SAFETY DATA SHEET
5L SUPER PROFESSIONAL BACTERICIDAL DETERGENT D8

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

1.1. Product identifier
Product name 5L SUPER PROFESSIONAL BACTERICIDAL DETERGENT D8
Product number 800-192-0003 D8
Container size 5 litres

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

1.3. Details of the supplier of the safety data sheet
Supplier Mirius™
A Coventry Group Company
Woodhams Road
Siskin Drive
Coventry
CV3 4FX
Tel: +44 (0) 02476 639 739
Fax: +44 (0) 02476 639 717
Email: sales@mirius.com

Contact person For content of safety data sheet: sds@mirius.com

1.4. Emergency telephone number
Emergency telephone +44 (0) 1865407333 (Strictly for emergencies only: incidents involving damage to human health and/or the environment)

National emergency telephone number In case of a medical emergency following exposure to a chemical call NHS Direct in England or Wales 0845 46 47 or NHS 24 in Scotland 08454 24 24 24

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
Environmental hazards Not Classified

2.2. Label elements
Pictogram

Signal word Danger
5L SUPER PROFESSIONAL BACTERICIDAL DETERGENT D8

Hazard statements
H315 Causes skin irritation.
H318 Causes serious eye damage.

Precautionary statements
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.
P362+P364 Take off contaminated clothing and wash it before reuse.
P337+P313 If eye irritation persists: Get medical advice/attention.
P280 Wear protective gloves.

Contains
QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16-ALKYLDIMETHYLCHLORIDES, ALCOHOLS, C12-14, ETHOXYLATED, COCONUT DIETHANOLAMIDE

Detergent labelling
< 5% disinfectants, < 5% non-ionic surfactants, < 5% perfumes, Contains d-LIMONENE

Supplementary precautionary statements
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

<table>
<thead>
<tr>
<th>QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16-ALKYLDIMETHYL, CHLORIDES</th>
<th>1-5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 68424-85-1</td>
<td>EC number: 270-325-2</td>
</tr>
<tr>
<td>M factor (Acute) = 1</td>
<td></td>
</tr>
</tbody>
</table>

Classification
Acute Tox. 4 - H302
Acute Tox. 4 - H312
Skin Corr. 1B - H314
Eye Dam. 1 - H318
Aquatic Acute 1 - H400

Classification (67/548/EEC or 1999/45/EC)
C;R34 Xn;R21/22 N;R50

<table>
<thead>
<tr>
<th>ALCOHOLS, C12-14, ETHOXYLATED</th>
<th>1-5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 68439-50-9</td>
<td>EC number: 500-213-3</td>
</tr>
<tr>
<td>M factor (Acute) = 1</td>
<td></td>
</tr>
</tbody>
</table>

Classification
Eye Dam. 1 - H318
Aquatic Acute 1 - H400
Aquatic Chronic 3 - H412

Classification (67/548/EEC or 1999/45/EC)
Xi;R41. N;R50.
5L SUPER PROFESSIONAL BACTERICIDAL DETERGENT D8

<table>
<thead>
<tr>
<th>COCONUT DIETHANOLAMIDE</th>
<th>1-5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS number: 68603-42-9</td>
<td>EC number: 931-329-6</td>
</tr>
</tbody>
</table>

**Classification**
- Skin Irrit. 2 - H315
- Eye Dam. 1 - H318
- Aquatic Chronic 2 - H411

**Classification (67/548/EEC or 1999/45/EC)**
- Xi;R38,R41.

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

**General information**
Provide eyewash station.

**Inhalation**
Move affected person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues.

**Ingestion**
Never give anything by mouth to an unconscious person. Do not induce vomiting. Rinse mouth thoroughly with water. Get medical attention if any discomfort continues.

**Skin contact**
Rinse immediately with plenty of water. Remove contaminated clothing. Get medical attention if irritation persists after washing.

**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. Get medical attention if symptoms are severe or persist after washing. Show this Safety Data Sheet to the medical personnel.

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

**General information**
Provide eyewash station.

**Skin contact**
Prolonged contact may cause redness, irritation and dry skin.

**Eye contact**
The product is irritating to eyes and skin. Prolonged or repeated exposure may cause the following adverse effects: Irritation and redness, followed by blurred vision. Corneal damage. Risk of serious damage to eyes.

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

**Notes for the doctor**
No specific recommendations.

**SECTION 5: Firefighting measures**

### 5.1. Extinguishing media

**Suitable extinguishing media**
The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire. Foam, carbon dioxide or dry powder.

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

**Hazardous combustion products**
Thermal decomposition or combustion products may include the following substances: Oxides of carbon. Toxic gases or vapours.

### 5.3. Advice for firefighters

**Protective actions during firefighting**
Control run-off water by containing and keeping it out of sewers and watercourses.

**Special protective equipment for firefighters**
Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.
5L SUPER PROFESSIONAL BACTERICIDAL DETERGENT D8

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions For personal protection, see Section 8. Treat the spilled material according to the instructions in the clean-up section. Take care as floors and other surfaces may become slippery.

6.2. Environmental precautions

Environmental precautions Collect and dispose of spillage as indicated in Section 13. Do not discharge into drains or watercourses or onto the ground.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Stop leak if safe to do so. Absorb in vermiculite, dry sand or earth and place into containers. Flush contaminated area with plenty of water. Avoid the spillage or runoff entering drains, sewers or watercourses.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8. See Section 11 for additional information on health hazards. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Provide adequate ventilation. Avoid spilling. Avoid contact with skin and eyes. Wear protective clothing as described in Section 8 of this safety data sheet. Avoid breathing vapour/spray. Do not mix with other household chemical products. Do not mix with acid.

Advice on general occupational hygiene Good personal hygiene procedures should be implemented. Do not eat, drink or smoke when using this product. Wash skin thoroughly after handling. Take off contaminated clothing and wash it before reuse. Use appropriate hand lotion to prevent defatting and cracking of skin.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Store at room temperature. Keep out of the reach of children. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

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

Ingredient comments No exposure limits known for ingredient(s).

ALCOHOLS, C12-14, ETHOXYLATED (CAS: 68439-50-9)

| DNEL | Workers - Inhalation; Long term systemic effects: 294 mg/m³  
Workers - Dermal; Long term systemic effects: 2080 mg/kg/day  
General population - Inhalation; Long term systemic effects: 87 mg/m³  
General population - Dermal; Long term systemic effects: 1250 mg/kg/day  
General population - Oral; Long term systemic effects: 25 mg/kg/day |
| PNEC | - Fresh water; 0.0437 mg/l  
- Intermittent release; 0.004 mg/l  
- STP; 10 mg/l  
- Sediment (Freshwater); 31 mg/kg  
- Sediment (Marinewater); 31 mg/kg  
- Soil; 1 mg/kg |
5L SUPER PROFESSIONAL BACTERICIDAL DETERGENT D8

COCONUT DIETHANOLAMIDE (CAS: 68603-42-9)

**DNEL**
- Workers - Inhalation; Long term systemic effects: 73.4 mg/m³
- Workers - Dermal; Long term systemic effects: 4.16 mg/kg/day
- Workers - Dermal; Long term local effects: 0.0936 mg/cm²
- General population - Inhalation; Long term systemic effects: 21.73 mg/m³
- General population - Dermal; Long term systemic effects: 2.5 mg/kg/day
- General population - Dermal; Long term local effects: 0.0562 mg/cm²
- General population - Oral; Long term systemic effects: 6.25 mg/kg/day

**PNEC**
- Fresh water; 0.007 mg/l
- Marine water; 0.001 mg/l
- STP; 830 mg/l
- Sediment (Freshwater); 0.195 mg/kg
- Sediment (Marine water); 0.019 mg/kg
- Soil; 0.035

DIETHANOLAMINE (CAS: 111-42-2)

**DNEL**
- Workers - Inhalation; Long term local effects: 1 mg/m³
- Workers - Dermal; Long term systemic effects: 0.13 mg/cm²
- General population - Inhalation; Long term local effects: 0.25 mg/m³
- General population - Dermal; Long term systemic effects: 0.07 mg/kg/day
- General population - Oral; Long term systemic effects: 0.06 mg/kg/day

**PNEC**
- Fresh water; 0.02 mg/l
- Marine water; 0.002 mg/l
- STP; 100 mg/l
- Sediment (Freshwater); 0.092 mg/kg
- Sediment (Marine water); 0.009 mg/kg
- Soil; 0.007 mg/kg

8.2. Exposure controls

**Protective equipment**

- Provide adequate ventilation.

**Appropriate engineering controls**

**Eye/face protection**

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses. Personal protective equipment for eye and face protection should comply with European Standard EN166.

**Hand protection**

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. It is recommended that gloves are made of the following material: Polyvinyl chloride (PVC). Rubber (natural, latex). Neoprene. Nitrile rubber. Polyethylene. To protect hands from chemicals, gloves should comply with European Standard EN374.

**Other skin and body protection**

Wear appropriate clothing to prevent repeated or prolonged skin contact. Use appropriate hand lotion to prevent defatting and cracking of skin.
5L SUPER PROFESSIONAL BACTERICIDAL DETERGENT D8

Hygiene measures
When using do not eat, drink or smoke. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Use appropriate skin cream to prevent drying of skin.

Respiratory protection
Respiratory protection not required.

Environmental exposure controls
Avoid releasing into the environment.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance
Liquid.

Colour
Blue.

Odour
Mild.

pH
pH (concentrated solution): 7.5 typically

Relative density
1.010 typically @ 20°C

Solubility(ies)
Soluble in water.

Explosive under the influence of a flame
Not considered to be explosive.

Comments
Information given is applicable to the product as supplied.

9.2. Other information

Other information
Not relevant.

SECTION 10: Stability and reactivity

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

10.2. Chemical stability
Stability
Stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions
Possibility of hazardous reactions
Not applicable.

10.4. Conditions to avoid
Conditions to avoid
Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials
Materials to avoid
No specific material or group of materials is likely to react with the product to produce a hazardous situation.

10.6. Hazardous decomposition products
Hazardous decomposition products
No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Toxicological effects
Information given is based on data of the components and of similar products.
5L SUPER PROFESSIONAL BACTERICIDAL DETERGENT D8

Acute toxicity - oral
Notes (oral LD₅₀) Based on available data the classification criteria are not met.
ATE oral (mg/kg) 9,937.5

Acute toxicity - dermal
Notes (dermal LD₅₀) Based on available data the classification criteria are not met.
ATE dermal (mg/kg) 39,000.0

Acute toxicity - inhalation
Notes (inhalation LC₅₀) Based on available data the classification criteria are not met.

Skin corrosion/irritation
Causes skin irritation. Calculation method.

Serious eye damage/irritation
Causes serious eye damage. Calculation method.

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

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

Germ cell mutagenicity
Based on available data the classification criteria are not met.

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

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

Specific target organ toxicity - single exposure
STOT - single exposure Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure
STOT - repeated exposure Not classified as a specific target organ toxicant after repeated exposure.

General information
This product has low toxicity.

Ingestion
May cause irritation. Symptoms following overexposure may include the following: Stomach pain. Nausea, vomiting. Diarrhoea.

Skin contact
Skin irritation should not occur when used as recommended. Prolonged or repeated exposure may cause the following adverse effects: Irritation. Redness. Dryness and/or cracking. Mild dermatitis, allergic skin rash.

Eye contact
Irritating to eyes. May cause serious eye damage. Severe irritation, burning, tearing and blurred vision. Corneal damage.

Toxicological information on ingredients.
QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16-ALKYLDIMETHYL, CHLORIDES

Acute toxicity - oral
Acute toxicity oral (LD₅₀ mg/kg) 397.5
SECTION 12: Ecological Information

Ecotoxicity

There are no data on the ecotoxicity of this product. Not regarded as dangerous for the environment.

12.1. Toxicity

Toxicity

Not considered toxic to fish.

Ecological information on ingredients.

QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16-ALKYLDIMETHYL, CHLORIDES

Acute aquatic toxicity

LE(C)_50 0.1 < L(E)C50 ≤ 1

M factor (Acute) 1

Acute toxicity - fish LC50, 96 hours: 0.85 – 1.2 mg/l, Fish

Acute toxicity - aquatic invertebrates EC50, 48 hours: 0.02 mg/l, Daphnia magna

Acute toxicity - aquatic plants LC50, 96 hours: 0.06 mg/l, Algae

ALCOHOLS, C12-14, ETHOXYLATED

Acute aquatic toxicity

LE(C)_50 0.1 < L(E)C50 ≤ 1

M factor (Acute) 1

Chronic aquatic toxicity

Chronic toxicity - aquatic invertebrates NOEC, 21 days: 0.77 mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability

There are no data on the degradability of this product. The surfactant(s) contained in this product complies(comply) 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.

Ecological information on ingredients:

QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16-ALKYLDIMETHYL, CHLORIDES

Persistence and degradability

The substance is readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential

No data available on bioaccumulation.
5L SUPER PROFESSIONAL BACTERICIDAL DETERGENT D8

Ecological information on ingredients.

ALCOHOLS, C12-14, ETHOXYLATED

Bioaccumulative potential  No potential for bioaccumulation.

12.4. Mobility in soil
Mobility  The product is water-soluble and may spread in water systems.

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  None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods
General information  Do not discharge into drains or watercourses or onto the ground.
Disposal methods  Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Reuse or recycle products 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).

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 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
5L SUPER PROFESSIONAL BACTERICIDAL DETERGENT D8

National regulations

The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended).

EU legislation


Guidance

Workplace Exposure Limits EH40.
ECHA Guidance on the Application of the CLP Criteria.
ECHA Guidance on the compilation of safety data sheets.
COSHH Essentials.

1.5.2. Chemical safety assessment

Currently we do not have information from our suppliers about this.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet

DNEL: Derived No Effect Level.
PBT: Persistent, Bioaccumulative and Toxic substance.
PNEC: Predicted No Effect Concentration.

Revision comments

New revision number applied to comply with Commission Regulation (EU) No 2015/830 Of 28 May 2015’ NOTE: Lines within the margin indicate significant changes from the previous revision.

Revision date

12/07/2018

Revision

3

Supersedes date

25/05/2017

SDS number

20600

Risk phrases in full

R21/22 Harmful in contact with skin and if swallowed.
R34 Causes burns.
R38 Irritating to skin.
R41 Risk of serious damage to eyes.
R50 Very toxic to aquatic organisms.
5L SUPER PROFESSIONAL BACTERICIDAL DETERGENT D8

Hazard statements in full

- 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.
- H400 Very toxic to aquatic life.
- H411 Toxic to aquatic life with long lasting effects.
- H412 Harmful to aquatic life with long lasting effects.

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.