



## SAFETY DATA SHEET Ardex EG 18 Hardener

According to the REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577, as amended.

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

#### 1.1. Product identifier

Product name Ardex EG 18 Hardener

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

Identified uses As part of an epoxy resin based adhesive or grout.

#### 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 UK and ROI:- 01865 407 333 (available 24/7/365)

### SECTION 2: Hazards identification

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

##### Classification (SI 2019 No. 720)

Physical hazards Not Classified

Health hazards Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317

Environmental hazards Aquatic Chronic 2 - H411

#### 2.2. Label elements

##### Hazard pictograms



Signal word

Danger

##### Hazard statements

H318 Causes serious eye damage.  
H314 Causes severe skin burns and eye damage.  
H317 May cause an allergic skin reaction.  
H411 Toxic to aquatic life with long lasting effects.

## Ardex EG 18 Hardener

<b>Precautionary statements</b>	<p>P102 Keep out of reach of children.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P261 Avoid breathing gas, fume, vapours or spray.</p> <p>P273 Avoid release to the environment.</p> <p>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of water.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p>
<b>Contains</b>	<p>Fatty acids, C18 unsat, dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine, 1,3- Cyclohexanedimethanamine, 3-AMINOPROPYLTRIETHOXYSILANE</p>

### 2.3. Other hazards

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

##### 3.2. Mixtures

<b>Fatty acids, C18 unsat, dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine</b>	<b>60-100%</b>
CAS number: 68082-29-1	
<b>Classification</b>	
Skin Irrit. 2 - H315	
Eye Dam. 1 - H318	
Skin Sens. 1 - H317	
Aquatic Chronic 2 - H411	
<b>1,3- Cyclohexanedimethanamine</b>	<b>10-30%</b>
CAS number: 2579-20-6                      EC number: 219-941-5	
<b>Classification</b>	
Acute Tox. 4 - H302	
Acute Tox. 4 - H312	
Skin Corr. 1B - H314	
Eye Dam. 1 - H318	
Aquatic Chronic 3 - H412	
<b>3-AMINOPROPYLTRIETHOXYSILANE</b>	<b>1-5%</b>
CAS number: 919-30-2                      EC number: 213-048-4	
<b>Classification</b>	
Acute Tox. 4 - H302	
Skin Corr. 1B - H314	
Eye Dam. 1 - H318	
Skin Sens. 1 - H317	

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

#### SECTION 4: First aid measures

##### 4.1. Description of first aid measures

<b>Inhalation</b>	<p>Remove affected person from source of contamination. If breathing stops, provide artificial respiration. Keep affected person warm and at rest. Get medical attention immediately.</p>
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<b>Ingestion</b>	DO NOT induce vomiting. Get medical attention immediately. Rinse mouth thoroughly with water. Give plenty of water to drink.
<b>Skin contact</b>	Remove affected person from source of contamination. Remove contaminated clothing. Continue to rinse for at least 15 minutes. Get medical attention. Wash skin thoroughly with soap and water. Get medical attention promptly if symptoms occur after washing.
<b>Eye contact</b>	Remove affected person from source of contamination. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention.

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

<b>General information</b>	Get medical attention immediately.
<b>Inhalation</b>	Gas or vapour may irritate the respiratory system.
<b>Ingestion</b>	Ingestion may cause severe irritation of the mouth, the oesophagus and the gastrointestinal tract.
<b>Skin contact</b>	Causes severe burns.
<b>Eye contact</b>	Causes serious eye damage.

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

<b>Notes for the doctor</b>	Treat symptomatically.
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## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

<b>Suitable extinguishing media</b>	Extinguish with alcohol-resistant foam, carbon dioxide or dry powder.
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### 5.2. Special hazards arising from the substance or mixture

<b>Specific hazards</b>	In case of fire, toxic and corrosive gases may be formed. Thermal decomposition or combustion products may include the following substances: Toxic gases or vapours.
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### 5.3. Advice for firefighters

<b>Special protective equipment for firefighters</b>	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.
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## 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.
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### 6.2. Environmental precautions

<b>Environmental precautions</b>	Avoid or minimise the creation of any environmental contamination.
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### 6.3. Methods and material for containment and cleaning up

<b>Methods for cleaning up</b>	Do not touch or walk into spilled material. 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.
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### 6.4. Reference to other sections

<b>Reference to other sections</b>	For personal protection, see Section 8.
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## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

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**Usage precautions** Avoid spilling. Avoid contact with skin and eyes.

### 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.

**Storage class** Corrosive storage.

### 7.3. Specific end use(s)

## SECTION 8: Exposure controls/Personal protection

### 8.1. Control parameters

#### Occupational exposure limits

The product does not contain any relevant quantities of materials with critical values that have to be monitored in the workplace.

**Ingredient comments** WEL = Workplace Exposure Limits

### 8.2. Exposure controls

#### Protective equipment



#### **Appropriate engineering controls**

Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients.

#### **Personal protection**

The following recommendations are made based on information available for the major chemical component.

#### **Eye/face protection**

The following protection should be worn: Chemical splash goggles.

#### **Hand protection**

Use protective gloves. Nitrile rubber. Protective gloves should have a minimum thickness of 0.5 mm.

#### **Other skin and body protection**

Wear appropriate clothing to prevent any possibility of skin contact.

#### **Hygiene measures**

Provide eyewash station and safety shower. Do not smoke in work area. Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

#### **Respiratory protection**

If ventilation is inadequate, suitable respiratory protection must be worn. Combination filter, type A2/P2.

## SECTION 9: Physical and chemical properties

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

<b>Appearance</b>	Coloured liquid.
<b>Colour</b>	Amber.
<b>Odour</b>	Amine.
<b>Flash point</b>	> 100°C (Non Flammable)
<b>Solubility(ies)</b>	Not miscible or difficult to mix.
<b>Viscosity</b>	202 mPa s @ 25°C

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### 9.2. Other information

Other information Not available.

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Reactivity No further information available.

#### 10.2. Chemical stability

Stability Stable at normal ambient temperatures.

#### 10.3. Possibility of hazardous reactions

Possibility of hazardous reactions No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

Conditions to avoid Avoid excessive heat for prolonged periods of time.

#### 10.5. Incompatible materials

Materials to avoid Strong oxidising agents. Alkali metals. Zinc, Nitrates, Peroxide.

#### 10.6. Hazardous decomposition products

Hazardous decomposition products Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of carbon. Oxides of nitrogen.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

##### Acute toxicity - oral

ATE oral (mg/kg) 4,434.16

##### Acute toxicity - dermal

ATE dermal (mg/kg) 11,333.33

##### Skin corrosion/irritation

Skin corrosion/irritation Causes severe burns.

##### Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye damage.

##### Respiratory sensitisation

Respiratory sensitisation May cause sensitisation or allergic reactions in sensitive individuals.

##### Skin sensitisation

Skin sensitisation May cause an allergic skin reaction.

##### Germ cell mutagenicity

Summary Based on available data, the classification criteria are not met.

##### Carcinogenicity

Summary Based on available data, the classification criteria are not met.

##### Reproductive toxicity

Summary Based on available data, the classification criteria are not met.

##### Specific target organ toxicity - single exposure

Summary Based on available data, the classification criteria are not met.

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### Specific target organ toxicity - repeated exposure

**Summary** Based on available data, the classification criteria are not met.

### Aspiration hazard

**Summary** Based on available data, the classification criteria are not met.

**Inhalation** Vapour may irritate respiratory system/lungs.

**Ingestion** Ingestion may cause severe irritation of the mouth, the oesophagus and the gastrointestinal tract.

**Skin contact** May cause skin irritation/eczema.

**Eye contact** Causes burns.

### Toxicological information on ingredients.

#### Fatty acids, C18 unsat, dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine

##### Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub> 2,000.0 mg/kg)

Species Rat

##### Acute toxicity - dermal

Acute toxicity dermal (LD<sub>50</sub> 2,000.0 mg/kg)

Species Rat

#### 1,3- Cyclohexanedimethanamine

##### Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub> 700.0 mg/kg)

Species Rat

ATE oral (mg/kg) 700.0

##### Acute toxicity - dermal

Acute toxicity dermal (LD<sub>50</sub> 1,700.0 mg/kg)

Species Rabbit

ATE dermal (mg/kg) 1,700.0

#### 3-AMINOPROPYLTRIETHOXYSILANE

##### Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub> 1,780.0 mg/kg)

Species Rat

ATE oral (mg/kg) 1,780.0

##### Acute toxicity - dermal

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Acute toxicity dermal (LD<sub>50</sub> 4,290.0 mg/kg)

Species Rabbit

ATE dermal (mg/kg) 4,290.0

### SECTION 12: Ecological information

**Ecotoxicity** No data on possible environmental effects have been found.

#### 12.1. Toxicity

##### Acute aquatic toxicity

**Acute toxicity - fish** LC<sub>50</sub>, 96 hour: 7.07 mg/l, Fish

**Acute toxicity - aquatic plants** LC<sub>50</sub>, 72 hour: 1.25 mg/l, Algae

##### Ecological information on ingredients.

###### Fatty acids, C18 unsat, dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine

##### Acute aquatic toxicity

**Acute toxicity - fish** LC<sub>50</sub>, 96 hour: 7.07 mg/l, Fish

**Acute toxicity - aquatic plants** LC<sub>50</sub>, 72 hour: 1.25 mg/l, Algae

#### 12.2. Persistence and degradability

**Persistence and degradability** No further relevant information available.

##### Ecological information on ingredients.

###### Fatty acids, C18 unsat, dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine

**Persistence and degradability** No further relevant information available.

#### 12.3. Bioaccumulative potential

**Bioaccumulative potential** No further relevant information available.

##### Ecological information on ingredients.

###### Fatty acids, C18 unsat, dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine

**Bioaccumulative potential** No further relevant information available.

#### 12.4. Mobility in soil

**Mobility** No further information available.

##### Ecological information on ingredients.

###### Fatty acids, C18 unsat, dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine

**Mobility** No data available.

#### 12.5. Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

##### Ecological information on ingredients.

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### Fatty acids, C18 unsat, dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

#### 12.6. Other adverse effects

**Other adverse effects** Not known.

#### Ecological information on ingredients.

### Fatty acids, C18 unsat, dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine

**Other adverse effects** Not available.

### 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.

**Waste class** 08 00 00 wastes from the manufacture, formulation, supply and use (MFSU) of coatings (peaints, varnishes. and vitreous enamels), adhesives, sealants and printing inks. 08 02 00 Wastes from MFSU of other coatings (including ceramic materials). 08 02 99 Wastes not otherwise specified.

### SECTION 14: Transport information

#### 14.1. UN number

**UN No. (ADR/RID)** 2735

**UN No. (IMDG)** 2735

**UN No. (ICAO)** 2735

**UN No. (ADN)** 2735

#### 14.2. UN proper shipping name

**Proper shipping name (ADR/RID)** AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS 1,3- Cyclohexanedimethanamine, Fatty acids, C18 unsat, dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine)

**Proper shipping name (IMDG)** AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS 1,3- Cyclohexanedimethanamine, Fatty acids, C18 unsat, dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine)

**Proper shipping name (ICAO)** AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS 1,3- Cyclohexanedimethanamine, Fatty acids, C18 unsat, dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine)

**Proper shipping name (ADN)** AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS 1,3- Cyclohexanedimethanamine, Fatty acids, C18 unsat, dimers, oligomeric reaction products with tall-oil fatty acids and triethylenetetramine)

#### 14.3. Transport hazard class(es)

**ADR/RID class** 8

**ADR/RID classification code** C7

**ADR/RID label** 8

**IMDG class** 8

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ICAO class/division 8

ADN class 8

### Transport labels



### 14.4. Packing group

ADR/RID packing group II

IMDG packing group II

ICAO packing group II

ADN packing group II

### 14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



### 14.6. Special precautions for user

IMDG Code segregation group 18. Alkalis

EmS F-A, S-B

ADR transport category 2

Emergency Action Code 2X

Hazard Identification Number (ADR/RID) 80

Tunnel restriction code (E)

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

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

## SECTION 15: Regulatory information

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

**Guidance** Workplace Exposure Limits EH40.  
CHIP for everyone HSG228.  
Approved Classification and Labelling Guide (Sixth edition) L131.  
Safety Data Sheets for Substances and Preparations.

### 15.2. Chemical safety assessment

## SECTION 16: Other information

Revision comments 1

Issued by Head of R+D

## Ardex EG 18 Hardener

<b>Revision date</b>	20/12/2021
<b>SDS number</b>	20660
<b>Hazard statements in full</b>	H302 Harmful if swallowed. H312 Harmful in contact with skin. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.