



## SAFETY DATA SHEET

### BARTOLINE - Fungicidal Wash

According to Regulation (EC) No 1907/2006 Annex II as amended by Regulation (EU) 2015/830.

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

##### 1.1. Product identifier

<b>Product name</b>	BARTOLINE - Fungicidal Wash
<b>REACH registration notes</b>	Not applicable as this mixture is a registered biocide and is therefore exempt according to REACH

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

<b>Identified uses</b>	FOR USE ONLY AS A SURFACE BIOCIDES FOR AMATEUR USE AGAINST MOULD, ALGAE, LICHEN AND MILDEW ON INTERNAL AND EXTERNAL HARD SURFACES.
<b>Uses advised against</b>	Not to be used for any other purpose than stated above.

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

<b>Supplier</b>	Bartoline Limited Barmston Close Beverley East Yorkshire HU17 0LW 01482 678710 info@bartoline.co.uk
<b>Contact person</b>	Regulatory Compliance Manager
<b>EU ADDRESS</b>	Bartoline Ireland Limited Unit 3D North Point House North Point Business Park New Mallow Road Cork T23 AT2P Ireland +353212066441 info@bartoline.eu

##### 1.4. Emergency telephone number

<b>Emergency telephone</b>	01482 678710 (8.30am - 4.45pm Monday to Friday) or NHS 111 (General Public) (24 Hour service)
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#### SECTION 2: Hazards identification

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

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

<b>Physical hazards</b>	Not Classified
<b>Health hazards</b>	Skin Irrit. 2 - H315 Eye Irrit. 2 - H319
<b>Environmental hazards</b>	Not Classified

## BARTOLINE - Fungicidal Wash

### 2.2. Label elements

#### Hazard pictograms



#### Signal word

Warning

#### Hazard statements

H315 Causes skin irritation.  
H319 Causes serious eye irritation.

#### Precautionary statements

P102 Keep out of reach of children.  
P280 Wear Nitrile/PVC protective gloves and chemical resistant safety glasses with side shields.  
P302+P352 IF ON SKIN: Wash with plenty of water.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P332+P313 If skin irritation occurs: Get medical advice/ attention.  
P337+P313 If eye irritation persists: Get medical advice/ attention.  
P501 Dispose of contents/container to hazardous waste collection point.

#### Supplemental label information

To comply with the Control of Pesticides Regulations the following information must be displayed in a box:

STATUTORY CONDITIONS OF APPROVAL RELATING TO USE  
FOR USE ONLY AS A SURFACE BIOCIDES.

SURFACE BIOCIDES FOR AMATEUR USE AGAINST MOULD, ALGAE, LICHEN AND MILDEW ON INTERNAL AND EXTERNAL HARD SURFACES SUCH AS BRICK, STONE, WOOD AND PLASTER.

APPLY AT A RATE OF 500ml OF PRODUCT PER 2.5 SQUARE METRES OF SURFACE.

APPLICATION METHOD: CLOTH, SPONGE AND TRIGGER SPRAY.

Contains: BENZALKONIUM CHLORIDE 1.5% w/w (15g/l).

Users must comply in full with all their legal responsibilities under the Control of Pesticides Regulations 1986 (as amended), including complying with all Conditions of Approval.

READ ALL PRECAUTIONS BEFORE USE. HSE No 9747

In addition to the information above the following information must be displayed outside the statutory box. Where a statement is prefixed by an asterisk the asterisk must be replicated on the label:

- \*DO NOT CONTAMINATE FOODSTUFFS, EATING UTENSILS OR FOOD CONTACT SURFACES.
- \*COVER ALL WATER STORAGE TANKS before application.
- \*Do not empty into drains.
- \*Do not breathe vapour/spray.
- \*Do not contaminate ground, waterbodies or watercourses with chemicals or used container.
- \*REMOVE OR COVER ALL FISH TANKS AND BOWLS before application.
- \*KEEP AWAY FROM TREATED SURFACES UNTIL DRY.
- \*AVOID ALL CONTACT WITH PLANT LIFE.
- \*Use only in well-ventilated areas.
- \*WASH HANDS AND EXPOSED SKIN before meals and after use.
- \*KEEP IN A SAFE PLACE.
- \*Keep out of the reach of children.
- \*IF SWALLOWED, seek medical advice immediately and show this container or label.
- \*Keep away from food, drink and animal feedingstuffs.
- \*Keep only in original container.
- \*Keep container tightly closed.

## BARTOLINE - Fungicidal Wash

**Biocide Labelling** Contains active substance: Quarternary ammonium compounds, benzyl (C12-C16) alkyl dimethyl, chlorides

**Supplementary precautionary statements** P101 If medical advice is needed, have product container or label at hand.  
P264 Wash contaminated skin thoroughly after handling.

### 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, benzyl (C12-C16) alkyl dimethyl, chlorides</b>		<b>1-5%</b>
CAS number: 68424-85-1	EC number: 270-325-2	
M factor (Acute) = 10		
<b>Classification</b>		
Acute Tox. 4 - H302		
Skin Corr. 1B - H314		
Eye Dam. 1 - H318		
Aquatic Acute 1 - H400		
Aquatic Chronic 1 - H410		

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

**Composition comments** This is a ready to use water based mixture containing an active ingredient. Contains: Benzalkonium Chloride 1.5%w/w (15g/l).

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

<b>General information</b>	IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR THE NHS 111 SERVICE. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Never give anything by mouth to an unconscious person. If medical advice is needed, have product container or label at hand.
<b>Inhalation</b>	Unlikely route of exposure as the product does not contain volatile substances. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. If breathing stops, provide artificial respiration. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention if symptoms are severe or persist.
<b>Ingestion</b>	Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. Get medical attention if a large quantity has been ingested. Consult a physician for specific advice.
<b>Skin contact</b>	Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention promptly if symptoms occur after washing.
<b>Eye contact</b>	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Continue to rinse for at least 15 minutes. Get medical attention if symptoms are severe or persist after washing.
<b>Protection of first aiders</b>	First aid personnel should wear appropriate protective equipment during any rescue. Wash contaminated clothing thoroughly with water before removing it from the affected person, or wear gloves.

## BARTOLINE - Fungicidal Wash

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

<b>General information</b>	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
<b>Inhalation</b>	May cause respiratory system irritation.
<b>Ingestion</b>	May cause damage to the gastro-intestinal tract.
<b>Skin contact</b>	The liquid may be irritating to skin. Skin irritation. Itchiness. Redness. Dryness and/or cracking.
<b>Eye contact</b>	Risk of serious damage to eyes. Pain or irritation. Profuse watering of the eyes. Irritation and redness, followed by blurred vision.

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

<b>Notes for the doctor</b>	Probable mucosal damage may contraindicate the use of gastric lavage.
<b>Specific treatments</b>	If swallowed, gastric irrigation with activated carbon. Rinse eyes thoroughly with physiological saline.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

<b>Suitable extinguishing media</b>	Water spray, foam, dry powder or carbon dioxide.
<b>Unsuitable extinguishing media</b>	None known.

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

<b>Specific hazards</b>	Not considered to be a significant hazard due to the small quantities used. When handled correctly, undamaged units represent no danger. The product is not believed to present a hazard due to its physical nature. No specific firefighting precautions applicable when small quantities are involved in the fire.
<b>Hazardous combustion products</b>	In a fire situation the following toxic gases/vapours or fumes may be produced: Carbon monoxide (CO). Hydrogen chloride (HCl). Nitrous gases (NOx).

### 5.3. Advice for firefighters

<b>Protective actions during firefighting</b>	Stop leak if safe to do so. Containers close to fire should be removed or cooled with water. Keep upwind to avoid inhalation of gases, vapours, fumes and smoke. Control run-off water by containing and keeping it out of sewers and watercourses.
<b>Special protective equipment for firefighters</b>	Use protective equipment appropriate for surrounding materials. Firefighter's clothing conforming to European standard EN469 (including helmets, protective boots and gloves) will provide a basic level of protection for chemical incidents. In case of a large fire or in confined or poorly ventilated spaces, wear full fire resistant protective clothing and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## SECTION 6: Accidental release measures

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

<b>Personal precautions</b>	Keep unnecessary and unprotected personnel away from the spillage. Avoid contact with skin and eyes. Do not enter storage areas or confined spaces unless adequately ventilated. Wear protective clothing as described in Section 8 of this safety data sheet. Wash thoroughly after dealing with a spillage.
<b>For non-emergency personnel</b>	No specific advice required.

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**For emergency responders** Keep people away from and upwind of spill/leak. Wear protective clothing as described in Section 8 of this safety data sheet. See section 11 for additional information on health hazards.  
For waste disposal, see section 13.

### 6.2. Environmental precautions

**Environmental precautions** As this product is supplied in packagings of 500ml there is a low risk of any environmental damage. The product contains a substance which is harmful to aquatic organisms and which may cause long-term adverse effects in the aquatic environment. Do not discharge into drains, water courses or onto the ground. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

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

**Methods for cleaning up** Stop leak if safe to do so. If leakage cannot be stopped, evacuate area. Take care as floors and other surfaces may become slippery. Small Spillages: Wipe up with an absorbent cloth and dispose of waste safely. Large Spillages: Contain spillage with sand, earth or other suitable non-combustible material. Collect and place in suitable waste disposal containers and seal securely. Flush contaminated area with plenty of water. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents.

### 6.4. Reference to other sections

**Reference to other sections** For personal protection, see Section 8. See Section 1 for emergency contact information. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Usage precautions** Do not handle until all safety precautions have been read and understood. Use biocides safely. Always read the label and product information before use. Wear protective clothing as described in Section 8 of this safety data sheet. Wear appropriate clothing to prevent any possibility of skin contact. Avoid contact with skin and eyes. Do not breathe vapour/spray. Keep containers upright. Keep out of the reach of children. Do not eat, drink or smoke when using this product.

**Advice on general occupational hygiene** Good personal hygiene procedures should be implemented. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Take off immediately all contaminated clothing and wash it before reuse.

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

**Storage precautions** Keep only in the original container. Store at temperatures above 10°C. Keep containers upright. Keep locked up and out of the reach of children. Keep away from food, drink and animal feeding stuffs.

**Storage class** Miscellaneous hazardous material storage.

### 7.3. Specific end use(s)

**Specific end use(s)** USE ONLY AS A SURFACE BIOCIDES IN ACCORDANCE WITH THE ON PACK INSTRUCTIONS.

## BARTOLINE - Fungicidal Wash

### Usage description

STATUTORY CONDITIONS OF APPROVAL  
RELATING TO USE

FOR USE ONLY AS A SURFACE BIOCIDES.

SURFACE BIOCIDES FOR AMATEUR USE AGAINST MOULD,  
ALGAE, LICHEN AND MILDEW ON INTERNAL AND EXTERNAL  
HARD SURFACES SUCH AS BRICK, STONE, WOOD AND PLASTER.  
APPLY AT A RATE OF 500ml OF PRODUCT PER 2.5 SQUARE  
METRES OF SURFACE.

APPLICATION METHOD: CLOTH, SPONGE AND TRIGGER SPRAY.

Contains: BENZALKONIUM CHLORIDE 1.5% W/W (15g/l).

Users must comply in full with all their legal responsibilities under the Control of pesticides  
Regulations 1986 (as amended), including complying with all Conditions of Approval.

READ ALL PRECAUTIONS BEFORE USE \*DO NOT CONTAMINATE FOODSTUFFS,  
EATING UTENSILS OR FOOD CONTACT SURFACES.

\*COVER ALL WATER STORAGE TANKS before application.

\*Do not empty into drains.

\*Do not breathe vapour/spray.

\*Do not contaminate ground, waterbodies or watercourses with chemicals or used container.

\*REMOVE OR COVER ALL FISH TANKS AND BOWLS before application.

\*KEEP AWAY FROM TREATED SURFACES UNTIL DRY.

\*AVOID ALL CONTACT WITH PLANT LIFE.

\*Use only in well-ventilated areas.

\*WASH HANDS AND EXPOSED SKIN before meals and after use.

\*KEEP IN A SAFE PLACE.

\*Keep out of the reach of children.

\*IF SWALLOWED, seek medical advice immediately and show this container or label.

\*Keep away from food, drink and animal feedingstuffs.

\*Keep only in original container.

\*Keep container tightly closed.

### SECTION 8: Exposure controls/Personal protection

#### 8.1. Control parameters

##### Occupational exposure limits

Quaternary ammonium compounds, benzyl (C12-C16) alkyl dimethyl, chlorides

According to the Suppliers MSDS this substance has no occupational exposure limit values.

Quaternary ammonium compounds, benzyl (C12-C16) alkyl dimethyl, chlorides (CAS: 68424-85-1)

DNEL

No data available from supplier of the substances.

PNEC

No data available from the substance supplier.

#### 8.2. Exposure controls

##### Protective equipment



##### Appropriate engineering controls

This product must not be handled in a confined space without adequate ventilation.

##### Personal protection

Protective engineering solutions should be implemented and in use before Personal Protective Equipment (PPE) is considered.

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<b>Eye/face protection</b>	Wear EN 166 approved chemical safety goggles with side shields where eye exposure is reasonably probable.
<b>Hand protection</b>	To protect hands from chemicals, gloves should comply with European Standard EN374. It is recommended that gloves are made of the following material: Butyl rubber. Nitrile rubber. Polyvinyl chloride (PVC). Rubber (natural, latex). Frequent changes are recommended.
<b>Other skin and body protection</b>	Given the identified use of the product additional skin and body protection should not be required.
<b>Hygiene measures</b>	Wash hands thoroughly after handling. Wash promptly with soap and water if skin becomes contaminated. Care should be taken to avoid contact with contaminants when removing contaminated clothing. Promptly remove any clothing that becomes wet or contaminated. Wash contaminated clothing before reuse. Wash at the end of each work shift and before eating, smoking and using the toilet. Do not eat, drink or smoke when using this product.
<b>Respiratory protection</b>	If used in accordance with section 7 of this MSDS the use of respiratory protection should not be required.
<b>Thermal hazards</b>	Not Applicable
<b>Environmental exposure controls</b>	Keep container tightly sealed when not in use.

### SECTION 9: Physical and chemical properties

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

<b>Appearance</b>	Clear liquid.
<b>Colour</b>	Colourless.
<b>Odour</b>	Almost odourless.
<b>Odour threshold</b>	No specific test data are available.
<b>pH</b>	7 - 8
<b>Melting point</b>	No information available.
<b>Initial boiling point and range</b>	100 Degrees C (water)
<b>Flash point</b>	Water Based > 100°C Closed cup.
<b>Evaporation rate</b>	Not applicable.
<b>Evaporation factor</b>	Not applicable.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	Not applicable.
<b>Vapour pressure</b>	No specific test data are available.
<b>Vapour density</b>	Not available.
<b>Relative density</b>	0.989 - 1.009
<b>Solubility(ies)</b>	Insoluble in ordinary solvents. Soluble in the following materials: Water
<b>Partition coefficient</b>	Not available.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition Temperature</b>	No specific test data are available.

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<b>Viscosity</b>	30 - 35 Seconds (B2 Flow Cup)
<b>Explosive properties</b>	Not considered explosive based on chemical structure and oxygen balance considerations.
<b>Explosive under the influence of a flame</b>	Not considered to be explosive.
<b>Oxidising properties</b>	This product is not considered oxidising based on chemical structure considerations.
<b>Comments</b>	Information declared as "Not available" or "Not applicable" is not considered to be relevant to the implementation of the proper control measures. Information given is applicable to the product in its ready-to-use form.

### 9.2. Other information

<b>Volatile organic compound</b>	There are no VOCs present.
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## SECTION 10: Stability and reactivity

### 10.1. Reactivity

<b>Reactivity</b>	There are no known reactivity hazards associated with this product.
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### 10.2. Chemical stability

<b>Stability</b>	Stable at normal ambient temperatures and when used as recommended.
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### 10.3. Possibility of hazardous reactions

<b>Possibility of hazardous reactions</b>	Under normal conditions of storage and use, no hazardous reactions will occur. No specific material or group of materials is likely to react with the product to produce a hazardous situation.
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### 10.4. Conditions to avoid

<b>Conditions to avoid</b>	Avoid the following conditions: Freezing. Long storage and large quantities.
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### 10.5. Incompatible materials

<b>Materials to avoid</b>	Anionic compounds
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### 10.6. Hazardous decomposition products

<b>Hazardous decomposition products</b>	In case of fire irritating fumes and smoke will be evolved.
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## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity - oral

<b>Notes (oral LD<sub>50</sub>)</b>	Calculated
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<b>ATE oral (mg/kg)</b>	22,933.33
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#### Skin corrosion/irritation

<b>Skin corrosion/irritation</b>	Irritating to skin.
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#### Serious eye damage/irritation

<b>Serious eye damage/irritation</b>	Causes serious eye irritation.
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#### Respiratory sensitisation

<b>Respiratory sensitisation</b>	Based on available data the classification criteria are not met.
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#### Skin sensitisation

<b>Skin sensitisation</b>	Based on available data the classification criteria are not met.
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## BARTOLINE - Fungicidal Wash

### Germ cell mutagenicity

**Genotoxicity - in vitro** Based on available data the classification criteria are not met.

**Genotoxicity - in vivo** Based on available data the classification criteria are not met.

### Carcinogenicity

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

### Reproductive toxicity

**Reproductive toxicity - fertility** Based on available data the classification criteria are not met.

**Reproductive toxicity - development** Does not contain any substances known to be toxic to reproduction.

### Specific target organ toxicity - single exposure

**STOT - single exposure** Based on available data the classification criteria are not met.

### Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** Based on available data the classification criteria are not met.

### Aspiration hazard

**Aspiration hazard** Not anticipated to present an aspiration hazard, based on chemical structure.

### **General information**

The product is not believed to present a hazard due to its physical nature. SEE INFORMATION ON HAZARDOUS COMPONENTS BELOW:

**Inhalation** Unlikely to be hazardous by inhalation because of the low vapour pressure of the product at ambient temperature.

**Ingestion** No harmful effects expected from quantities likely to be ingested by accident.

**Skin contact** Prolonged or repeated contact with skin may cause irritation, redness and dermatitis.

**Eye contact** May cause severe eye irritation.

**Acute and chronic health hazards** No known chronic or acute health risks.

**Route of exposure** Skin and/or eye contact

**Target organs** Eyes Skin

**Medical symptoms** May cause discomfort if swallowed. Skin contact may cause: Dry skin.

**Medical considerations** The following pre-existing or historic medical conditions of the worker may lead to an increased risk of adverse health effects following exposure to this product: Skin disorders and allergies.

### Toxicological information on ingredients.

#### Quaternary ammonium compounds, benzyl (C12-C16) alkyl dimethyl, chlorides

##### Acute toxicity - oral

**Acute toxicity oral (LD<sub>50</sub> mg/kg)** 344.0

**Species** Rat

**ATE oral (mg/kg)** 344.0

##### Acute toxicity - dermal

## BARTOLINE - Fungicidal Wash

**Acute toxicity dermal (LD<sub>50</sub> mg/kg)** 3,340.0

**Species** Rabbit

**ATE dermal (mg/kg)** 3,340.0

### Acute toxicity - inhalation

**ATE inhalation (dusts/mists mg/l)** 5.01

### Skin corrosion/irritation

**Skin corrosion/irritation** Corrosive (Rabbit) (OECD 404).

### Serious eye damage/irritation

**Serious eye damage/irritation** Based on the skin toxicity data this substance is assumed to cause severe eye damage.

### Respiratory sensitisation

**Respiratory sensitisation** Based on available data the classification criteria are not met.

### Skin sensitisation

**Skin sensitisation** Based on available data the classification criteria are not met.

### Germ cell mutagenicity

**Genotoxicity - in vitro** Based on available data the classification criteria are not met.

**Genotoxicity - in vivo** Based on available data the classification criteria are not met.

### Carcinogenicity

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

### Reproductive toxicity

**Reproductive toxicity - fertility** Based on available data the classification criteria are not met.

**Reproductive toxicity - development** Supplier's information. This substance has no evidence of toxicity to reproduction.

### Specific target organ toxicity - single exposure

**STOT - single exposure** Based on available data the classification criteria are not met.

### Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** Based on available data the classification criteria are not met.

### Aspiration hazard

**Aspiration hazard** Not anticipated to present an aspiration hazard, based on chemical structure.

## SECTION 12: Ecological information

### 12.1. Toxicity

**Toxicity** Not regarded as dangerous for the environment. See information on ingredient substances below.

### Ecological information on ingredients.

Quaternary ammonium compounds, benzyl (C12-C16) alkyl dimethyl, chlorides

## BARTOLINE - Fungicidal Wash

<b>Toxicity</b>	Substance is very toxic to aquatic life.
<b><u>Acute aquatic toxicity</u></b>	
<b>LE(C)<sub>50</sub></b>	$0.01 < L(E)C_{50} \leq 0.1$
<b>M factor (Acute)</b>	10
<b>Acute toxicity - fish</b>	LC <sub>50</sub> , 96 hour: 0.085 mg/l, Oncorhynchus mykiss (Rainbow trout) Method: OECD 203
<b>Acute toxicity - aquatic invertebrates</b>	EC <sub>50</sub> , 48 hour: 0.016 mg/l, Daphnia magna
<b>Acute toxicity - aquatic plants</b>	EC <sub>50</sub> , 72 hour: 0.025 mg/l, Selenastrum capricornutum Method: OECD 201
<b><u>Chronic aquatic toxicity</u></b>	
<b>NOEC</b>	$0.01 < NOEC \leq 0.1$
<b>Degradability</b>	Rapidly degradable

### 12.2. Persistence and degradability

<b>Biodegradation</b>	This surfactants within this product complies with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer. The product ingredients can be readily eliminated in the sewage system.
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### Ecological information on ingredients.

#### Quaternary ammonium compounds, benzyl (C12-C16) alkyl dimethyl, chlorides

<b>Biodegradation</b>	The substance is readily biodegradable.
<b>Biological oxygen demand</b>	Technical impossibility to obtain the data.
<b>Chemical oxygen demand</b>	~ 1130 mg O <sub>2</sub> /g product

### 12.3. Bioaccumulative potential

<b>Partition coefficient</b>	Not available.
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### Ecological information on ingredients.

#### Quaternary ammonium compounds, benzyl (C12-C16) alkyl dimethyl, chlorides

<b>Bioaccumulative potential</b>	Log Kow (shake flask method) 2.88 (n-Octanol/water) (OECD 107).
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### 12.4. Mobility in soil

### Ecological information on ingredients.

#### Quaternary ammonium compounds, benzyl (C12-C16) alkyl dimethyl, chlorides

<b>Mobility</b>	No data available.
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### 12.5. Results of PBT and vPvB assessment

<b>Results of PBT and vPvB assessment</b>	Based on available data, the classification criteria are not met.
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### Ecological information on ingredients.

## BARTOLINE - Fungicidal Wash

### Quaternary ammonium compounds, benzyl (C12-C16) alkyl dimethyl, chlorides

**Results of PBT and vPvB assessment** Based on available data, the classification criteria are not met.

#### 12.6. Other adverse effects

**Other adverse effects** None known.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

**General information** Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labelled with their contents. Residues and empty containers should be taken care of as hazardous waste according to local and national provisions. Waste should be treated as controlled waste. Waste packaging should be collected for reuse or recycling. When handling waste, the safety precautions applying to handling of the product should be considered.

**Disposal methods** The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. 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. Following dilution, discharge to the sewer with plenty of water may be permitted. The requirements of the local water authority must be complied with if contaminated water is flushed directly to the sewer.

**Waste class** Empty plastic containers can be disposed of using EU Waste code 15 01 02 plastic packaging. Note For a waste container to be classed as a packaging waste (15 01) it must be effectively 'empty'.

It is usually obvious if a container is 'empty', for example a half empty tin of solidified paint is not empty, but where there is a small amount of residual material a container will not be empty if that residual material can be removed by physical or mechanical means by applying normal industry standards or processes.

This means that all reasonable efforts must have been made to remove any left-over contents from the container. This may involve for example washing, draining or scraping. The method of emptying will depend on the container and the type of material it contains.

Note: if the design of the packaging, its aperture, or the adherent nature of the material does not permit it to be emptied then it will not be a packaging waste.

If a container is not 'empty' it is not packaging waste. It should be classified on the basis of its contents and the source or activity that produced it. Waste liquid can be classified as organic waste with the European waste code 16 03 05.

### SECTION 14: Transport information

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

#### 14.1. UN number

#### 14.2. UN proper shipping name

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

#### 14.4. Packing group

#### 14.5. Environmental hazards

#### 14.6. Special precautions for user

## BARTOLINE - Fungicidal Wash

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

#### SECTION 15: Regulatory information

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

<b>National regulations</b>	<p>Users of this product are reminded of their duties under the current Control of Substances Hazardous to Health Regulations and a suitable and sufficient assessment of all the risk should be undertaken before using this product. The guidelines given in the HSE publication COSHH ESSENTIALS - Easy Steps To Control Chemicals gives sound advice for deciding safe working control measures.</p> <p>Control of Substances Hazardous to Health Regulations 2002 (as amended).</p> <p>EH40/2005 Workplace exposure limits.</p> <p>Health and Safety at Work etc. Act 1974 (as amended).</p> <p>The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].</p> <p>Control of Pesticides Regulations (COPR) 1986</p>
<b>EU legislation</b>	<p>Commission Decision 2000/532/EC as amended by Decision 2001/118/EC establishing a list of wastes and hazardous waste pursuant to Council Directive 75/442/EEC on waste and Directive 91/689/EEC on hazardous waste with amendments.</p> <p>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).</p> <p>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).</p>
<b>Guidance</b>	Workplace Exposure Limits EH40.
<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>General information</b>	Only trained personnel should use this material. This product is authorised under Control of Pesticides Regulations (COPR) 1986, HSE No 9626
<b>Training advice</b>	The information on directions for use can be found on the product label. It is important to ensure that anyone using this product in the workplace has been adequately trained and in particular: The use of personal protective equipment, methods of cleaning up and disposal of waste. The basic first aid arrangements.
<b>Revision comments</b>	DUE TO CHANGE OF CLASSIFICATION DATABASE THE REVISION NUMBERING HAS BEEN RESET. You should therefore look at the revision date rather than the revision number to ensure you have the most up to date version. NOTE: Lines within the margin indicate significant changes from the previous revision.
<b>Issued by</b>	Product Compliance Assistant
<b>Revision date</b>	26/11/2018
<b>Revision</b>	3
<b>Supersedes date</b>	24/05/2017

## BARTOLINE - Fungicidal Wash

<b>SDS number</b>	4839
<b>Hazard statements in full</b>	H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H315 Causes skin irritation. H318 Causes serious eye damage. H319 Causes serious eye irritation. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects.

The information contained in this data sheet is provided in accordance with the requirements of the Regulation (EC) No 1907/2006 Annex II as amended by Regulation (EU) 2015/830 and Regulation (EC) No 1272/2008 (CLP). The product should not be used for purposes other than those shown in Section 1.2. As the specific conditions of use are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with. The information contained in this safety data sheet is based on the present knowledge and the current EU and UK Legislation. It provides guidance on health, safety and environmental aspects of the product and should not be taken as a product specification. 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.