



## SAFETY DATA SHEET QUARTAMIN AB

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

#### 1.1. Product identifier

Product name                      QUARTAMIN AB

Product number                  14670

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

Identified uses                      Surfactant Cosmetics Personal Care Hair and skin care products

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

Supplier                              Univar  
                                          Aquarius House  
                                          6 Mid Point Business Park  
                                          Bradford  
                                          BD3 7AY  
                                          +44 1274 267300  
                                          +44 1274 267306  
                                          sds@univar.com

#### 1.4. Emergency telephone number

Emergency telephone              SGS - +32 (0)3 575 55 55 (24h)

Sds No.                                14670

### 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 STOT RE 2 - H373

Environmental hazards              Aquatic Acute 1 - H400 Aquatic Chronic 2 - H411

#### 2.2. Label elements

##### Pictogram



Signal word                              Danger

Hazard statements                      H315 Causes skin irritation.  
                                          H318 Causes serious eye damage.  
                                          H373 May cause damage to organs through prolonged or repeated exposure.  
                                          H400 Very toxic to aquatic life.  
                                          H411 Toxic to aquatic life with long lasting effects.

## QUARTAMIN AB

**Precautionary statements**

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
P260 Do not breathe dust.  
P273 Avoid release to the environment.  
P314 Get medical advice/ attention if you feel unwell.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P501 Dispose of contents/ container in accordance with local regulations.

**Contains** QUATERNARY AMMONIUM COMPOUNDS, C20-22-ALKYLTRIMETHYL, CHLORIDES

### 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>QUATERNARY AMMONIUM COMPOUNDS, C20-22-ALKYLTRIMETHYL, CHLORIDES</b>                                                                       |                      | <b>25 - 100%</b>                                 |
| CAS number: 68607-24-9                                                                                                                       | EC number: 271-756-9 | REACH registration number: 01-2119484817-22-XXXX |
| M factor (Acute) = 1                                                                                                                         |                      |                                                  |
| <b>Classification</b><br>Skin Irrit. 2 - H315<br>Eye Dam. 1 - H318<br>STOT RE 2 - H373<br>Aquatic Acute 1 - H400<br>Aquatic Chronic 2 - H411 |                      |                                                  |
| <b>PROPAN-2-OL</b>                                                                                                                           |                      | <b>10 - 20%</b>                                  |
| CAS number: 67-63-0                                                                                                                          | EC number: 200-661-7 | REACH registration number: 01-2119457558-25-XXXX |
| <b>Classification</b><br>Flam. Liq. 2 - H225<br>Eye Irrit. 2 - H319<br>STOT SE 3 - H336                                                      |                      |                                                  |

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

**Composition comments** The data shown are in accordance with the latest EC Directives.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

**Inhalation**

Get medical attention immediately. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. If it is suspected that volatile contaminants are still present around the affected person, first aid personnel should wear an appropriate respirator or self-contained breathing apparatus. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. It may be dangerous for first aid personnel to carry out mouth-to-mouth resuscitation. Place unconscious person on their side in the recovery position and ensure breathing can take place. Maintain an open airway. Loosen tight clothing such as collar, tie or belt.

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|                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Ingestion</b>                  | Get medical attention immediately. Rinse mouth thoroughly with water. Remove any dentures. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Give a few small glasses of water or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Do not induce vomiting unless under the direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated by a physician. Never give anything by mouth to an unconscious person. Place unconscious person on their side in the recovery position and ensure breathing can take place. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. |
| <b>Skin contact</b>               | Get medical attention immediately. Wash skin thoroughly with soap and water. Wash contaminated clothing thoroughly with water before removing it from the affected person, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated by a physician. Wash clothing and clean shoes thoroughly before reuse.                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Eye contact</b>                | Get medical attention immediately. Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Chemical burns must be treated by a physician.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Protection of first aiders</b> | No action shall be taken without appropriate training or involving any personal risk. If it is suspected that airborne contaminants are still present around the affected person, first aid personnel should wear an appropriate respirator or self-contained breathing apparatus. It may be dangerous for first aid personnel to carry out mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it from the affected person, or wear gloves.                                                                                                                                                                                                                                                                                         |

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

|                            |                                                                                                                                  |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| <b>General information</b> | May cause damage to organs (Gastro-intestinal tract) through prolonged or repeated exposure.                                     |
| <b>Ingestion</b>           | Overexposure may cause the following adverse effects: Stomach pain.                                                              |
| <b>Skin contact</b>        | Causes skin irritation. Overexposure may cause the following adverse effects: Pain or irritation. Redness. Blistering may occur. |
| <b>Eye contact</b>         | Causes serious eye damage. Overexposure may cause the following adverse effects: Pain. Profuse watering of the eyes. Redness.    |

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

|                             |                                                                                                                          |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------|
| <b>Notes for the doctor</b> | Treat symptomatically. Contact specialist immediately poison treatment if large quantities have been ingested or inhaled |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------|

## **SECTION 5: Firefighting measures**

### **5.1. Extinguishing media**

|                                       |                                                                        |
|---------------------------------------|------------------------------------------------------------------------|
| <b>Suitable extinguishing media</b>   | Use fire-extinguishing media suitable for the surrounding fire.        |
| <b>Unsuitable extinguishing media</b> | Do not use water jet as an extinguisher, as this will spread the fire. |

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

|                                      |                                                                                                                                                                                                                    |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Specific hazards</b>              | Very toxic to aquatic life. Toxic to aquatic life with long lasting effects. Fire-water run-off in sewers may create fire or explosion hazard. When heated and in case of fire, toxic vapours/gases may be formed. |
| <b>Hazardous combustion products</b> | Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of the following substances: Carbon.                                                                       |

### **5.3. Advice for firefighters**

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|                                                      |                                                                                                       |
|------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| <b>Protective actions during firefighting</b>        | No action shall be taken without appropriate training or involving any personal risk. Evacuate area.  |
| <b>Special protective equipment for firefighters</b> | 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

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Personal precautions</b> | No action shall be taken without appropriate training or involving any personal risk. Evacuate area. Keep unnecessary and unprotected personnel away from the spillage. Do not touch or walk into spilled material. Provide adequate ventilation. If ventilation is inadequate, suitable respiratory protection must be worn. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

#### 6.2. Environmental precautions

|                                  |                                                                                                                                                                                                                                                                                                     |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Environmental precautions</b> | Very toxic to aquatic life. Toxic to aquatic life with long lasting effects. Do not discharge into drains or watercourses or onto the ground. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body. |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Methods for cleaning up</b> | Move containers from spillage area. Approach the spillage from upwind. Avoid generation and spreading of dust. Remove spillage with vacuum cleaner or collect with a shovel and broom, or similar. 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. Avoid the spillage or runoff entering drains, sewers or watercourses. |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

#### 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. Collect and dispose of spillage as indicated in Section 13. |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

|                                               |                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Usage precautions</b>                      | Wear protective clothing as described in Section 8 of this safety data sheet. Avoid contact with skin, eyes and clothing. Avoid release to the environment. If ventilation is inadequate, suitable respiratory protection must be worn. Container must be kept tightly closed when not in use. Product residues retained in emptied containers can be hazardous. Do not reuse empty containers. |
| <b>Advice on general occupational hygiene</b> | Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Remove contaminated clothing and protective equipment before entering eating areas.                                                                                                                                                                     |

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

|                            |                                                                                                                                                                                                                                                                                                                          |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Storage precautions</b> | Store in tightly-closed, original container in a dry, cool and well-ventilated place. Avoid exposure to high temperatures or direct sunlight. Store away from incompatible materials (see Section 10). Keep away from food and drink. Store locked up. Store away from the following materials: Strong oxidising agents. |
| <b>Storage class</b>       | Flammable liquid storage.                                                                                                                                                                                                                                                                                                |

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

|                            |                                                                   |
|----------------------------|-------------------------------------------------------------------|
| <b>Specific end use(s)</b> | The identified uses for this product are detailed in Section 1.2. |
|----------------------------|-------------------------------------------------------------------|

### SECTION 8: Exposure Controls/personal protection

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### 8.1. Control parameters

#### Occupational exposure limits

##### PROPAN-2-OL

Long-term exposure limit (8-hour TWA): WEL 400 ppm 999 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): WEL 500 ppm 1250 mg/m<sup>3</sup>

WEL = Workplace Exposure Limit

#### Ingredient comments

WEL = Workplace Exposure Limits

#### QUATERNARY AMMONIUM COMPOUNDS, C20-22-ALKYLTRIMETHYL, CHLORIDES (CAS: 68607-24-9)

**DNEL** Workers - Inhalation; Long term systemic effects: 0.49 mg/m<sup>3</sup>  
Workers - Dermal; Long term systemic effects: 1.7 mg/kg/day

**PNEC**

- Fresh water; 0.013 mg/l
- STP; 0.43 mg/l
- Marine water; 0.0013 mg/l
- Sediment (Freshwater); 1.25 mg/kg
- Sediment (Marinewater); 125 mg/kg
- Soil; 1 mg/kg
- Intermittent release; 0.014 mg/l

#### PROPAN-2-OL (CAS: 67-63-0)

**DNEL** Industry - Dermal; Long term systemic effects: 888 mg/kg/day  
Industry - Inhalation; Long term systemic effects: 500 mg/m<sup>3</sup>  
Consumer - Dermal; Long term systemic effects: 319 mg/kg/day  
Consumer - Inhalation; Long term systemic effects: 89 mg/m<sup>3</sup>  
Consumer - Oral; Long term systemic effects: 26 mg/kg/day

**PNEC**

- Fresh water; 140.9 mg/l
- Marine water; 140.9 mg/l
- Intermittent release; 140.9 mg/l
- STP; 2251 mg/l
- Sediment (Freshwater); 552 mg/kg
- Sediment (Marinewater); 552 mg/kg
- Soil; 28 mg/kg

### 8.2. Exposure controls

#### Protective equipment



#### Appropriate engineering controls

Provide adequate ventilation. Use mechanical ventilation if there is a risk of handling causing formation of airborne dust. Use process enclosures, local exhaust ventilation or other engineering controls as the primary means to minimise worker exposure.

#### Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Wear chemical splash goggles. Personal protective equipment for eye and face protection should comply with European Standard EN166.

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|                                        |                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Hand protection</b>                 | 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. The selected gloves should have a breakthrough time of at least 8 hours. Nitrile rubber. To protect hands from chemicals, gloves should comply with European Standard EN374.                     |
| <b>Other skin and body protection</b>  | Wear appropriate clothing to prevent skin contamination.                                                                                                                                                                                                                                                                                                                       |
| <b>Hygiene measures</b>                | Wash at the end of each work shift and before eating, smoking and using the toilet. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Care should be taken to avoid contact with contaminants when removing contaminated clothing. Wash contaminated clothing before reuse. Provide eyewash station and safety shower. |
| <b>Respiratory protection</b>          | Ensure all respiratory protective equipment is suitable for its intended use and is 'CE'-marked. If ventilation is inadequate, suitable respiratory protection must be worn. EN 136/140/141/145/143/149                                                                                                                                                                        |
| <b>Environmental exposure controls</b> | Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.                                                           |

### SECTION 9: Physical and Chemical Properties

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

|                                                     |                                                       |
|-----------------------------------------------------|-------------------------------------------------------|
| <b>Appearance</b>                                   | Solid                                                 |
| <b>Colour</b>                                       | White.                                                |
| <b>Odour</b>                                        | Alcoholic.                                            |
| <b>Odour threshold</b>                              | No information available.                             |
| <b>pH</b>                                           | pH (diluted solution): 5 - 7.5 (5% w/w IPA:H2O 50:50) |
| <b>Melting point</b>                                | 55 - 65°C                                             |
| <b>Initial boiling point and range</b>              | 82°C                                                  |
| <b>Flash point</b>                                  | No information available.                             |
| <b>Evaporation rate</b>                             | No information available.                             |
| <b>Evaporation factor</b>                           | No information available.                             |
| <b>Flammability (solid, gas)</b>                    | No information available.                             |
| <b>Upper/lower flammability or explosive limits</b> | No information available.                             |
| <b>Other flammability</b>                           | No information available.                             |
| <b>Vapour pressure</b>                              | No information available.                             |
| <b>Vapour density</b>                               | No information available.                             |
| <b>Relative density</b>                             | 0.6 @ 60°C                                            |
| <b>Bulk density</b>                                 | No information available.                             |
| <b>Solubility(ies)</b>                              | Insoluble in water.                                   |
| <b>Partition coefficient</b>                        | No information available.                             |

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**Auto-ignition temperature** No information available.

**Decomposition Temperature** No information available.

**Viscosity** No information available.

**Explosive properties** No information available.

**Explosive under the influence of a flame** No information available.

**Oxidising properties** No information available.

### 9.2. Other information

**Refractive index** No information available.

**Particle size** No information available.

**Molecular weight** No information available.

**Volatility** No information available.

**Saturation concentration** No information available.

**Critical temperature** No information available.

**Volatile organic compound** This product contains a maximum VOC content of 20 %.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

**Reactivity** No test data specifically related to reactivity available for this product or its ingredients.

### 10.2. Chemical stability

**Stability** Stable at normal ambient temperatures and when used as recommended.

### 10.3. Possibility of hazardous reactions

**Possibility of hazardous reactions** Under normal conditions of storage and use, no hazardous reactions will occur.

### 10.4. Conditions to avoid

**Conditions to avoid** Avoid heat, flames and other sources of ignition. Static electricity and formation of sparks must be prevented.

### 10.5. Incompatible materials

**Materials to avoid** Avoid contact with strong oxidising agents.

### 10.6. Hazardous decomposition products

**Hazardous decomposition products** Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of the following substances: Carbon.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity - oral

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

**Species** Rat

**Notes (oral LD<sub>50</sub>)** No specific test data are available.

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### Acute toxicity - dermal

**Notes (dermal LD<sub>50</sub>)** No specific test data are available.

### Acute toxicity - inhalation

**Notes (inhalation LC<sub>50</sub>)** No specific test data are available.

### Skin corrosion/irritation

**Skin corrosion/irritation** Causes skin irritation.

### Serious eye damage/irritation

**Serious eye damage/irritation** Causes serious eye damage.

### Respiratory sensitisation

**Respiratory sensitisation** No information available.

### Skin sensitisation

**Skin sensitisation** No information available.

### Germ cell mutagenicity

**Genotoxicity - in vitro** No information available.

**Genotoxicity - in vivo** No information available.

### Carcinogenicity

**Carcinogenicity** No information available.

### Reproductive toxicity

**Reproductive toxicity - fertility** No information available.

**Reproductive toxicity - development** No information available.

### Specific target organ toxicity - single exposure

**STOT - single exposure** No information available.

### Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** May cause damage to organs (Gastro-intestinal tract) through prolonged or repeated exposure.

### Aspiration hazard

**Aspiration hazard** No information available.

### **General information**

May cause damage to organs (Gastro-intestinal tract) through prolonged or repeated exposure.

### **Inhalation**

Dust in high concentrations may irritate the respiratory system.

### **Ingestion**

Overexposure may cause the following adverse effects: Stomach pain.

### **Skin contact**

Causes skin irritation. Overexposure may cause the following adverse effects: Pain or irritation. Redness. Blistering may occur.

### **Eye contact**

Causes serious eye damage. Overexposure may cause the following adverse effects: Pain. Profuse watering of the eyes. Redness.

### **Target organs**

Gastro-intestinal tract

### Toxicological information on ingredients.

**QUATERNARY AMMONIUM COMPOUNDS, C20-22-ALKYLTRIMETHYL, CHLORIDES**

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### Acute toxicity - oral

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

Species Rat

Notes (oral LD<sub>50</sub>) LD<sub>50</sub> > 2000 mg/kg, Oral, Rat

### Acute toxicity - dermal

Notes (dermal LD<sub>50</sub>) LD<sub>50</sub> > 2000 mg/kg, Dermal, Rabbit

### Skin corrosion/irritation

Skin corrosion/irritation Causes skin irritation. Rabbit

### Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye damage. Rabbit

### Respiratory sensitisation

Respiratory sensitisation No information available.

### Skin sensitisation

Skin sensitisation No information available.

### Germ cell mutagenicity

Genotoxicity - in vitro Gene mutation: Negative. Ames test: Negative.

### Carcinogenicity

Carcinogenicity No information available.

### Reproductive toxicity

Reproductive toxicity - fertility No information available.

### Specific target organ toxicity - single exposure

STOT - single exposure No information available.

### Specific target organ toxicity - repeated exposure

STOT - repeated exposure May cause damage to organs (Gastro-intestinal tract) through prolonged or repeated exposure. NOAEL 10 mg/kg/day, Oral, Rat

### Aspiration hazard

Aspiration hazard No information available.

General information May cause damage to organs (Gastro-intestinal tract) through prolonged or repeated exposure.

Inhalation May cause respiratory irritation.

Ingestion May cause discomfort if swallowed.

Skin contact Causes skin irritation.

Eye contact Causes serious eye damage.

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### Acute toxicity - oral

Acute toxicity oral (LD<sub>50</sub>  
mg/kg) 5,840.0

Species Rat

Notes (oral LD<sub>50</sub>) OECD 401

ATE oral (mg/kg) 5,840.0

### Acute toxicity - dermal

Acute toxicity dermal (LD<sub>50</sub>  
mg/kg) 13,900.0

Species Rabbit

Notes (dermal LD<sub>50</sub>) OECD 402

ATE dermal (mg/kg) 13,900.0

### Acute toxicity - inhalation

Acute toxicity inhalation  
(LC<sub>50</sub> gases ppmV) 10,000.0

Species Rat

Notes (inhalation LC<sub>50</sub>) LC<sub>50</sub> (6h) >10000 ppm, Inhalation, Rat OECD 403

### Skin corrosion/irritation

Animal data Not irritating.

### Serious eye damage/irritation

Serious eye  
damage/irritation Causes serious eye irritation.

### Respiratory sensitisation

Respiratory sensitisation Not sensitising.

### Skin sensitisation

Skin sensitisation Not sensitising.

### Germ cell mutagenicity

Genotoxicity - in vivo No information available.

### Carcinogenicity

Carcinogenicity There is no evidence that the product can cause cancer.

### Reproductive toxicity

Reproductive toxicity -  
fertility No information available.

### Specific target organ toxicity - single exposure

STOT - single exposure No information available.

### Specific target organ toxicity - repeated exposure

STOT - repeated exposure No information available.

### Aspiration hazard

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|                          |                                                                                                                        |
|--------------------------|------------------------------------------------------------------------------------------------------------------------|
| <b>Aspiration hazard</b> | No information available.                                                                                              |
| <b>Inhalation</b>        | May cause respiratory system irritation. Vapours may cause drowsiness and dizziness.                                   |
| <b>Ingestion</b>         | Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia. |
| <b>Skin contact</b>      | Prolonged contact may cause dryness of the skin.                                                                       |
| <b>Eye contact</b>       | Causes serious eye irritation.                                                                                         |
| <b>Target organs</b>     | Kidneys Liver                                                                                                          |

### SECTION 12: Ecological Information

**Ecotoxicity** Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

#### Ecological information on ingredients.

##### QUATERNARY AMMONIUM COMPOUNDS, C20-22-ALKYLTRIMETHYL, CHLORIDES

**Ecotoxicity** Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

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**Ecotoxicity** The product is not expected to be toxic to aquatic organisms.

#### 12.1. Toxicity

**Toxicity** Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

#### Ecological information on ingredients.

##### QUATERNARY AMMONIUM COMPOUNDS, C20-22-ALKYLTRIMETHYL, CHLORIDES

##### Acute aquatic toxicity

**LE(C)<sub>50</sub>** 0.1 < L(E)C<sub>50</sub> ≤ 1

**M factor (Acute)** 1

**Acute toxicity - fish** LC<sub>50</sub>, 96 hour: 3.5 mg/l,  
OECD 203

**Acute toxicity - aquatic invertebrates** EC<sub>50</sub>, 48 hour: 1.38 mg/l, Daphnia magna  
OECD 202

**Acute toxicity - aquatic plants** EC<sub>50</sub>, 72 hour: 3.48 mg/l, Algae  
OECD 201  
EC<sub>10</sub>, 72 hour: 0.78 mg/l, Algae  
OECD 201

##### Chronic aquatic toxicity

**Chronic toxicity - fish early life stage** NOEC, 9 day: 0.24 mg/l,  
(OECD 212)

**Chronic toxicity - aquatic invertebrates** NOEC, 21 days: 0.128 mg/l, Daphnia magna  
OECD 211

##### PROPAN-2-OL

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|                                               |                                                                               |
|-----------------------------------------------|-------------------------------------------------------------------------------|
| <b>Toxicity</b>                               | Not considered toxic to fish.                                                 |
| <b><u>Acute aquatic toxicity</u></b>          |                                                                               |
| <b>Acute toxicity - fish</b>                  | LC <sub>50</sub> , 48 hours: 9640 mg/l, Pimephales promelas (Fat-head Minnow) |
| <b>Acute toxicity - aquatic invertebrates</b> | EC <sub>50</sub> , 48 hours: 10000 mg/l, Daphnia magna                        |
| <b>Acute toxicity - aquatic plants</b>        | EC <sub>50</sub> , 7 days: 1800 mg/l, Algae                                   |

### **12.2. Persistence and degradability**

**Persistence and degradability** There are no data on the degradability of this product.

#### **Ecological information on ingredients.**

##### **QUATERNARY AMMONIUM COMPOUNDS, C20-22-ALKYLTRIMETHYL, CHLORIDES**

|                                      |                                       |
|--------------------------------------|---------------------------------------|
| <b>Persistence and degradability</b> | The product is readily biodegradable. |
|--------------------------------------|---------------------------------------|

##### **PROPAN-2-OL**

|                                      |                                         |
|--------------------------------------|-----------------------------------------|
| <b>Persistence and degradability</b> | The substance is readily biodegradable. |
|--------------------------------------|-----------------------------------------|

**Biological oxygen demand** 53 %

### **12.3. Bioaccumulative potential**

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

**Partition coefficient** No information available.

#### **Ecological information on ingredients.**

##### **QUATERNARY AMMONIUM COMPOUNDS, C20-22-ALKYLTRIMETHYL, CHLORIDES**

**Bioaccumulative potential** Bioaccumulation is unlikely.

**Partition coefficient** log Pow: 3.29

##### **PROPAN-2-OL**

**Bioaccumulative potential** The product is not bioaccumulating.

**Partition coefficient** log Pow: 0.05 OECD 107

### **12.4. Mobility in soil**

**Mobility** The product is insoluble in water.

#### **Ecological information on ingredients.**

##### **QUATERNARY AMMONIUM COMPOUNDS, C20-22-ALKYLTRIMETHYL, CHLORIDES**

**Mobility** No information available.

##### **PROPAN-2-OL**

**Mobility** The product is soluble in water.

## QUARTAMIN AB

Surface tension 22.7 mN/m @ 20°C

### 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.

#### QUATERNARY AMMONIUM COMPOUNDS, C20-22-ALKYLTRIMETHYL, CHLORIDES

**Results of PBT and vPvB assessment** This substance is not classified as PBT or vPvB according to current EU criteria.

#### PROPAN-2-OL

**Results of PBT and vPvB assessment** This substance is not classified as PBT or vPvB according to current EU criteria.

### 12.6. Other adverse effects

**Other adverse effects** None known.

### Ecological information on ingredients.

#### QUATERNARY AMMONIUM COMPOUNDS, C20-22-ALKYLTRIMETHYL, CHLORIDES

**Other adverse effects** No information available.

#### PROPAN-2-OL

**Other adverse effects** No data available.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**General information** Waste is classified as hazardous waste. Do not puncture or incinerate, even when empty.

**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

**General** Wear protective clothing as described in Section 8 of this safety data sheet.

### 14.1. UN number

UN No. (ADR/RID) 3077

UN No. (IMDG) 3077

UN No. (ICAO) 3077

UN No. (ADN) 3077

### 14.2. UN proper shipping name

**Proper shipping name (ADR/RID)** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CONTAINS QUATERNARY AMMONIUM COMPOUNDS, C20-22-ALKYLTRIMETHYL, CHLORIDES)

**Proper shipping name (IMDG)** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CONTAINS QUATERNARY AMMONIUM COMPOUNDS, C20-22-ALKYLTRIMETHYL, CHLORIDES)

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**Proper shipping name (ICAO)** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CONTAINS QUATERNARY AMMONIUM COMPOUNDS, C20-22-ALKYLTRIMETHYL, CHLORIDES)

**Proper shipping name (ADN)** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (CONTAINS QUATERNARY AMMONIUM COMPOUNDS, C20-22-ALKYLTRIMETHYL, CHLORIDES)

### 14.3. Transport hazard class(es)

|                             |    |
|-----------------------------|----|
| ADR/RID class               | 9  |
| ADR/RID classification code | M7 |
| ADR/RID label               | 9  |
| IMDG class                  | 9  |
| ICAO class/division         | 9  |
| ADN class                   | 9  |

Transport labels



### 14.4. Packing group

|                       |     |
|-----------------------|-----|
| ADR/RID packing group | III |
| IMDG packing group    | III |
| ADN packing group     | III |
| ICAO packing group    | III |

### 14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



### 14.6. Special precautions for user

|                                        |          |
|----------------------------------------|----------|
| EmS                                    | F-A, S-F |
| ADR transport category                 | 3        |
| Emergency Action Code                  | 2Z       |
| Hazard Identification Number (ADR/RID) | 90       |
| Tunnel restriction code                | (-)      |

### 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

## QUARTAMIN AB

### 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.

This product may impact SEVESO storage regulations.

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

### Inventories

#### EU - EINECS/ELINCS

All the ingredients are listed or exempt.

#### Canada - DSL/NDSL

All the ingredients are listed or exempt.  
NDSL

#### US - TSCA

All the ingredients are listed or exempt.

#### Australia - AICS

All the ingredients are listed or exempt.

#### Korea - KECI

All the ingredients are listed or exempt.

#### China - IECSC

All the ingredients are listed or exempt.

#### Philippines – PICCS

All the ingredients are listed or exempt.

#### New Zealand - NZIOC

All the ingredients are listed or exempt.

### SECTION 16: Other information

## QUARTAMIN AB

### Abbreviations and acronyms used in the safety data sheet

ATE: Acute Toxicity Estimate.  
 ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.  
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.  
 CAS: Chemical Abstracts Service.  
 DNEL: Derived No Effect Level.  
 IATA: International Air Transport Association.  
 IMDG: International Maritime Dangerous Goods.  
 Kow: Octanol-water partition coefficient.  
 LC<sub>50</sub>: Lethal Concentration to 50 % of a test population.  
 LD<sub>50</sub>: Lethal Dose to 50% of a test population (Median Lethal Dose).  
 PBT: Persistent, Bioaccumulative and Toxic substance.  
 PNEC: Predicted No Effect Concentration.  
 REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.  
 RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.  
 vPvB: Very Persistent and Very Bioaccumulative.  
 IARC: International Agency for Research on Cancer.  
 MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.  
 cATpE: Converted Acute Toxicity Point Estimate.  
 BCF: Bioconcentration Factor.  
 BOD: Biochemical Oxygen Demand.  
 EC<sub>50</sub>: 50% of maximal Effective Concentration.  
 LOAEC: Lowest Observed Adverse Effect Concentration.  
 LOAEL: Lowest Observed Adverse Effect Level.  
 NOAEC: No Observed Adverse Effect Concentration.  
 NOAEL: No Observed Adverse Effect Level.  
 NOEC: No Observed Effect Concentration.  
 LOEC: Lowest Observed Effect Concentration.  
 DMEL: Derived Minimal Effect Level.  
 EL50: Exposure Limit 50  
 hPa: Hectopascal  
 LL50: Lethal Loading fifty  
 OECD: Organisation for Economic Co-operation and Development  
 POW: Octanol-water partition coefficient  
 SCBA: self-contained breathing apparatus  
 STP: Sewage Treatment Plant  
 VOC: Volatile Organic Compounds

### Classification abbreviations and acronyms

Acute Tox. = Acute toxicity  
 Aquatic Acute = Hazardous to the aquatic environment (acute)  
 Aquatic Chronic = Hazardous to the aquatic environment (chronic)

### Key literature references and sources for data

Supplier's information.

### Revision comments

NOTE: Lines within the margin indicate significant changes from the previous revision.

### Revision date

05/02/2019

### Version number

4.000

### Supersedes date

22/11/2018

### SDS number

14670

## QUARTAMIN AB

**SDS status**

Approved.

**Hazard statements in full**

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H373 May cause damage to organs through prolonged or repeated exposure.

H373 May cause damage to organs (Gastro-intestinal tract) through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

**Signature**

Lisa Bland