobility of the substance available.			

Portland cement (65997-15-1) This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

No additional information available

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SECTION 13: Disposal considerations			
13.1. Waste treatment methods			
Regional legislation (waste)	: Disposal must be done according to official regulations.		
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.		
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Avoid release to the environment.		
Ecology - waste materials	: Avoid release to the environment.		
European List of Waste (LoW) code	: 17 01 01 - concrete 10 13 14 - waste concrete and concrete sludge		

SECTION 14: Transport information

In accordance with ADR / IATA / IMDG

ADR	IMDG	ΙΑΤΑ		
14.1. UN number				
Not applicable	Not applicable	Not applicable		
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable		
Not applicable	Not applicable	Not applicable		
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable		
Not applicable	Not applicable	Not applicable		
14.4. Packing group				
Not applicable	Not applicable	Not applicable		
14.5. Environmental hazards				
Not applicable	Not applicable	Not applicable		
No supplementary information available				

14.6. Special precautions for user

- Overland transport

Not applicable

- Transport by sea

Not applicable

- Air transport

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions Contains no substance on the REACH candidate list Contains no REACH Annex XIV substances

VOC content : < 3 %

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Other information, restriction and prohibition : regulations	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.
	4. The standard adopted by the European Committee for Standardization (CEN) for testing the water-soluble chromium (VI) content of cement and cement-containing mixtures shall be used as the test method for demonstrating conformity with paragraph 1.
	5. Leather articles coming into contact with the skin shall not be placed on the market where they contain chromium VI in concentrations equal to or greater than 3 mg/kg (0,0003 % by weight) of the total dry weight of the leather.
	6. Articles containing leather parts coming into contact with the skin shall not be placed on the market where any of those leather parts contains chromium VI in concentrations equal to or greater than 3 mg/kg (0,0003 % by weight) of the total dry weight of that leather part.
	7. Paragraphs 5 and 6 shall not apply to the placing on the market of second-hand articles which were in end-use in the Union before 1 May 2015.
15.1.2. National regulations	

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Full text of H- and EUH-statements:

Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Respiratory tract irritation
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.

ARDEX SDS EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product