

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

**1.1. Product identifier**

**Product name:** TRIO 100

**Product code:** 201

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

**Use of substance / mixture:** PC8: Biocidal products (e.g. Disinfectants, pest control).

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

**Company name:** Clover Chemicals Ltd

Clover House

Macclesfield Road

Whaley Bridge, High Peak

Derbyshire

SK23 7DQ

UK

**Tel:** +44 (0) 1663 733114

**Fax:** +44 (0) 1663 733115

**Email:** technical@cloverchemicals.com

**1.4. Emergency telephone number**

**Emergency tel:** NHS 111

NHS Direct Wales 08454647

ROI 01 809 2166

**Section 2: Hazards identification**

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

**Classification under CLP:** Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Skin Corr. 1B: H314

**Most important adverse effects:** Causes severe skin burns and eye damage. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

**2.2. Label elements**

**Label elements:**

**Hazard statements:** H314: Causes severe skin burns and eye damage.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

# SAFETY DATA SHEET

TRIO 100

Page: 2

**Hazard pictograms:** GHS05: Corrosion

GHS09: Environmental



**Signal words:** Danger

**Precautionary statements:** P102: Keep out of reach of children.

P264: Wash hands thoroughly after handling.

P280: Wear eye protection, protective gloves.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water .

P337+P313: If eye irritation persists: Get medical advice/attention.

P332+P313: If skin irritation occurs: Get medical advice/attention.

P273: Avoid release to the environment.

## 2.3. Other hazards

**PBT:** This product is not identified as a PBT/vPvB substance.

## Section 3: Composition/information on ingredients

### 3.2. Mixtures

#### \* Hazardous ingredients:

##### C9-11 ALCOHOL ETHOXYLATE

EINECS	CAS	PBT / WEL	CLP Classification	Percent
-	68439-46-3	-	Eye Dam. 1: H318; Acute Tox. 4: H302	1-10%

##### QUATERNARY AMMONIUM COMPOUNDS, BENZYL (C12-C16)ALKYL DIMETHYL CHLORIDES

270-325-2	68424-85-1	-	Skin Corr. 1B: H314; Eye Dam. 1: H318; Aquatic Acute 1: H400; Acute Tox. 4: H302; Aquatic Chronic 1: H410	1-10%
-----------	------------	---	---	-------

##### DIDECYLDIMETHYLAMMONIUM CHLORIDE

230-525-2	7173-51-5	-	Acute Tox. 4: H302; Skin Corr. 1B: H314	1-10%
-----------	-----------	---	---	-------

##### C9/11 A, >3-6 EO PREDOMINANTLY LINEAR (DID 21)

POLYMER	160875-66-1	-	Eye Dam. 1: H318	1-10%
---------	-------------	---	------------------	-------

[cont...]

# SAFETY DATA SHEET

TRIO 100

Page: 3

ALCOHOLS, C12-C14, ETHOXYLATED

POLYMER	68439-50-9	-	Aquatic Acute 1: H400; Eye Dam. 1: H318	<1%
---------	------------	---	---	-----

**Contains:** Quaternary ammonium compounds, benzyl (C12-C16) alkyl dimethyl, chlorides (2.967 %w/w) Didecyldimethylammonium chloride (2.967 %w/w)

## Section 4: First aid measures

### 4.1. Description of first aid measures

**Skin contact:** Remove all contaminated clothes and footwear immediately unless stuck to skin. Rinse skin with water. Transfer to hospital if there are burns or symptoms of poisoning.

**Eye contact:** Bathe the eye with running water for 15 minutes. Consult a doctor.

**Ingestion:** Do not induce vomiting. Wash out mouth with water. If conscious, give half a litre of water to drink immediately. Consult a doctor.

**Inhalation:** Not applicable.

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

**Skin contact:** There may be irritation and redness at the site of contact.

**Eye contact:** There may be irritation and pain.

**Ingestion:** There may be soreness and redness of the mouth and throat.

**Delayed / immediate effects:** Immediate effects can be expected after short-term exposure.

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

## Section 5: Fire-fighting measures

### 5.1. Extinguishing media

**Extinguishing media:** Water.

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

**Exposure hazards:** In combustion emits toxic fumes of carbon dioxide / carbon monoxide.

### 5.3. Advice for fire-fighters

**Advice for fire-fighters:** Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

## Section 6: Accidental release measures

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

**Personal precautions:** Refer to section 8 of SDS for personal protection details. Mark out the contaminated area with signs and prevent access to unauthorised personnel. Turn leaking containers leak-side up to prevent the escape of liquid.

### 6.2. Environmental precautions

**Environmental precautions:** Do not discharge into drains or rivers.

[cont...]

# SAFETY DATA SHEET

TRIO 100

Page: 4

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

**Clean-up procedures:** Transfer to a suitable container.

## 6.4. Reference to other sections

## Section 7: Handling and storage

### 7.1. Precautions for safe handling

**Handling requirements:** Avoid the formation or spread of mists in the air.

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

**Storage conditions:** Keep container tightly closed.

**Suitable packaging:** Polyethylene.

### 7.3. Specific end use(s)

## Section 8: Exposure controls/personal protection

### 8.1. Control parameters

**Workplace exposure limits:** No data available.

### DNEL/PNEC Values

**DNEL / PNEC** No data available.

### 8.2. Exposure controls

**Engineering measures:** Not applicable.

**Hand protection:** Protective gloves. Nitrile gloves.

**Eye protection:** Safety glasses.

## Section 9: Physical and chemical properties

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

**State:** Liquid

**Colour:** Yellow

**Odour:** Barely perceptible odour

**Evaporation rate:** Not applicable.

**Oxidising:** Non-oxidising (by EC criteria)

**Solubility in water:** Soluble

**Viscosity:** Non-viscous

**Boiling point/range°C:** 100

**Flammability limits %: lower:** Not applicable.

**Part.coeff. n-octanol/water:** Not applicable.

**Vapour pressure:** Not applicable.

**pH:** 11

**Melting point/range°C:** 0

**upper:** Not applicable.

**Autoflammability°C:** Not applicable.

**Relative density:** 1.003

**VOC g/l:** 0

[cont...]

# SAFETY DATA SHEET

TRIO 100

Page: 5

## 9.2. Other information

Other information: No data available.

## Section 10: Stability and reactivity

### 10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

### 10.2. Chemical stability

Chemical stability: Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.

### 10.4. Conditions to avoid

### 10.5. Incompatible materials

### 10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes of carbon dioxide / carbon monoxide.

## Section 11: Toxicological information

### 11.1. Information on toxicological effects

#### Hazardous ingredients:

#### QUATERNARY AMMONIUM COMPOUNDS, BENZYL (C12-C16)ALKYL DIMETHYL CHLORIDES

ORAL	RAT	LD50	795	mg/kg
------	-----	------	-----	-------

#### DIDECYLDIMETHYLAMMONIUM CHLORIDE

DERMAL	RAT	LD50	>2000	mg/kg
ORAL	RAT	LD50	658	mg/kg

#### C9/11 A, >3-6 EO PREDOMINANTLY LINEAR (DID 21)

ORL	RAT	LD50	>2000	mg/kg
-----	-----	------	-------	-------

#### ALCOHOLS, C12-C14, ETHOXYLATED

ORL	RAT	LD50	>5000	mg/kg
-----	-----	------	-------	-------

#### Relevant hazards for product:

Hazard	Route	Basis
Skin corrosion/irritation	DRM	Hazardous: calculated

[cont...]

# SAFETY DATA SHEET

TRIO 100

Page: 6

Serious eye damage/irritation	OPT	Hazardous: calculated
-------------------------------	-----	-----------------------

## Symptoms / routes of exposure

**Skin contact:** There may be irritation and redness at the site of contact.

**Eye contact:** There may be irritation and pain.

**Ingestion:** There may be soreness and redness of the mouth and throat.

**Delayed / immediate effects:** Immediate effects can be expected after short-term exposure.

## Section 12: Ecological information

### 12.1. Toxicity

#### Hazardous ingredients:

##### C9-11 ALCOHOL ETHOXYLATE

FISH	96H LC50	1-10	mg/l
------	----------	------	------

##### QUATERNARY AMMONIUM COMPOUNDS, BENZYL (C12-C16)ALKYL DIMETHYL CHLORIDES

Daphnia magna	48H EC50	.016	mg/l
GREEN ALGA ( <i>Selenastrum capricornutum</i> )	72H ErC50	.026	mg/l
RAINBOW TROUT ( <i>Oncorhynchus mykiss</i> )	96H LC50	.85	mg/l

##### DIDECYLDIMETHYLAMMONIUM CHLORIDE

Daphnia magna	48H EC50	0.06	mg/l
GREEN ALGA ( <i>Selenastrum capricornutum</i> )	96H LC50	0.12	mg/l
ZEBRAFISH ( <i>Brachydanio rerio</i> )	96H LC50	0.97	mg/l

##### C9/11 A, >3-6 EO PREDOMINANTLY LINEAR (DID 21)

Scenedesmus	48H EC50	10 - 100	mg/l
-------------	----------	----------	------

##### ALCOHOLS, C12-C14, ETHOXYLATED

-	48H EC50	>1-<=10	mg/l
-	48H EC50	>100	mg/l
-	96H LC50	>1-<=10	mg/l
-	96H LC50	>1-<=10	mg/l

### 12.2. Persistence and degradability

**Persistence and degradability:** Biodegradable. The surfactants contained in this preparation comply with the biodegradability criteria as laid down in regulation (EC) No.648/2004 on detergents.

### 12.3. Bioaccumulative potential

**Bioaccumulative potential:** No bioaccumulation potential.

[cont...]

# SAFETY DATA SHEET

TRIO 100

Page: 7

## 12.4. Mobility in soil

**Mobility:** Soluble in water.

## 12.5. Results of PBT and vPvB assessment

**PBT identification:** This product is not identified as a PBT/vPvB substance.

## 12.6. Other adverse effects

## Section 13: Disposal considerations

### 13.1. Waste treatment methods

**Disposal of packaging:** Dispose of as normal industrial waste.

**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

## Section 14: Transport information

### 14.1. UN number

**UN number:** UN3082

### 14.2. UN proper shipping name

**Shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(alkyldimethylbenzylammoniumchloride, didecyldimethylammoniumchloride)

### 14.3. Transport hazard class(es)

**Transport class:** 9

### 14.4. Packing group

**Packing group:** III

### 14.5. Environmental hazards

**Environmentally hazardous:** Yes

**Marine pollutant:** Yes

### 14.6. Special precautions for user

**Tunnel code:** E

**Transport category:** 3

## Section 15: Regulatory information

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

**Specific regulations:** . . . .

### 15.2. Chemical Safety Assessment

## Section 16: Other information

### Other information

**Other information:** This safety data sheet is prepared in accordance with Commission Regulation (EU) No

[cont...]

# SAFETY DATA SHEET

TRIO 100

Page: 8

2015/830.

\* indicates text in the SDS which has changed since the last revision.

**Phrases used in s.2 and s.3:** H302: Harmful if swallowed.

H314: Causes severe skin burns and eye damage.

H318: Causes serious eye damage.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

**Legal disclaimer:** The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.