

SAFETY DATA SHEET

TRIO 100

Page: 1

Compilation date: 14/08/2014

Revision No: 2

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 Direct 08454647

NHS24 0845242424

ROI 018092166

(office hours only)

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CHIP: Xi: R38; Xi: R41; N: R50

Most important adverse effects: Irritating to skin. Risk of serious damage to eyes. Very toxic to aquatic organisms.

2.2. Label elements

Label elements under CHIP:

Hazard symbols: Irritant.

Dangerous for the environment.



SAFETY DATA SHEET

TRIO 100

Page: 2

Risk phrases: R38: Irritating to skin.
R41: Risk of serious damage to eyes.
R50: Very toxic to aquatic organisms.

Safety phrases: S2: Keep out of the reach of children.
S39: Wear eye / face protection.
S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S61: Avoid release to the environment. Refer to special instructions / safety data sheets.

Precautionary phrases: Use biocides safely. Always read the label and product information before use.

2.3. Other hazards

PBT: This product is not identified as a PBT substance.

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

C 12/15 (MEAN VALUE C<14)A.>6-9 EO (DID 28)

EINECS	CAS	CHIP Classification	CLP Classification	Percent
POLYMER	9043-30-5	Xn: R22; Xi: R41	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	C: R34; Xn: R22; N: R50	Met. Corr. 1: H290; Skin Corr. 1B: H314; Aquatic Acute 1: H400; Acute Tox. 4: H302	1-10%
-----------	------------	-------------------------	--	-------

DIDECYLDIMETHYLAMMONIUM CHLORIDE

230-525-2	7173-51-5	Xn: R22; C: R34	Acute Tox. 4: H302; Skin Corr. 1B: H314	1-10%
-----------	-----------	-----------------	---	-------

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

POLYMER	160875-66-1	Xi: R41	Eye Dam. 1: H318	1-10%
---------	-------------	---------	------------------	-------

ALCOHOLS, C12-C14, ETHOXYLATED

POLYMER	68439-50-9	Xi: R41; N: R50	Aquatic Acute 1: H400; Eye Dam. 1: H318	<1%
---------	------------	-----------------	---	-----

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Wash immediately with plenty of soap and 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.

[cont...]

SAFETY DATA SHEET

TRIO 100

Page: 3

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. 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.

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

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.

[cont...]

SAFETY DATA SHEET

TRIO 100

Page: 4

8.1. 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

Oxidising: Non-oxidising (by EC criteria)

Solubility in water: Soluble

Viscosity: Non-viscous

Boiling point/range°C: 100

Melting point/range°C: 0

Flammability limits %: lower: Not applicable.

upper: Not applicable.

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

Autoflammability°C: Not applicable.

Vapour pressure: Not applicable.

Relative density: 1.003

pH: 9

VOC g/l: 0

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

[cont...]

SAFETY DATA SHEET

TRIO 100

Page: 5

11.1. Information on toxicological effects

Hazardous ingredients:

C 12/15 (MEAN VALUE C<14)A.>6-9 EO (DID 28)

ORL	RAT	LD50	1.5	g/kg
-----	-----	------	-----	------

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 effects for mixture:

Effect	Route	Basis
Irritation	OPT DRM	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:

C 12/15 (MEAN VALUE C<14)A.>6-9 EO (DID 28)

-	96H LC50	>1	mg/l
---	----------	----	------

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

Daphnia magna	48H EC50	.016	mg/l
---------------	----------	------	------

[cont...]

SAFETY DATA SHEET

TRIO 100

Page: 6

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.

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 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

[cont...]

SAFETY DATA SHEET

TRIO 100

Page: 7

14.2. UN proper shipping name

Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(alkydimethylbenzylammoniumchloride, 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: No

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

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 453/2010.

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

Phrases used in s.2 and 3: H290: May be corrosive to metals.
H302: Harmful if swallowed.
H314: Causes severe skin burns and eye damage.
H318: Causes serious eye damage.
H400: Very toxic to aquatic life.
R22: Harmful if swallowed.
R34: Causes burns.
R38: Irritating to skin.
R41: Risk of serious damage to eyes.
R50: Very toxic to aquatic organisms.

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.