



## SAFETY DATA SHEET

### Byotrol 4in1 Multipurpose Cleaner & Disinfectant (10-20% dilution)

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

##### 1.1. Product identifier

**Product name** Byotrol 4in1 Multipurpose Cleaner & Disinfectant (10-20% dilution)

**Product number** B2047

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

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

**Supplier** Byotrol plc  
 Building 303 (Ashton),  
 Thornton Science Park,  
 Pool Lane, Ince, Chester,  
 CH2 4NU  
 Tel: +44 (0) 1925 742 000  
 Fax: +44 (0) 1925 363 099  
 info@byotrol.com

##### 1.4. Emergency telephone number

#### SECTION 2: Hazards identification

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

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

**Physical hazards** Not Classified

**Health hazards** Eye Irrit. 2 - H319

**Environmental hazards** Aquatic Chronic 3 - H412

##### 2.2. Label elements

###### Hazard pictograms



**Signal word** Warning

**Hazard statements** H319 Causes serious eye irritation.  
 H412 Harmful to aquatic life with long lasting effects.

**Precautionary statements** P264 Wash contaminated skin thoroughly after handling.  
 P273 Avoid release to the environment.  
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P337+P313 If eye irritation persists: Get medical advice/ attention.  
 P501 Dispose of contents/ container in accordance with national regulations.

**Detergent labelling** < 5% cationic surfactants, < 5% non-ionic surfactants, < 5% perfumes, Contains Hydroxyisohexyl 3-cyclohexene carboxaldehyde, Hexyl cinnamal

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### 2.3. Other hazards

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

##### 3.2. Mixtures

<p><b>N,N-dimethyldecylamine N-oxide</b> &lt;1%</p> <p>CAS number: 2605-79-0                      EC number: 220-020-5</p> <p>M factor (Acute) = 1</p>
<p><b>Classification</b></p> <p>Acute Tox. 4 - H302</p> <p>Skin Irrit. 2 - H315</p> <p>Eye Dam. 1 - H318</p> <p>Aquatic Acute 1 - H400</p>
<p><b>Didecyldimethylammonium chloride (DDAC)</b> &lt;1%</p> <p>CAS number: 7173-51-5                      EC number: 230-525-2</p> <p>M factor (Acute) = 10                      M factor (Chronic) = 1</p>
<p><b>Classification</b></p> <p>Acute Tox. 3 - H301</p> <p>Acute Tox. 4 - H312</p> <p>Skin Corr. 1B - H314</p> <p>Aquatic Acute 1 - H400</p> <p>Aquatic Chronic 1 - H410</p>
<p><b>Alkyl (C12-16) dimethylbenzyl ammonium chloride (ADBAC/BKC (C12-C16))</b> &lt;1%</p> <p>CAS number: 68424-85-1                      EC number: 270-325-2</p> <p>M factor (Acute) = 10                      M factor (Chronic) = 1</p>
<p><b>Classification</b></p> <p>Met. Corr. 1 - H290</p> <p>Acute Tox. 4 - H302</p> <p>Skin Corr. 1B - H314</p> <p>Aquatic Acute 1 - H400</p> <p>Aquatic Chronic 1 - H410</p>

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

#### SECTION 4: First aid measures

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

<b>Inhalation</b>	Not expected to present a significant inhalation hazard under anticipated conditions of normal use.
<b>Ingestion</b>	Do not induce vomiting. Get medical attention if symptoms are severe or persist. Rinse mouth thoroughly with water. Give plenty of water to drink. Never give anything by mouth to an unconscious person.
<b>Skin contact</b>	Skin irritation should not occur when used as recommended. Wash with plenty of water.

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**Eye contact** Rinse immediately with plenty of water. 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** The product is considered to be a low hazard under normal conditions of use.

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

**Notes for the doctor** Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

**Suitable extinguishing media** Carbon dioxide (CO<sub>2</sub>). Powder. Water spray. Alcohol-resistant foam.

**Unsuitable extinguishing media** None known.

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

**Specific hazards** None known.

**Hazardous combustion products** Toxic gases and fumes may be released in a fire.

### 5.3. Advice for firefighters

**Protective actions during firefighting** Use fire-extinguishing media suitable for the surrounding fire. Fight fire with normal precautions from a reasonable distance. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk.

**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

**For non-emergency personnel** In case of fire: Wear self-contained breathing apparatus. Wear protective clothing, gloves, eye and face protection. Keep unnecessary and unprotected personnel away from the spillage. Eliminate all sources of ignition. Ventilate closed spaces before entering them.

**For emergency responders** Wear self-contained breathing apparatus. Wear protective clothing, gloves, eye and face protection. Dilute with plenty of water. Do not allow uncontrolled discharge of product into the environment. Evacuate unnecessary personnel.

### 6.2. Environmental precautions

**Environmental precautions** Avoid discharge into drains or watercourses or onto the ground.

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

**Methods for cleaning up** Contain spillage with sand, earth or other suitable non-combustible material. Dilute with plenty of water. Contain and dispose of waste according to local regulations.

### 6.4. Reference to other sections

**Reference to other sections** For personal protection, see Section 8. For waste disposal, see Section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Usage precautions** Use only non-sparking tools. Avoid contact with eyes.

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**Advice on general occupational hygiene** Do not eat, drink or smoke when using this product. No specific hygiene procedures recommended but good personal hygiene practices should always be observed when working with chemical products.

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

**Storage precautions** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep containers upright. Store in tightly-closed, original container in a dry, cool and well-ventilated place. Protect from freezing and direct sunlight. Avoid contact with oxidising agents. Store at temperatures not exceeding 35°C.

**Storage class** Unspecified 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

### 8.2. Exposure controls

**Appropriate engineering controls** Wash hands at the end of each work shift and before eating, smoking and using the toilet.

**Eye/face protection** Chemical splash goggles.

**Hand protection** Hand protection not required.

**Respiratory protection** Respiratory protection not required.

## SECTION 9: Physical and chemical properties

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

**Odour** Characteristic.

**Odour threshold** Not determined.

**Melting point** Not determined.

**Initial boiling point and range** Not determined.

**Flash point** Not determined.

**Evaporation rate** Not determined.

**Evaporation factor** Not determined.

**Flammability (solid, gas)** Not relevant.

**Upper/lower flammability or explosive limits** Not relevant.

**Other flammability** Not relevant.

**Vapour pressure** Not determined.

**Vapour density** Not determined.

**Bulk density** Not relevant.

**Solubility(ies)** Soluble in water.

**Partition coefficient** Not determined.

**Auto-ignition temperature** Not determined.

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<b>Decomposition Temperature</b>	Not determined.
<b>Explosive properties</b>	Not considered to be explosive.
<b>Explosive under the influence of a flame</b>	Not considered to be explosive.
<b>Oxidising properties</b>	The mixture itself has not been tested but none of the ingredient substances meet the criteria for classification as oxidising.
<b>Comments</b>	Information given is applicable to the product as supplied.

### 9.2. Other information

**Other information** None.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

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

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

### 10.4. Conditions to avoid

**Conditions to avoid** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

### 10.5. Incompatible materials

**Materials to avoid** Anionics. Hypochlorite. Oxidising agents.

### 10.6. Hazardous decomposition products

**Hazardous decomposition products** None known.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

**Toxicological effects** This product is considered non-toxic to humans.

#### Acute toxicity - oral

**ATE oral (mg/kg)** 58,571.43

#### Skin corrosion/irritation

**Skin corrosion/irritation**

#### Serious eye damage/irritation

**Serious eye damage/irritation** Not classified.

#### Respiratory sensitisation

**Respiratory sensitisation** Not classified.

#### Skin sensitisation

**Skin sensitisation** May cause sensitisation or allergic reactions in sensitive individuals.

#### Germ cell mutagenicity

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**Genotoxicity - in vitro** Not classified.

**Genotoxicity - in vivo** Not classified.

### Carcinogenicity

**Carcinogenicity** Not classified.

### Reproductive toxicity

**Reproductive toxicity - fertility** Not classified.

**Reproductive toxicity - development** Not classified.

### Specific target organ toxicity - single exposure

**STOT - single exposure** Not classified.

### Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** Not classified.

### Aspiration hazard

**Aspiration hazard** Not classified.

## SECTION 12: Ecological information

### 12.1. Toxicity

**Toxicity** When used as instructed, the product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

### 12.2. Persistence and degradability

**Persistence and degradability** Not determined.

### 12.3. Bioaccumulative potential

**Partition coefficient** Not determined.

### 12.4. Mobility in soil

**Mobility** Not determined.

### 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.

### 12.6. Other adverse effects

**Other adverse effects** Not determined.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**General information** Dispose of waste product or used containers in accordance with local regulations Do not discharge into drains or watercourses or onto the ground. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

**Disposal methods** The generation of waste should be minimised or avoided wherever possible.

## SECTION 14: Transport information

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

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### 14.1. UN number

Not applicable.

### 14.2. UN proper shipping name

Not applicable.

### 14.3. Transport hazard class(es)

No transport warning sign required.

### 14.4. Packing group

Not applicable.

### 14.5. Environmental hazards

**Environmentally hazardous substance/marine pollutant**

No.

### 14.6. Special precautions for user

Not applicable.

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

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

**Annex II of MARPOL 73/78  
and the IBC Code**

## SECTION 15: Regulatory information

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

**EU legislation** 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).

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

## SECTION 16: Other information

<b>Revision date</b>	19/08/2019
<b>Revision</b>	2
<b>Supersedes date</b>	05/07/2019
<b>SDS number</b>	5237
<b>Hazard statements in full</b>	H290 May be corrosive to metals. H301 Toxic if swallowed. H302 Harmful if swallowed. H312 Harmful in contact with skin. 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. H412 Harmful to aquatic life with long lasting effects.

## **Byotrol 4in1 Multipurpose Cleaner & Disinfectant (10-20% dilution)**

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.