

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

1.1. Product identifier

Product name ARDEX DPM 1 C R Part B

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

**Identified uses**Two part epoxy damp proof membrane

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 Acute Tox. 4 - H332 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Repr. 2 -

H361 STOT SE 3 - H335

**Environmental hazards** Aquatic Chronic 2 - H411

2.2. Label elements

**Pictogram** 









Signal word

Hazard statements H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H361 Suspected of damaging fertility or the unborn child.

H411 Toxic to aquatic life with long lasting effects.

#### ARDEX DPM 1 C R Part B

**Precautionary statements** P102 Keep out of reach of children.

P260 Do not breathe vapour/ spray.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water or shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER/ doctor.

P405 Store locked up.

P501 Dispose of contents/ container in accordance with national regulations.

Contains 4-TERT-BUTYLPHENOL, M-PHENYLENEBIS(METHYLAMINE), Polymer, trimethylhexane-

1,6-diamine, Phenol, styrenated, Fatty acids, C18 unsat, dimers, oligomeric reaction products

with tall-oil fatty acids and triethylenetetramine, BENZYL ALCOHOL, 2,4,6-

TRIS(DIMETHYLAMINOMETHYL)PHENOL, 3-AMINOPROPYLDIMETHYLAMINE

Supplementary precautionary statements

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P261 Avoid breathing vapour/ spray.

P264 Wash contaminated skin thoroughly after handling. P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P302+P352 IF ON SKIN: Wash with plenty of water.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P308+P313 IF exposed or concerned: Get medical advice/ attention.

P312 Call a POISON CENTRE/doctor if you feel unwell. P321 Specific treatment (see medical advice on this label).

P333+P313 If skin irritation or rash occurs: Get medical advice/ attention. P362+P364 Take off contaminated clothing and wash it before reuse.

P363 Wash contaminated clothing before reuse.

P391 Collect spillage.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

#### 2.3. Other hazards

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

#### 3.2. Mixtures

4-TERT-BUTYLPHENOL 30-60%

CAS number: 98-54-4 EC number: 202-679-0

M factor (Chronic) = 1

Classification

Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Repr. 2 - H361

Aquatic Chronic 1 - H410

# ARDEX DPM 1 C R Part B

Polymer 10-30%

CAS number: —

Classification

Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Aquatic Chronic 3 - H412

# M-PHENYLENEBIS(METHYLAMINE)

10-30%

CAS number: 1477-55-0 EC number: 216-032-5

Classification

Acute Tox. 4 - H302 Acute Tox. 4 - H332 Skin Corr. 1B - H314 Skin Sens. 1 - H317 Aquatic Chronic 3 - H412

# trimethylhexane-1,6-diamine

5-10%

CAS number: 25513-64-8

Classification

Acute Tox. 4 - H302 Skin Corr. 1B - H314 Skin Sens. 1 - H317 Aquatic Chronic 3 - H412

Phenol, styrenated

5-10%

CAS number: 61788-44-1

Classification

Skin Irrit. 2 - H315 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411

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

1-5%

CAS number: 68082-29-1

Classification

Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411

#### ARDEX DPM 1 C R Part B

BENZYL ALCOHOL 1-5%

CAS number: 100-51-6 EC number: 202-859-9

Classification

Acute Tox. 4 - H302 Acute Tox. 4 - H332 Eye Irrit. 2 - H319

# 2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL

<1%

CAS number: 90-72-2 EC number: 202-013-9

Classification

Skin Corr. 1B - H314 Skin Sens. 1 - H317 Aquatic Chronic 3 - H412

# **3-AMINOPROPYLDIMETHYLAMINE**

<1%

CAS number: 109-55-7 EC number: 203-680-9

Classification

Flam. Liq. 3 - H226 Acute Tox. 4 - H302 Acute Tox. 4 - H312 Skin Corr. 1B - H314 Skin Sens. 1 - H317 STOT SE 3 - H335

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

# SECTION 4: First aid measures

### 4.1. Description of first aid measures

**Inhalation** Remove affected person from source of contamination. If breathing stops, provide artificial

respiration. Keep affected person warm and at rest. Get medical attention immediately.

Ingestion DO NOT induce vomiting. Get medical attention immediately. Rinse mouth thoroughly with

water. Give plenty of water to drink.

**Skin contact** 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.

**Eye contact** 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

General information Get medical attention promptly if symptoms occur after washing.

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

Notes for the doctor No specific recommendations. If in doubt, get medical attention promptly.

# **SECTION 5: Firefighting measures**

## 5.1. Extinguishing media

#### ARDEX DPM 1 C R Part B

Suitable extinguishing media Extinguish with alcohol-resistant foam, carbon dioxide or dry powder.

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

Specific hazards 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.

Hazardous combustion

products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or

vapours. Oxides of carbon. Oxides of nitrogen.

#### 5.3. Advice for firefighters

Protective actions during

firefighting

Avoid breathing fire gases or vapours.

Special protective equipment for firefighters

Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective

clothing.

#### SECTION 6: Accidental release measures

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

Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet.

#### 6.2. Environmental precautions

**Environmental precautions** Avoid or minimise the creation of any environmental contamination.

# 6.3. Methods and material for containment and cleaning up

Methods for cleaning up 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.

#### 6.4. Reference to other sections

**Reference to other sections** For personal protection, see Section 8.

# SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

**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)

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

# M-PHENYLENEBIS(METHYLAMINE) (CAS: 1477-55-0)

PNEC Fresh water; 0.94 mg/l

Marine water; 0.0094 mg/l

BENZYL ALCOHOL (CAS: 100-51-6)

#### ARDEX DPM 1 C R Part B

**DNEL** Workers - Dermal; Long term : 9.5 mg/kg/day

Workers - Inhalation; Long term: 90 mg/m3

PNEC Fresh water; 1 mg/l

Marine water; 0.1 mg/l

# 2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL (CAS: 90-72-2)

**DNEL** Workers - Inhalation; Short term: 0.31 mg/m<sup>3</sup>

PNEC Fresh water; 0.84 mg/l

,

# 3-AMINOPROPYLDIMETHYLAMINE (CAS: 109-55-7)

**DNEL** Workers - Inhalation; Short term : 9.8 mg/m<sup>3</sup>

PNEC Fresh water; 0.0535 mg/l

Marine water; 0.00535 mg/l

#### 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.

**Eye/face protection** The following protection should be worn: Chemical splash goggles.

**Hand protection**Use protective gloves. It is recommended that gloves are made of the following material: Viton

rubber (fluoro rubber). Nitrile rubber. Considering the data specified by the glove

manufacturer, check during use that the gloves are retaining their protective properties and

change them as soon as any deterioration is detected.

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

Appearance Liquid.

Colour Yellowish.

Odour Amine.

Melting point Not determined.

Initial boiling point and range ca. 135°C

Flash point ca. 86°C

#### ARDEX DPM 1 C R Part B

0.3 hPa @ °C Vapour pressure

Solubility(ies) Not miscible or difficult to mix

380°C Auto-ignition temperature

Viscosity 600 mPa s @ 20°C

**Explosive properties** Not considered to be explosive.

9.2. Other information

Other information No information required.

## SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability No decomposition if used according to specifications.

# 10.3. Possibility of hazardous reactions

Possibility of hazardous

reactions

No potentially hazardous reactions known.

10.4. Conditions to avoid

Conditions to avoid No further relevant information available.

10.5. Incompatible materials

Materials to avoid Strong oxidising agents.

#### 10.6. Hazardous decomposition products

Hazardous decomposition

Poisonous gases/vapours Corrosive gases/vapours

products

# SECTION 11: Toxicological information

# 11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 2,730.88

Acute toxicity - inhalation

ATE inhalation (gases ppm) 257,142.86

ATE inhalation (vapours mg/l) 11.99

ATE inhalation (dusts/mists 85.71

mg/l)

# Toxicological information on ingredients.

#### 4-TERT-BUTYLPHENOL

Acute toxicity - oral

Acute toxicity oral (LD₅o 2,951.0

mg/kg)

**Species** Rat

Acute toxicity - dermal

# ARDEX DPM 1 C R Part B

Acute toxicity dermal (LD<sub>50</sub> 2,288.0

mg/kg)

Species Rabbit

M-PHENYLENEBIS(METHYLAMINE)

Acute toxicity - oral

Acute toxicity oral (LD₅o

930.0

mg/kg)

Species Rat

**ATE oral (mg/kg)** 930.0

Acute toxicity - dermal

Acute toxicity dermal (LD<sub>50</sub> 3,100.0

mg/kg)

**Species** 

•

Notes (dermal LD50)

**BENZYL ALCOHOL** 

Acute toxicity - oral

Acute toxicity oral (LD50

1,040.0

Rabbit

mg/kg)

**Species** Mouse

**ATE oral (mg/kg)** 1,040.0

Acute toxicity - dermal

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

mg/kg)

Species Rabbit

2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL

Acute toxicity - oral

Acute toxicity oral (LD50

2,169.0

mg/kg)

Species Rat

**ATE oral (mg/kg)** 2,169.0

3-AMINOPROPYLDIMETHYLAMINE

Acute toxicity - oral

Acute toxicity oral (LD50

410.0

mg/kg)

Species Rat

**ATE oral (mg/kg)** 410.0

Acute toxicity - dermal

#### ARDEX DPM 1 C R Part B

Acute toxicity dermal (LD<sub>50</sub> 1,200.0

mg/kg)

Species Rat

ATE dermal (mg/kg) 1,200.0

Acute toxicity - inhalation

Acute toxicity inhalation

(LC50 vapours mg/l)

24.8

Species Rat

ATE inhalation (vapours

mg/l)

24.8

#### SECTION 12: Ecological Information

#### 12.1. Toxicity

Ecological information on ingredients.

# 4-TERT-BUTYLPHENOL

Acute aquatic toxicity

Acute toxicity - fish LC<sub>50</sub>, 96 hours: >5.1 mg/l, Pimephales promelas (Fat-head Minnow)

LC<sub>50</sub>, 96 hours: >1 mg/l, Oncorhynchus mykiss (Rainbow trout)

LC<sub>50</sub>, 48 hours: 1.5 mg/l, Leuciscus idus (Golden orfe)

Acute toxicity - aquatic

invertebrates

EC<sub>50</sub>, 48 hours: 4.8 mg/l, Daphnia magna

Acute toxicity - aquatic

plants

EC<sub>50</sub>, 72 hours: <100 mg/l, Selenastrum capricornutum EC<sub>50</sub>, 72 hours: 14 mg/l, Pseudokirchneriella subcapitata

Acute toxicity -

microorganisms

EC<sub>50</sub>, 3 hours: 10 mg/l, Activated sludge

Chronic aquatic toxicity

**NOEC** 0.01 < NOEC ≤ 0.1

**Degradability** Non-rapidly degradable

M factor (Chronic) 1

#### M-PHENYLENEBIS (METHYLAMINE)

Acute aquatic toxicity

Acute toxicity - fish LC50, 96 hours: 87.6 mg/l, Oryzias latipes (Red killifish)

 $LC_{50}$ , 96 hours: >100 mg/l, Oncorhynchus mykiss (Rainbow trout)

LC<sub>50</sub>, 96 hours: >100 mg/l, Brachydanio rerio (Zebra Fish)

Acute toxicity - aquatic

invertebrates

EC₅o, 48 hours: 15.2 mg/l, Daphnia magna

Acute toxicity - aquatic

plants

EC<sub>80</sub>, 72 hours: 20.3 mg/l, Selenastrum capricornutum

trimethylhexane-1,6-diamine

Acute aquatic toxicity

#### ARDEX DPM 1 C R Part B

Acute toxicity - fish LC<sub>50</sub>, 48 hours: 174 mg/l, Leuciscus idus (Golden orfe)

Acute toxicity - aquatic

invertebrates

EC<sub>50</sub>, 24 hours: 31.5 mg/l, Daphnia magna

Acute toxicity - aquatic

plants

EC<sub>50</sub>, 72 hours: 29.5 mg/l, Scenedesmus subspicatus

Phenol, styrenated

Acute aquatic toxicity

Acute toxicity - fish LL<sub>50</sub>, 96 hours: 14.8 mg/l, Fish

**BENZYL ALCOHOL** 

Acute aquatic toxicity

Acute toxicity - fish LC50, 96 hours: 10 mg/l, Lepomis macrochirus (Bluegill)

Acute toxicity - aquatic

invertebrates

EC<sub>50</sub>, 24 hours: 400 mg/l, Daphnia magna

2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 24 hours: 222 mg/l, Oncorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic

plants

LC<sub>50</sub>, 72 hours: 84 mg/l, Scenedesmus subspicatus

3-AMINOPROPYLDIMETHYLAMINE

Acute aquatic toxicity

Acute toxicity - fish LC<sub>80</sub>, 96 hours: 122 mg/l, Leuciscus idus (Golden orfe)

Acute toxicity - aquatic

invertebrates

EC<sub>50</sub>, 48 hours: 59.5 mg/l, Daphnia magna

Acute toxicity - aquatic

plants

LC₅o, 72 hours: 53.5 mg/l, Scenedesmus subspicatus

12.2. Persistence and degradability

12.3. Bioaccumulative potential

12.4. Mobility in soil

12.5. Results of PBT and vPvB assessment

12.6. Other adverse effects

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.

**SECTION 14: Transport information** 

14.1. UN number

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

#### ARDEX DPM 1 C R Part B

UN No. (ICAO) 2735 UN No. (ADN) 2735

#### 14.2. UN proper shipping name

Proper shipping name AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS M-PHENYLENEBIS(METHYLAMINE),

(ADR/RID) 4-TERT-BUTYLPHENOL)

Proper shipping name (IMDG) AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS M-PHENYLENEBIS(METHYLAMINE),

4-TERT-BUTYLPHENOL, Phenol, styrenated, 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 M-PHENYLENEBIS(METHYLAMINE),

4-TERT-BUTYLPHENOL)

Proper shipping name (ADN) AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS M-PHENYLENEBIS(METHYLAMINE),

4-TERT-BUTYLPHENOL)

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

ADR/RID class 8

ADR/RID classification code C7

ADR/RID label 8

IMDG class 8

ICAO class/division 8

ADN class 8

# Transport labels



#### 14.4. Packing group

ADR/RID packing group II

IMDG packing group

ADN packing group

ICAO packing group

# 14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



# 14.6. Special precautions for user

IMDG Code segregation 18. Alkalis

group

**EmS** F-A, S-B

ADR transport category 2

Emergency Action Code 2X

#### ARDEX DPM 1 C R Part B

Hazard Identification Number 80

(ADR/RID)

Tunnel restriction code (E)

#### 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

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

**EU legislation** 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).

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).

Commission Regulation (EU) No 2015/830 of 28 May 2015.

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

#### SECTION 16: Other information

Revision comments 1

**Issued by** Research and Development Manager

Revision date 10/05/2018

SDS number 20393

Hazard statements in full H226 Flammable liquid and vapour.

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. H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H361 Suspected of damaging fertility or the unborn child.

H361 Suspected of damaging fertility or the unborn child by inhalation.

H410 Very toxic to aquatic life with long lasting effects. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.