

**Sanichlor****Section: 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****1.1 Product identifier**

Product name : Sanichlor  
Product code : 111337E  
Use of the Substance/Mixture : Disinfectant  
Substance type: : Mixture

**For professional users only.**

Product dilution information : No dilution information provided.

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

Identified uses : Surface disinfectant. Manual process  
Recommended restrictions on use : Reserved for industrial and professional use.

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

Company : Ecolab Ltd.  
PO Box 11; Winnington Avenue  
Northwich, Cheshire, United Kingdom CW8 4DX  
+ 44 (0)1606 74488  
ccs@ecolab.com

**1.4 Emergency telephone number**

Emergency telephone number : Food & Beverage, Institutional, Agriculture, Textile Hygiene:  
Northwich: +44 (0)1606 74488  
Healthcare Leeds: +44 (0)113 232 2480  
Healthcare Swansea: +44 (0)1235 239670  
Poison Information Centre telephone number : Not Available

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**Section: 2. HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture****Classification (REGULATION (EC) No 1272/2008)**

Eye irritation, Category 2	H319
Specific target organ toxicity - single exposure, Category 3, Respiratory system	H335
Acute aquatic toxicity, Category 1	H400
Chronic aquatic toxicity, Category 1	H410

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**Classification (67/548/EEC, 1999/45/EC)**

Xn; HARMFUL	R22
N; DANGEROUS FOR THE ENVIRONMENT	R31
	R36/37
	R50/53

For the full text of the R-phrases mentioned in this Section, see Section 16.  
 For the full text of the H-Statements mentioned in this Section, see Section 16.

**2.2 Label elements**

**Labelling (REGULATION (EC) No 1272/2008)**

Hazard pictograms :



Signal Word : Warning

Hazard Statements	:	H319	Causes serious eye irritation.
		H335	May cause respiratory irritation.
		H400	Very toxic to aquatic life.
		H410	Very toxic to aquatic life with long lasting effects.

Supplemental Hazard Statements : EUH031 Contact with acids liberates toxic gas.

Precautionary Statements	:	<b>Prevention:</b>	
		P273	Avoid release to the environment.
		P280e	Wear eye protection/face protection.

Hazardous components which must be listed on the label:  
 troclosene sodium

**2.3 Other hazards**

Mixing this product with acid or ammonia releases chlorine gas. Do not mix with bleach or other chlorinated products – will cause chlorine gas.

**Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS**

**3.2 Mixtures**

**Hazardous components**

Chemical Name	CAS-No. EC-No. REACH No.	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration: [%]
troclosene sodium	2893-78-9 220-767-7	E-N-O-Xi-Xn; R02-R22-R31- R36/37-R08- R50/53	Note G Oxidizing solids Category 2; H272 Acute toxicity Category 4; H302 Eye irritation Category 2;	>= 50 - <= 100

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			H319 Specific target organ toxicity - single exposure Category 3; H335 Acute aquatic toxicity Category 1; H400 Chronic aquatic toxicity Category 1; H410	
adipic acid	124-04-9 204-673-3	Xi; R36	Eye irritation Category 2; H319	>= 20 - < 25
Sodium Carbonate(soda)	497-19-8 207-838-8 01-2119485498-19	Xi; R36	Eye irritation Category 2; H319	>= 3 - < 5

For the full text of the R-phrases mentioned in this Section, see Section 16.  
For the full text of the H-Statements mentioned in this Section, see Section 16.

**Section: 4. FIRST AID MEASURES**

**4.1 Description of first aid measures**

- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention.
- In case of skin contact : Rinse with plenty of water.
- If swallowed : Rinse mouth. Get medical attention if symptoms occur.
- If inhaled : Remove to fresh air. Treat symptomatically. Get medical attention if symptoms occur.

**4.2 Most important symptoms and effects, both acute and delayed**

See Section 11 for more detailed information on health effects and symptoms.

**4.3 Indication of immediate medical attention and special treatment needed**

Treatment : Treat symptomatically.

**Section: 5. FIREFIGHTING MEASURES**

**5.1 Extinguishing media**

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : None known.

**5.2 Special hazards arising from the substance or mixture**

Specific hazards during firefighting : Exposure to decomposition products may be a hazard to health.

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Hazardous combustion products : Decomposition products may include the following materials:  
Carbon oxides  
nitrogen oxides (NOx)  
Sulphur oxides  
Oxides of phosphorus

**5.3 Advice for firefighters**

Special protective equipment for firefighters : Use personal protective equipment.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire and/or explosion do not breathe fumes.

**Section: 6. ACCIDENTAL RELEASE MEASURES**

**6.1 Personal precautions, protective equipment and emergency procedures**

Advice for non-emergency personnel : Ensure clean-up is conducted by trained personnel only. Refer to protective measures listed in sections 7 and 8.

Advice for emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials.

**6.2 Environmental precautions**

Environmental precautions : Do not allow contact with soil, surface or ground water.

**6.3 Methods and materials for containment and cleaning up**

Methods for cleaning up : Sweep up and shovel into suitable containers for disposal.

**6.4 Reference to other sections**

See Section 1 for emergency contact information.  
For personal protection see section 8.  
See Section 13 for additional waste treatment information.

**Section: 7. HANDLING AND STORAGE**

**7.1 Precautions for safe handling**

Advice on safe handling : Avoid contact with skin and eyes. Do not breathe dust/fume/gas/mist/vapours/spray. Use only with adequate ventilation. Wash hands thoroughly after handling. Mixing this product with acid or ammonia releases chlorine gas. Do not mix with bleach or other chlorinated products – will cause chlorine gas.

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling.

**7.2 Conditions for safe storage, including any incompatibilities**

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Requirements for storage areas and containers : Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers.

Storage temperature : 0 °C to 40 °C

**7.3 Specific end uses**

Specific use(s) : Surface disinfectant. Manual process

**Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1 Control parameters**

Contains no substances with occupational exposure limit values.

**DNEL**

Sodium Carbonate(soda)	:	End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term local effects Value: 10 mg/m3
	:	End Use: Consumers Exposure routes: Inhalation Potential health effects: Acute local effects Value: 10 mg/m3

**8.2 Exposure controls**

**Appropriate engineering controls**

Engineering measures : Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.

**Individual protection measures**

Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling.

Eye/face protection (EN 166) : Safety glasses with side-shields

Hand protection (EN 374) : No special protective equipment required.

Skin and body protection (EN 14605) : No special protective equipment required.

Respiratory protection (EN 143, 14387) : When respiratory risks cannot be avoided or sufficiently limited by technical means of collective protection or by measures, methods or procedures of work organization, consider the use of certified respiratory protection equipment meeting EU requirements (89/656/EEC, 89/686/EEC), or equivalent, with filter type: B-P

**Environmental exposure controls**

General advice : Consider the provision of containment around storage vessels.

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**Section: 9. PHYSICAL AND CHEMICAL PROPERTIES**

**9.1 Information on basic physical and chemical properties**

Appearance	: tablet
Colour	: white
Odour	: Chlorine
pH	: 5.0 - 6.0, 1 %
Flash point	: Not applicable.
Odour Threshold	: Not applicable and/or not determined for the mixture
Melting point/freezing point	: Not applicable and/or not determined for the mixture
Initial boiling point and boiling range	: Not applicable and/or not determined for the mixture
Evaporation rate	: Not applicable and/or not determined for the mixture
Flammability (solid, gas)	: Not applicable and/or not determined for the mixture
Upper explosion limit	: Not applicable and/or not determined for the mixture
Lower explosion limit	: Not applicable and/or not determined for the mixture
Vapour pressure	: Not applicable and/or not determined for the mixture
Relative vapour density	: Not applicable and/or not determined for the mixture
Relative density	: Not applicable and/or not determined for the mixture
Water solubility	: soluble
Solubility in other solvents	: Not applicable and/or not determined for the mixture
Partition coefficient: n-octanol/water	: Not applicable and/or not determined for the mixture
Auto-ignition temperature	: Not applicable and/or not determined for the mixture
Thermal decomposition	: Not applicable and/or not determined for the mixture
Viscosity, kinematic	: Not applicable and/or not determined for the mixture
Explosive properties	: Not applicable and/or not determined for the mixture
Oxidizing properties	: The substance or mixture is not classified as oxidizing.

**9.2 Other information**

Not applicable and/or not determined for the mixture

**Section: 10. STABILITY AND REACTIVITY**

**10.1 Reactivity**

No dangerous reaction known under conditions of normal use.

**10.2 Chemical stability**

Stable under normal conditions.

**10.3 Possibility of hazardous reactions**

Mixing this product with acid or ammonia releases chlorine gas.

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Do not mix with bleach or other chlorinated products – will cause chlorine gas.

**10.4 Conditions to avoid**

None known.

**10.5 Incompatible materials**

Acids

**10.6 Hazardous decomposition products**

Decomposition products may include the following materials:

Carbon oxides  
nitrogen oxides (NO<sub>x</sub>)  
Sulphur oxides  
Oxides of phosphorus

**Section: 11. TOXICOLOGICAL INFORMATION**

**11.1 Information on toxicological effects**

Information on likely routes of exposure : Eye contact, Skin contact

**Toxicity**

Acute oral toxicity : Acute toxicity estimate : > 2,000 mg/kg

Acute inhalation toxicity : There is no data available for this product.

Acute dermal toxicity : There is no data available for this product.

Skin corrosion/irritation : There is no data available for this product.

Serious eye damage/eye irritation : There is no data available for this product.

Respiratory or skin sensitization : There is no data available for this product.

Carcinogenicity : There is no data available for this product.

Reproductive effects : There is no data available for this product.

Germ cell mutagenicity : There is no data available for this product.

Teratogenicity : There is no data available for this product.

STOT - single exposure : There is no data available for this product.

STOT - repeated exposure : There is no data available for this product.

Aspiration toxicity : There is no data available for this product.

**Components**

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Acute oral toxicity : troclosene sodium  
LD50 rat: 1,500 mg/kg

adipic acid  
LD50 rat: 5,560 mg/kg

Sodium Carbonate(soda)  
LD50 rat: 2,800 mg/kg

**Components**

Acute inhalation toxicity : adipic acid  
4 h LC50 rat: > 7.7 mg/l

**Components**

Acute dermal toxicity : troclosene sodium  
LD50 rabbit: > 10,000 mg/kg

adipic acid  
LD50 rabbit: > 7,940 mg/kg

**Potential Health Effects**

Eyes : Causes serious eye irritation.

Skin : Health injuries are not known or expected under normal use.

Ingestion : Health injuries are not known or expected under normal use.

Inhalation : May cause respiratory tract irritation. May cause nose, throat, and lung irritation.

Chronic Exposure : Health injuries are not known or expected under normal use.

**Experience with human exposure**

Eye contact : Redness, Pain, Irritation

Skin contact : No symptoms known or expected.

Ingestion : No symptoms known or expected.

Inhalation : Respiratory irritation, Cough

**Section: 12. ECOLOGICAL INFORMATION**

**12.1 Ecotoxicity**

Environmental Effects : Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

**Product**

Toxicity to fish : no data available

Toxicity to daphnia and other aquatic invertebrates : no data available



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Toxicity to algae : no data available

**Components**

Toxicity to fish : Sodium Carbonate(soda)  
96 h LC50 *Lepomis macrochirus* (Bluegill sunfish): 300 mg/l

**Components**

Toxicity to daphnia and other aquatic invertebrates : Sodium Carbonate(soda)  
48 h EC50 *Ceriodaphnia* (water flea): 213.5 mg/l

**Components**

Toxicity to algae : adipic acid  
96 h EC50: 26.6 mg/l

**12.2 Persistence and degradability**

**Product**

no data available

**Components**

Biodegradability : troclosene sodium  
Result: Poorly biodegradable  
  
adipic acid  
Result: Readily biodegradable.  
  
Sodium Carbonate(soda)  
Result: Not applicable - inorganic

**12.3 Bioaccumulative potential**

no data available

**12.4 Mobility in soil**

no data available

**12.5 Results of PBT and vPvB assessment**

**Product**

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**12.6 Other adverse effects**

no data available

**Section: 13. DISPOSAL CONSIDERATIONS**

Dispose of in accordance with the European Directives on waste and hazardous waste. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

**13.1 Waste treatment methods**

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- Product : The product should not be allowed to enter drains, water courses or the soil. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations. Dispose of wastes in an approved waste disposal facility.
- Contaminated packaging : Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers. Dispose of in accordance with local, state, and federal regulations.
- European Waste Catalogue : 200129\* - detergents containing dangerous substances

**Section: 14. TRANSPORT INFORMATION**

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

**Land transport (ADR/ADN/RID)**

- 14.1 UN number : Not dangerous goods
- 14.2 UN proper shipping name : Not dangerous goods
- 14.3 Transport hazard class(es) : Not dangerous goods
- 14.4 Packing group : Not dangerous goods
- 14.5 Environmental hazards : Not dangerous goods
- 14.6 Special precautions for user : Not dangerous goods

**Air transport (IATA)**

- 14.1 UN number : Not dangerous goods
- 14.2 UN proper shipping name : Not dangerous goods
- 14.3 Transport hazard class(es) : Not dangerous goods
- 14.4 Packing group : Not dangerous goods
- 14.5 Environmental hazards : Not dangerous goods
- 14.6 Special precautions for user : Not dangerous goods

**Sea transport (IMDG/IMO)**

- 14.1 UN number : Not dangerous goods
- 14.2 UN proper shipping name : Not dangerous goods
- 14.3 Transport hazard class(es) : Not dangerous goods
- 14.4 Packing group : Not dangerous goods
- 14.5 Environmental hazards : Not dangerous goods
- 14.6 Special precautions for user : Not dangerous goods
- 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not dangerous goods

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**Section: 15. REGULATORY INFORMATION**

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

according to Detergents : Contains: Disinfectants  
Regulation EC 648/2004 troclosene sodium

**National Regulations**

**Take note of Dir 94/33/EC on the protection of young people at work.**

Other regulations : The Chemicals (Hazard Information and Packaging for Supply) Regulations.  
The Control of Substances Hazardous to Health Regulations.  
Health and Safety at Work Act.

**15.2 Chemical Safety Assessment**

This product contains substances for which Chemical Safety Assessments are still required.

**Section: 16. OTHER INFORMATION**

**Full text of R-Phrases**

R02 Risk of explosion by shock, friction, fire or other sources of ignition.  
R08 Contact with combustible material may cause fire.  
R22 Harmful if swallowed.  
R31 Contact with acids liberates toxic gas.  
R36 Irritating to eyes.  
R36/37 Irritating to eyes and respiratory system.  
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Full text of H-Statements**

H272 May intensify fire; oxidiser.  
H302 Harmful if swallowed.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.

**Full text of other abbreviations**

(Q)SAR - (Quantitative) Structure Activity Relationship; ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; DIN - Standard of the German Institute for Standardisation; ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal

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inhibitory concentration; ICAO - International Civil Aviation Organization; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISO - International Organisation for Standardization; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TRGS - Technical Rule for Hazardous Substances; UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative; DSL - Domestic Substances List (Canada); KECI - Korea Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); AICS - Australian Inventory of Chemical Substances; IECSC - Inventory of Existing Chemical Substances in China; ENCS - Existing and New Chemical Substances (Japan); ISHL - Industrial Safety and Health Law (Japan); PICCS - Philippines Inventory of Chemicals and Chemical Substances; NZIoC - New Zealand Inventory of Chemicals; TCSI - Taiwan Chemical Substance Inventory; CMR - Carcinogen, Mutagen or Reproductive Toxicant; GLP - Good Laboratory Practice

Prepared by : Regulatory Affairs

Numbers quoted in the MSDS are given in the format: 1,000,000 = 1 million and 1,000 = 1 thousand. 0.1 = 1 tenth and 0.001 = 1 thousandth

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in the text.

**ANNEX: EXPOSURE SCENARIOS**

**DPD+ Substances:**

The following substances are the lead substances that contribute to the mixture Exposure Scenario according to the DPD+ Rule:

Route	Substance	CAS-No.	EINECS-No.
Ingestion	troclosene sodium	2893-78-9	220-767-7
Inhalation	troclosene sodium	2893-78-9	220-767-7
Dermal	No lead substance		
Eyes	troclosene sodium	2893-78-9	220-767-7
aquatic environment	troclosene sodium	2893-78-9	220-767-7

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To calculate if your downstream Operating Conditions and Risk management Measures are safe, please calculate your risk factor at the website below:

[www.ecetoc.org/tra](http://www.ecetoc.org/tra)

**Short title of Exposure Scenario** : **Surface disinfectant. Manual process**

**Use descriptors**

- Main User Groups : Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
- Sectors of end-use : **SU22:** Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
- Process categories : **PROC10:** Roller application or brushing  
**PROC8a:** Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at non-dedicated facilities
- Product categories : **PC35:** Washing and cleaning products (including solvent based products)
- Environmental Release Categories : **ERC8a:** Wide dispersive indoor use of processing aids in open systems