



## SAFETY DATA SHEET ARDEX A23

According to Regulation (EC) No 1907/2006, Annex II, as amended. Commission Regulation (EU) No 2015/830 of 28 May 2015.

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

#### 1.1. Product identifier

**Product name** ARDEX A23

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Identified uses** A rapid setting cement used to prepare screeds and renders.

**Uses advised against** No specific uses advised against are identified.

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

**Supplier** Ardex UK Limited  
Homefield Road  
Haverhill  
Suffolk  
CB9 8QP  
01440 714939

**Contact person** safetydatasheets@ardex.co.uk

#### 1.4. Emergency telephone number

**Emergency telephone** +44 (0) 870 190 6777 (24 hours)

### SECTION 2: Hazards identification

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

##### Classification (EC 1272/2008)

**Physical hazards** Not Classified

**Health hazards** Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Skin Sens. 1 - H317 STOT SE 3 - H335

**Environmental hazards** Not Classified

##### Human health

When the cement based powder is mixed with water or admixture, a strongly alkaline paste is produced. Cement based products may, until set, cause both irritant and allergic contact dermatitis. Irritant contact dermatitis is due to a combination of the wetness, alkalinity and abrasiveness of the constituent materials. Allergic contact dermatitis is caused mainly by the sensitivity of the individual's skin to hexavalent chromium salts. Corrosive. Prolonged contact causes serious eye and tissue damage.

##### Environmental

The product is not expected to be hazardous to the environment.

#### 2.2. Label elements

##### Hazard pictograms



## ARDEX A23

|                                 |   |
|---------------------------------|---|
| <b>Signal word</b>              | Danger  |
| <b>Hazard statements</b>        | H315 Causes skin irritation.<br>H317 May cause an allergic skin reaction.<br>H318 Causes serious eye damage.<br>H335 May cause respiratory irritation.  |
| <b>Precautionary statements</b> | P102 Keep out of reach of children.<br>P261 Avoid breathing dust.<br>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.<br>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>P501 Dispose of contents/ container in accordance with local regulations. |
| <b>Contains</b>                 | ORDINARY PORTLAND CEMENT, CALCIUM SULFOALUMINATE CEMENT   |

### 2.3. Other hazards

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

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

|   |                      |
|---|----------------------|
| <b>ORDINARY PORTLAND CEMENT</b>   | <b>60-100%</b>       |
| CAS number: 65997-15-1  | EC number: 266-043-4 |
| <b>Classification</b><br>Skin Irrit. 2 - H315<br>Eye Dam. 1 - H318<br>Skin Sens. 1 - H317<br>STOT SE 3 - H335 |                      |
| <b>CALCIUM SULFOALUMINATE CEMENT</b>  | <b>10-30%</b>        |
| CAS number: 12004-14-7  |                      |
| <b>Classification</b><br>Skin Irrit. 2 - H315<br>Eye Dam. 1 - H318<br>Skin Sens. 1 - H317<br>STOT SE 3 - H335 |                      |

The full text for all hazard statements is displayed in Section 16.

|                             |  |
|-----------------------------|--|
| <b>Composition comments</b> | This product contains a reducing agent to ensure that the CrVI content of the cement in the product remains below 2ppm during the defined shelf life of the product. |
|-----------------------------|--|

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

|                            |  |
|----------------------------|--|
| <b>General information</b> | Consult a physician for specific advice.   |
| <b>Inhalation</b>          | Move affected person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues.                       |
| <b>Ingestion</b>           | Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth thoroughly with water. Get medical attention immediately. |

## ARDEX A23

|                     |  |
|---------------------|--|
| <b>Skin contact</b> | Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing.                                     |
| <b>Eye contact</b>  | Remove affected person from source of contamination. Do not rub eye. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention immediately. Continue to rinse. |

### 4.2. Most important symptoms and effects, both acute and delayed

|                     |  |
|---------------------|--|
| <b>Inhalation</b>   | Frequent inhalation of dust over a long period of time increases the risk of developing lung diseases. |
| <b>Ingestion</b>    | May cause chemical burns in mouth and throat.  |
| <b>Skin contact</b> | May cause serious chemical burns to the skin.  |
| <b>Eye contact</b>  | May cause severe eye irritation. May cause blurred vision and serious eye damage.                      |

### 4.3. Indication of any immediate medical attention and special treatment needed

|                             |   |
|-----------------------------|---|
| <b>Notes for the doctor</b> | No specific recommendations. If in doubt, get medical attention promptly. |
|-----------------------------|---|

## **SECTION 5: Firefighting measures**

### 5.1. Extinguishing media

|                                     |   |
|-------------------------------------|---|
| <b>Suitable extinguishing media</b> | The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire. |
|-------------------------------------|---|

### 5.2. Special hazards arising from the substance or mixture

|                                      |  |
|--------------------------------------|--|
| <b>Specific hazards</b>              | Protection against nuisance dust must be used when the airborne concentration exceeds 10 mg/m <sup>3</sup> . No unusual fire or explosion hazards noted. |
| <b>Hazardous combustion products</b> | Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of carbon.                                       |

### 5.3. Advice for firefighters

|  |   |
|--|---|
| <b>Protective actions during firefighting</b>        | No specific firefighting precautions known. |
| <b>Special protective equipment for firefighters</b> | Wear chemical protective suit.              |

## **SECTION 6: Accidental release measures**

### 6.1. Personal precautions, protective equipment and emergency procedures

|                             |   |
|-----------------------------|---|
| <b>Personal precautions</b> | Wear protective clothing as described in Section 8 of this safety data sheet. |
|-----------------------------|---|

### 6.2. Environmental precautions

|                                  |  |
|----------------------------------|--|
| <b>Environmental precautions</b> | Do not discharge into drains or watercourses or onto the ground. |
|----------------------------------|--|

### 6.3. Methods and material for containment and cleaning up

|                                |  |
|--------------------------------|--|
| <b>Methods for cleaning up</b> | Avoid contact with skin or inhalation of spillage, dust or vapour. Dampen spillage with water. Absorb in vermiculite, dry sand or earth and place into containers. Avoid the spillage or runoff entering drains, sewers or watercourses. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Flush contaminated area with plenty of water. |
|--------------------------------|--|

### 6.4. Reference to other sections

|                                    |   |
|------------------------------------|---|
| <b>Reference to other sections</b> | Wear protective clothing as described in Section 8 of this safety data sheet. |
|------------------------------------|---|

## ARDEX A23

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

**Usage precautions** Avoid spilling. Avoid contact with skin and eyes. Provide adequate ventilation. Avoid handling which leads to dust formation.

#### 7.2. Conditions for safe storage, including any incompatibilities

**Storage precautions** Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep only in the original container.

#### 7.3. Specific end use(s)

**Specific end use(s)** The identified uses for this product are detailed in Section 1.2.

### SECTION 8: Exposure controls/Personal protection

#### 8.1. Control parameters

##### Occupational exposure limits

##### ORDINARY PORTLAND CEMENT

Long-term exposure limit (8-hour TWA): WEL 10 mg/m<sup>3</sup> inhalable dust

Long-term exposure limit (8-hour TWA): WEL 4 mg/m<sup>3</sup> respirable dust

##### CALCIUM SULFOALUMINATE CEMENT

Long-term exposure limit (8-hour TWA): WEL 10 mg/m<sup>3</sup> inhalable dust

Long-term exposure limit (8-hour TWA): WEL 4 mg/m<sup>3</sup> respirable dust

WEL = Workplace Exposure Limit

**Ingredient comments** WEL = Workplace Exposure Limits

##### LITHIUM CARBONATE (CAS: 554-13-2)

|             |  |
|-------------|--|
| <b>DNEL</b> | - Inhalation; Long term systemic effects: 10 mg/m <sup>3</sup><br>- Dermal; Long term systemic effects: 64 mg/kg/day |
| <b>PNEC</b> | - Fresh water; Intermittent release 0.9 mg/l   |

#### 8.2. Exposure controls

##### Protective equipment



##### Appropriate engineering controls

Provide adequate ventilation. Avoid inhalation of vapours. Observe any occupational exposure limits for the product or ingredients.

##### Eye/face protection

Wear chemical splash goggles. Personal protective equipment for eye and face protection should comply with European Standard EN166.

##### Hand protection

Gloves made from the following material may provide suitable chemical protection: Nitrile rubber. The selected gloves should have a breakthrough time of at least >8 hours. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material.

##### Other skin and body protection

Wear appropriate clothing to prevent any possibility of skin contact.

##### Hygiene measures

Provide eyewash station. Do not smoke in work area. Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Do not eat, drink or smoke when using this product.

## ARDEX A23

|  |  |
|--|--|
| <b>Respiratory protection</b>          | If ventilation is inadequate, suitable respiratory protection must be worn. Use respiratory equipment with particle filter type P2 |
| <b>Thermal hazards</b>                 | Not applicable.  |
| <b>Environmental exposure controls</b> | Avoid release to the environment.  |

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

|                        |                                   |
|------------------------|-----------------------------------|
| <b>Appearance</b>      | Dusty powder.                     |
| <b>Colour</b>          | Grey.                             |
| <b>pH</b>              | pH (concentrated solution): 12-13 |
| <b>Solubility(ies)</b> | Slightly soluble in water.        |

#### 9.2. Other information

|                          |                          |
|--------------------------|--------------------------|
| <b>Other information</b> | No information required. |
|--------------------------|--------------------------|

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

|                   |   |
|-------------------|---|
| <b>Reactivity</b> | There are no known reactivity hazards associated with this product. |
|-------------------|---|

#### 10.2. Chemical stability

|                  |  |
|------------------|--|
| <b>Stability</b> | Stable at normal ambient temperatures. |
|------------------|--|

#### 10.3. Possibility of hazardous reactions

|   |                 |
|---|-----------------|
| <b>Possibility of hazardous reactions</b> | Not applicable. |
|---|-----------------|

#### 10.4. Conditions to avoid

|                            |  |
|----------------------------|--|
| <b>Conditions to avoid</b> | Avoid contact with acids. Water, moisture. |
|----------------------------|--|

#### 10.5. Incompatible materials

|                           |                                |
|---------------------------|--------------------------------|
| <b>Materials to avoid</b> | Strong acids. Aluminium powder |
|---------------------------|--------------------------------|

#### 10.6. Hazardous decomposition products

|   |  |
|---|--|
| <b>Hazardous decomposition products</b> | Fire creates: Carbon monoxide (CO). Carbon dioxide (CO <sub>2</sub> ). |
|---|--|

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

##### Skin corrosion/irritation

|                                  |                         |
|----------------------------------|-------------------------|
| <b>Skin corrosion/irritation</b> | Severe skin irritation. |
|----------------------------------|-------------------------|

|                   |        |
|-------------------|--------|
| <b>Extreme pH</b> | ≥ 11.5 |
|-------------------|--------|

##### Serious eye damage/irritation

|                                      |                            |
|--------------------------------------|----------------------------|
| <b>Serious eye damage/irritation</b> | Causes serious eye damage. |
|--------------------------------------|----------------------------|

##### Respiratory sensitisation

|                                  |            |
|----------------------------------|------------|
| <b>Respiratory sensitisation</b> | Not known. |
|----------------------------------|------------|

##### Skin sensitisation

## ARDEX A23

|  |  |
|--|--|
| <b>Skin sensitisation</b>  | May cause sensitisation or allergic reactions in sensitive individuals.  |
| <b><u>Germ cell mutagenicity</u></b>                             |  |
| <b>Genotoxicity - in vitro</b>                                   | Based on available data the classification criteria are not met.   |
| <b>Genotoxicity - in vivo</b>                                    | Based on available data the classification criteria are not met.   |
| <b><u>Carcinogenicity</u></b>                                    |  |
| <b>Carcinogenicity</b>   | Based on available data the classification criteria are not met.   |
| <b><u>Reproductive toxicity</u></b>                              |  |
| <b>Reproductive toxicity - fertility</b>                         | Based on available data the classification criteria are not met.   |
| <b><u>Specific target organ toxicity - single exposure</u></b>   |  |
| <b>STOT - single exposure</b>                                    | Based on available data the classification criteria are not met.   |
| <b><u>Specific target organ toxicity - repeated exposure</u></b> |  |
| <b>STOT - repeated exposure</b>                                  | Not classified as a specific target organ toxicant after repeated exposure.  |
| <b><u>Aspiration hazard</u></b>                                  |  |
| <b>Aspiration hazard</b>   | Not relevant.  |
| <b><u>Inhalation</u></b>   |  |
| <b>Inhalation</b>  | May cause respiratory system irritation. May cause damage to mucous membranes in nose, throat, lungs and bronchial system. Harmful: danger of serious damage to health by prolonged exposure through inhalation. |
| <b><u>Ingestion</u></b>  |  |
| <b>Ingestion</b>   | Ingestion may cause severe irritation of the mouth, the oesophagus and the gastrointestinal tract.   |
| <b><u>Skin contact</u></b>                                       |  |
| <b>Skin contact</b>  | The product contains a small amount of sensitising substance. May cause sensitisation or allergic reactions in sensitive individuals.  |
| <b><u>Eye contact</u></b>  |  |
| <b>Eye contact</b>   | Risk of serious damage to eyes. May cause chemical eye burns.  |
| <b><u>Acute and chronic health hazards</u></b>                   |  |
| <b>Acute and chronic health hazards</b>                          | Repeated exposure in excess of the WEL has been linked with rhinitis and coughing. Skin exposure has been linked to allergic chromium dermatitis.  |

### SECTION 12: Ecological information

**Ecotoxicity** The product may affect the acidity (pH) of water which may have hazardous effects on aquatic organisms.

#### 12.1. Toxicity

**Toxicity** The product is not expected to be hazardous to the environment (LC50 aquatic toxicity rating not determined). The addition of cement based product to water will, however, cause the pH to rise and may, therefore, be toxic to aquatic life in some circumstances.

#### 12.2. Persistence and degradability

**Persistence and degradability** Not relevant. After hardening, cement presents no toxicity risks. There are no data on the degradability of this product.

#### 12.3. Bioaccumulative potential

**Bioaccumulative potential** No data available on bioaccumulation.

#### 12.4. Mobility in soil

**Mobility** The product is non-volatile. The product is insoluble in water and will sediment in water systems.

## ARDEX A23

### 12.5. Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** Not relevant.

### 12.6. Other adverse effects

**Other adverse effects** None known.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**Disposal methods** Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Product that contains >2ppm CrVI should be disposed of according to local legislation or should be treated with a reducing agent before use. Product that is within shelf life may be hydrated with water and disposed of according to local legislation. The hydrated product is not hazardous.

## SECTION 14: Transport information

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

**Road transport notes** Not classified.

**Rail transport notes** Not classified.

**Sea transport notes** Not classified.

**Air transport notes** Not classified.

### 14.1. UN number

Not applicable.

### 14.2. UN proper shipping name

Not applicable.

### 14.3. Transport hazard class(es)

Not applicable.

### Transport labels

No transport warning sign required.

### 14.4. Packing group

Not applicable.

### 14.5. Environmental hazards

**Environmentally hazardous substance/marine pollutant**

No.

### 14.6. Special precautions for user

Not applicable.

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

**Transport in bulk according to** Not applicable.

**Annex II of MARPOL 73/78**

**and the IBC Code**

## SECTION 15: Regulatory information

## ARDEX A23

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

|  |  |
|--|--|
| <b>EU legislation</b>                                  | 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).<br>Commission Regulation (EU) No 2015/830 of 28 May 2015.<br>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). |
| <b>Guidance</b>  | Workplace Exposure Limits EH40.  |
| <b>Health and environmental listings</b>               | None of the ingredients are listed.  |
| <b>Authorisations (Annex XIV Regulation 1907/2006)</b> | No specific authorisations are known for this product.   |
| <b>Restrictions (Annex XVII Regulation 1907/2006)</b>  | No specific restrictions on use are known for this product.  |

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

### SECTION 16: Other information

|                                  |  |
|----------------------------------|--|
| <b>Issued by</b>                 | Technical Manager  |
| <b>Revision date</b>             | 27/05/2020   |
| <b>Revision</b>                  | 3  |
| <b>Supersedes date</b>           | 16/04/2018   |
| <b>Hazard statements in full</b> | H315 Causes skin irritation.<br>H317 May cause an allergic skin reaction.<br>H318 Causes serious eye damage.<br>H335 May cause respiratory irritation. |

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.