Safety Data Sheet according to Regulation (EU) 2015/830 Date of issue: 1/6/2017 Revision date: 3/22/2019



Version: 2.0

1.1. Product identifier	
roduct form	: Mixture
roduct name	: ARDEX X 77 Grey
roduct code	: 18326, 25092, 25073
.2. Relevant identified uses of the	substance or mixture and uses advised against
.2.1. Relevant identified uses	
lain use category	: Construction materials
ndustrial/Professional use spec	: For professional use only
Jse of the substance/mixture	: Tile Adhesives
.2.2. Uses advised against	
lo additional information available	
.3. Details of the supplier of the sa	ifety data sheet
Manufacturer 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>
I.4. Emergency telephone number	
Emergency number	: +44 (0) 870 190 6777 24 hours
	ROI +353 (0)1 809 2166 (available 8am-10pm, 7 days)
SECTION 2: Hazards identification	n
.1. Classification of the substance	
kin corrosion/irritation, Category 2 H erious eye damage/eye irritation, H ategory 1	315 318
Skin corrosion/irritation, Category 2 H Serious eye damage/eye irritation, H Category 1 Specific target organ toxicity — Single H exposure, Category 3, Respiratory tract ritation Full text of H statements : see section 16	315 318 335
Skin corrosion/irritation, Category 2 H Serious eye damage/eye irritation, H Category 1 Specific target organ toxicity — Single H exposure, Category 3, Respiratory tract ritation Full text of H statements : see section 16	315 318 335 and environmental effects
Serious eye damage/eye irritation, H Category 1	315 318 335 and environmental effects
Skin corrosion/irritation, Category 2 H Serious eye damage/eye irritation, H Category 1 Specific target organ toxicity — Single H exposure, Category 3, Respiratory tract rritation Full text of H statements : see section 16 Adverse physicochemical, human health Causes skin irritation. Causes serious eye of 2.2. Label elements Labelling according to Regulation (EC) N	315 318 335 and environmental effects damage.
<ul> <li>kin corrosion/irritation, Category 2</li> <li>Histerious eye damage/eye irritation, Histerious eye damage/eye irritation, Histerious eye damage/eye irritation, Histerious eye of a construct of the statements is seen section 16</li> <li>Adverse physicochemical, human health Causes skin irritation. Causes serious eye of a construct serious eye of a construct of the statements.</li> <li>Label elements</li> <li>Label elements</li> <li>Label grams (CLP)</li> </ul>	315 318 335 and environmental effects damage. No. 1272/2008 [CLP] : : : : : : : : : : : : :
<ul> <li>Skin corrosion/irritation, Category 2</li> <li>Herious eye damage/eye irritation, Category 1</li> <li>Specific target organ toxicity — Single Herious eye damage/eye irritation</li> <li>Full text of H statements : see section 16</li> <li>Adverse physicochemical, human health</li> <li>Causes skin irritation. Causes serious eye of the section in the section is a section in the section in the section is a section in the section in the section is a section in the section is a section in the section is a section in the section in the section is a section in the section is a section in the section is a section in the section in the section is a section in the section is a section in the section in the section is a section in the section in the section in the section is a section in the section in the section in the section in the section is a section in the sectio</li></ul>	315 318 335 and environmental effects damage. No. 1272/2008 [CLP] $\therefore$ $\bigoplus_{GHS05}$ $\bigoplus_{GHS07}$
kin corrosion/irritation, Category 2 H berious eye damage/eye irritation, H category 1 pecific target organ toxicity — Single H xposure, Category 3, Respiratory tract ritation full text of H statements : see section 16 <b>Adverse physicochemical, human health</b> causes skin irritation. Causes serious eye of <b>.2. Label elements</b> abelling according to Regulation (EC) N lazard pictograms (CLP) Fignal word (CLP) lazardous ingredients	315 318 335 <b>n and environmental effects</b> damage. No. 1272/2008 [CLP] : : : : : : : : : : : : :
Skin corrosion/irritation, Category 2       H         Serious eye damage/eye irritation, Category 1       H         Specific target organ toxicity — Single exposure, Category 3, Respiratory tract       H         Full text of H statements : see section 16       H         Adverse physicochemical, human health       Causes skin irritation. Causes serious eye of the series eye of the series exponent ex	<ul> <li>and environmental effects</li> <li>damage.</li> <li>Associate the second seco</li></ul>

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# 2.3. Other hazards Other hazards not contributing to the classification : 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). PBT: not relevant – no registration required vPvB: not relevant – no registration required

#### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Not applicable

#### 3.2. 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 measures	
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 and effe	cts, 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 medica	al attention and special treatment needed
Treat symptomatically.	
SECTION 5: Firefighting measures	
5.1. Extinguishing media	
Suitable extinguishing media	: Non flammable.
5.2. Special hazards arising from the su	ibstance or mixture
Fire hazard	: No fire hazard.
Explosion hazard	: None.
Hazardous decomposition products in case of fire	: None.
5.3. Advice for firefighters	
Precautionary measures fire	: No specific measures are necessary.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
SECTION 6: Accidental release mea	sures
6.1. Personal precautions, protective ed	quipment and emergency procedures
General measures	: Absorb spillage to prevent material damage.
6.1.1. For non-emergency personnel	
Protective equipment	: Precautions for safe handling. See Heading 7.
FIOLECLIVE Equipment	. Trecautions for sale nationing. See neading 7.

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6.1.2. For emergency responders	
Emergency procedures	: No specific measures are necessary.
6.2. Environmental precautions	
Prevent entry to sewers and public wate	rs.
6.3. Methods and material for co	ntainment 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 1	3. See Heading 8.
SECTION 7: Handling and sto	rage
7.1. Precautions for safe handlin	Ig
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,	including any incompatibilities
Storage conditions	<ul> <li>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%.</li> <li>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).</li> </ul>
Incompatible materials	: Aluminium.
Storage area	: dry.
7.3. Specific end use(s)	
No additional information available	
<b>SECTION 8: Exposure control</b>	s/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

Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
Reusable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	1,0		EN 388

## Eye protection:

Safety glasses

#### Skin and body protection:

Wear suitable protective clothing

#### Respiratory protection:

If the occupational exposure limit is exceeded:

Device	Filter type	Condition	Standard
Disposable half mask	Type P1, Type P2	Dust protection	EN 149

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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.

<b>SECTION 9: Physical and chemical</b>	properties
9.1. Information on basic physical and	
Physical state	: Solid
Appearance	: Powder.
Colour	: Grey.
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 <sup>3</sup>
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 reactivity	y .
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 co	onditions of use.
10.4. Conditions to avoid	
None under recommended storage and handlin	g conditions (see section 7).
10.5. Incompatible materials	
Acids. ammonium salts. Aluminium.	

### 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.
Serious eye damage/irritation	pH: <= 11.5 : Causes serious eye damage.
Respiratory or skin sensitisation	pH: <= 11.5 : Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: May cause respiratory irritation.
	: Not classified
STOT-repeated exposure	
Aspiration hazard	: Not classified
Potential adverse human health effects and symptoms	: Irritation: severely irritant to eyes.
SECTION 12: Ecological information	1
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 Grey	
Persistence and degradability	Not applicable. Inorganic Particulate Substances.
BOD (% of ThOD)	Not applicable
Portland cement (65997-15-1)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
12.3. Bioaccumulative potential	
ARDEX X 77 Grey	
Bioaccumulative potential	No bioaccumulation.
Portland cement (65997-15-1)	
Bioaccumulative potential	Bioaccumulation: not applicable.
12.4. Mobility in soil	
ARDEX X 77 Grey	
Ecology - soil	None.
Portland cement (65997-15-1)	
Ecology - soil	No (test)data on mobility of the substance available.
12.5. Results of PBT and vPvB assessme	ent
ARDEX X 77 Grey	
PBT: not relevant – no registration required	
vPvB: not relevant – no registration required	
Component	
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	
SECTION 13: Disposal consideration	ns
13.1. Waste treatment methods	· Dispacel must be done according to official regulations

Regional legislation (waste)

: Disposal must be done according to official regulations.

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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

IMDC	ΙΑΤΑ	
INDO		
Not applicable	Not applicable	
·		
Not applicable	Not applicable	
Not applicable	Not applicable	
Not applicable	Not applicable	
Not applicable	Not applicable	
14.4. Packing group		
Not applicable	Not applicable	
14.5. Environmental hazards		
Not applicable	Not applicable	
No supplementary information available		
	Not applicable         Not applicable         Not applicable         Not applicable         Not applicable         Not applicable         Not applicable	

#### 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.