



**SAFETY DATA SHEET**  
**KI-403 MOSS AND ALGAE REMOVER**  
Commission Regulation (EU) No 2015/830 of 28 May 2015.

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

**1.1. Product identifier**

Product name                      KI-403 MOSS AND ALGAE REMOVER  
Product number                  800-196-0008 C12  
Container size                    5L

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

Identified uses                    Detergent. Disinfectant.

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

Supplier                            Cleaning Supplies 2U Ltd.  
   Unit 4, Pineapple Park  
   Road One,  
   Winsford Industrial Estate  
   Winsford  
   Cheshire  
   CW7 3PR  
Tel:                                    +44 (0) 1606 863637  
  
Email:                                info@cleaningsupplies2u.co.uk

**1.4. Emergency telephone number**

Emergency telephone            +44 (0) 1606 863637

National emergency telephone: In case of a medical emergency following exposure to a chemical call NHS Direct in England number                                    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 Irrit. 2 - H319  
Environmental hazards            Not Classified

**2.2. Label elements**

Pictogram



Signal word                         Warning

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Hazard statements	H315 Causes skin irritation. H319 Causes serious eye irritation.
Precautionary statements	P264 Wash contaminated skin thoroughly after handling. 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. P362+P364 Take off contaminated clothing and wash it before reuse. P501 Dispose of contents/ container in accordance with local regulations. P280 Wear protective clothing and gloves.
Contains	QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16-ALKYLDIMETHYL, CHLORIDES, ALCOHOLS, C12-14, ETHOXYLATED
Detergent labelling	< 5% disinfectants, < 5% non-ionic surfactants

### 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

QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-16-ALKYLDIMETHYL, CHLORIDES	1-5%
CAS number: 68424-85-1                      EC number: 270-325-2 M factor (Acute) = 1	
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
ALCOHOLS, C12-14, ETHOXYLATED	<1%
CAS number: 68439-50-9                      EC number: 500-213-3 M factor (Acute) = 1	REACH registration number: 01-2119487984-16-XXXX
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.

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.

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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.
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## **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.
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### 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.
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### 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 clothing.	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective for firefighters clothing.

## **SECTION 6: Accidental release measures**

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

Specific end use(s)	The identified uses for this product are detailed in Section 1.2.
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### **SECTION 8: Exposure Controls/personal protection**

#### **8.1. Control parameters**

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

DNEL	<p>Workers - Inhalation; Long term systemic effects: 294 mg/m<sup>3</sup></p> <p>Workers - Dermal; Long term systemic effects: 2080 mg/kg/day</p> <p>General population - Inhalation; Long term systemic effects: 87 mg/m<sup>3</sup></p> <p>General population - Dermal; Long term systemic effects: 1250 mg/kg/day</p> <p>General population - Oral; Long term systemic effects: 25 mg/kg/day</p>
PNEC	<p>- Fresh water; 0.0437 mg/l</p> <p>- Intermittent release; 0.004 mg/l</p> <p>- STP; 10 mg/l</p> <p>- Sediment (Freshwater); 31 mg/kg</p> <p>- Sediment (Marinewater); 31 mg/kg</p> <p>- Soil; 1 mg/kg</p>

#### **8.2. Exposure controls**

##### Protective equipment



Appropriate engineering controls

Provide adequate ventilation.

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.

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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.
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	Pale green liquid.
Odour	Odourless.
pH	pH (concentrated solution): 10.5
Relative density	0.98-1.01 @ 20°C
Solubility(ies)	Soluble in water.
Explosive properties	There are no chemical groups present in the product that are associated with explosive properties.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	There are no chemical groups present in the product that are associated with oxidising properties.
Comments	Information given is applicable to the product as supplied.

#### 9.2. Other information

Other information	Not relevant.
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### **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

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

Stability	Stable at normal ambient temperatures.
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#### 10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Not applicable.
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#### 10.4. Conditions to avoid

Conditions to avoid	Avoid exposure to high temperatures or direct sunlight.
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### 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                      No information available.

#### Acute toxicity - oral

Notes (oral LD<sub>50</sub>)                              Estimated value. Based on available data the classification criteria are not met.

ATE oral (mg/kg)                              31,800.0

#### Acute toxicity - dermal

Notes (dermal LD<sub>50</sub>)                              Estimated value. Based on available data the classification criteria are not met.

ATE dermal (mg/kg)                              124,800.0

#### Acute toxicity - inhalation

Notes (inhalation LC<sub>50</sub>)                              Based on available data the classification criteria are not met.

#### Skin corrosion/irritation

Skin corrosion/irritation                      Skin irritation. Calculation method.

#### Serious eye damage/irritation

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

#### 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                              Does not contain any substances known to be mutagenic.

#### Carcinogenicity

Carcinogenicity                              Does not contain any substances known to be carcinogenic.

#### Reproductive toxicity

Reproductive toxicity - fertility                      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.

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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 (LD<sub>50</sub> mg/kg) 397.5

Species Rat

ATE oral (mg/kg) 397.5

##### Acute toxicity - dermal

ATE dermal (mg/kg) 1,560.0

### **SECTION 12: Ecological Information**

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

Toxicity	Not considered toxic to fish.
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### Ecological information on ingredients.

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

##### Acute aquatic toxicity

LE(C)<sub>50</sub> 0.1 < L(E)C50 ≤ 1

M factor (Acute) 1

Acute toxicity - fish LC<sub>50</sub>, 96 hours: 0.85 - 1.2 mg/l, Fish

Acute toxicity - aquatic invertebrates EC<sub>50</sub>, 48 hours: 0.02 mg/l, Daphnia magna

Acute toxicity - aquatic plants LC<sub>50</sub>, 96 hours: 0.06 mg/l, Algae

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

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

Persistence and degradability	The substance is readily biodegradable.
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### 12.3. Bioaccumulative potential

Bioaccumulative potential No data available on 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

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



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EU legislation	<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> <p>Commission Regulation (EU) No 453/2010 of 20 May 2010.</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>Commission Directive 2000/39/EC of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work (as amended).</p> <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>Commission Regulation (EU) No 2015/830 of 28 May 2015.</p>
Guidance	<p>Workplace Exposure Limits EH40.</p> <p>ECHA Guidance on the Application of the CLP Criteria.</p> <p>ECHA Guidance on the compilation of safety data sheets.</p> <p>COSHH Essentials.</p> <p>Technical Guidance WM2: Hazardous Waste.</p>

### 15.2. Chemical safety assessment

No information available.

### **SECTION 16: Other information**

Abbreviations and acronyms used in the safety data sheet	<p>DNEL: Derived No Effect Level.</p> <p>PBT: Persistent, Bioaccumulative and Toxic substance.</p> <p>PNEC: Predicted No Effect Concentration.</p> <p>MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.</p>
Revision comments	<p>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.</p>
Revision date	09/07/2018
Revision	4
Supersedes date	08/05/2017
SDS number	20599
Risk phrases in full	<p>Not classified.</p> <p>R21/22 Harmful in contact with skin and if swallowed.</p> <p>R22 Harmful if swallowed.</p> <p>R34 Causes burns.</p> <p>R41 Risk of serious damage to eyes.</p> <p>R50 Very toxic to aquatic organisms.</p>

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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.
- H319 Causes serious eye irritation.
- H400 Very toxic to aquatic life.
- 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.