

# ARDEX K 40

## Safety Data Sheet

according to Regulation (EU) 2015/830

Issue date: 8/21/2020

Revision date:



Supersedes version of:

Version: 1.0

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

#### 1.1. Product identifier

Product form : Mixture  
Product name : ARDEX K 40

#### 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  
Industrial/Professional use spec : For professional use only  
Use of the substance/mixture : Floor Levelling Compounds

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

##### Manufacturer

Ardex UK Limited

Homefield Road

CB9 8QP Haverhill Suffolk

T 01440 714939 - F 01440 716667

E-mail address of competent person responsible for the SDS : [safetydatasheets@ardex.co.uk](mailto:safetydatasheets@ardex.co.uk)

#### 1.4. Emergency telephone number

Emergency number : +44 (0) 870 190 6777  
24 hours

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Serious eye damage/eye irritation, Category 1 H318

Full text of H statements : see section 16

##### Adverse physicochemical, human health and environmental effects

Causes skin irritation. Causes serious eye damage.

#### 2.2. Label elements

##### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS05

Signal word (CLP) : Danger  
Hazardous ingredients : Portland cement  
Hazard statements (CLP) : H318 - Causes serious eye damage.  
Precautionary statements (CLP) : P102 - Keep out of reach of children.  
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) is less than 0.0002%.  
With proper storage (dry) and consumption within the specified storage time, a sensitizing

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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]
calcium sulfate	(CAS-No.) 7778-18-9 (EC-No.) 231-900-3 (REACH-no) 01-2119444918-26	< 20	Not classified
calcium carbonate	(CAS-No.) 471-34-1 (EC-No.) 207-439-9	< 40	Not classified
Portland cement	(EC-No.) 266-043-4	≥3 - ≤ 10	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. Do not induce vomiting.

#### 4.2. Most important symptoms and 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 medical 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 substance 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 measures

#### 6.1. Personal precautions, protective equipment 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.
- Emergency procedures : Avoid contact with skin and eyes.

##### 6.1.2. For emergency responders

- Emergency procedures : No specific measures are necessary.

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### 6.2. Environmental precautions

Prevent entry to sewers and public waters.

### 6.3. Methods and material for containment 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. See Heading 8.

## SECTION 7: Handling and storage

### 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, including 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		
United Kingdom	Local name	Portland cement
United Kingdom	WEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> 4 mg/m <sup>3</sup>
calcium carbonate (471-34-1)		
United Kingdom	WEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> 4 mg/m <sup>3</sup>

### 8.2. Exposure controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

#### Personal protective equipment:

Safety glasses. Dust formation: dust mask. Gloves.

#### Hand protection:

Protective gloves. The following materials are suitable for protective gloves:  
Nitrile impregnated cotton gloves (layer thickness of about 0,15 mm).

#### 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 chemical properties

Physical state	: Solid
Appearance	: Powder.
Colour	: Grey. white.
Odour	: odourless.
Odour threshold	: No data available
pH	: 11.5 Aqueous solution
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
Partition coefficient n-octanol/water (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/m <sup>3</sup>

## SECTION 10: Stability and reactivity

### 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 conditions of use.

### 10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

### 10.5. Incompatible materials

Acids. ammonium salts. Aluminium.

### 10.6. Hazardous decomposition products

No hazardous decomposition products known.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified

#### calcium sulfate (7778-18-9)

LD50 oral rat	> 1584 mg/kg bodyweight (OECD 420: Acute Oral toxicity – Acute Toxic Class Method, Rat, Female, Experimental value, Oral)
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<b>calcium sulfate (7778-18-9)</b>	
LC50 inhalation rat (mg/l)	> 2.61 mg/l air (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (dust))
<b>calcium carbonate (471-34-1)</b>	
LD50 oral rat	> 2000 mg/kg (OECD 420: Acute Oral toxicity – Acute Toxic Class Method, Rat, Female, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LC50 inhalation rat (mg/l)	> 3 mg/l (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (aerosol))

Skin corrosion/irritation	: Not classified pH: 11.5 Aqueous solution
Serious eye damage/irritation	: Causes serious eye damage. pH: 11.5 Aqueous solution
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
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.
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<b>Portland cement</b>	
LC50 fish 1	> 1000 mg/l (96 h, Pisces)
<b>calcium sulfate (7778-18-9)</b>	
LC50 fish 1	2980 mg/l (96 h, Lepomis macrochirus)
<b>calcium carbonate (471-34-1)</b>	
LC50 fish 1	> 100 % (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value, Saturated solution)
EC50 Daphnia 1	> 100 % (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Saturated solution)
EC50 72h algae (1)	> 14 mg/l (OECD 201: Alga, Growth Inhibition Test, Desmodesmus subspicatus, Static system, Fresh water, Experimental value, GLP)

### 12.2. Persistence and degradability

<b>ARDEX K 40</b>	
Persistence and degradability	Not applicable. Inorganic Particulate Substances.
BOD (% of ThOD)	Not applicable
<b>Portland cement</b>	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
<b>calcium sulfate (7778-18-9)</b>	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
<b>calcium carbonate (471-34-1)</b>	
Persistence and degradability	Biodegradability in soil: not applicable. Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)

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### 12.3. Bioaccumulative potential

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Bioaccumulative potential	No bioaccumulation.
Portland cement	
Bioaccumulative potential	Bioaccumulation: not applicable.
calcium sulfate (7778-18-9)	
Bioaccumulative potential	No bioaccumulation data available.
calcium carbonate (471-34-1)	
Partition coefficient n-octanol/water (Log Pow)	-2.12 (Estimated value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

### 12.4. Mobility in soil

ARDEX K 40	
Ecology - soil	None.
Portland cement	
Ecology - soil	No (test)data on mobility of the substance available.
calcium carbonate (471-34-1)	
Ecology - soil	Adsorbs into the soil.

### 12.5. Results of PBT and vPvB assessment

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PBT: not relevant – no registration required	
vPvB: not relevant – no registration required	
Component	
Portland cement ()	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
calcium carbonate (471-34-1)	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 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	IATA
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		

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### 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 %

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.

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

*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.*