

SAFETY DATA SHEET

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

1.1 Product identifier

- Datasheet Number: SP103 Version 2.0.0
- Product Name: Multi-5 Chlorine Granules
- Contains troclosene sodium, dihydrate and aluminium sulphate

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

- Use of the substance/mixture: Pool / spa treatment; Biocide
- Use advised against: No information available

1.3 Details of the supplier of the safety data sheet

- Name of Supplier: Total Pool Chemicals Ltd
- Address of Supplier: Unit 1-5 , Pool Bank Business Park
High Street, Tarvin
Chester
UK
CH3 8JH
- Telephone: +44 (0)1829 740290
- Email: sales@totalpool.co.uk

1.4 Emergency telephone number

- +44 (0)1829 740290 (Office Hours)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

- Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]: Acute Tox. 4, H302; Eye Dam. 1, H318; STOT SE 3, H335; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; EUH031
- Additional information: For full text of Hazard- and EU Hazard-statements: see section 16

2.2 Label elements



- Signal Word: Danger
- Hazard statements
 - H302 - Harmful if swallowed.
 - H318 - Causes serious eye damage.
 - H335 - May cause respiratory irritation.
 - H410 - Very toxic to aquatic life with long lasting effects.
- Precautionary statements
 - P102 - Keep out of reach of children.
 - P271 - Use only outdoors or in a well-ventilated area.
 - P280 - Wear protective gloves/protective clothing/eye protection/face protection.
 - P301+P312 - IF SWALLOWED: Call a POISON CENTRE/doctor/ if you feel unwell.
 - P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
 - P501 - Dispose of contents/container to an authorised waste collection point

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SECTION 2: Hazards identification (....)

- Supplemental Hazard information (EU)
EUH031 - Contact with acids liberates toxic gas.

2.3 Other hazards

- Not a PBT according to REACH Annex XIII
- Not a vPvB according to REACH Annex XIII

SECTION 3: Composition/information on ingredients

3.1 Substances

- Not applicable

3.2 Mixtures

Chemical Name	Conc.	CAS No.	EC No.	Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]	SCL/ M-Factor/ ATE	REACH Registration Number	WEL/ OEL
Troclosene sodium, dihydrate	50 - 100%	51580-86-0	220-767-7	Acute Tox. 4, H302; Eye Irrit. 2, H319; STOT SE 3, H335; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; EUH031	-	-	None
Aluminium sulphate	2.5 - 10%	10043-01-3	233-135-0	Eye Dam. 1, H318	-	-	Yes
Copper sulphate pentahydrate	< 2.5%	7758-99-8	231-847-6	Acute Tox. 4, H302; Eye Dam. 1, H318; Aquatic Acute 1, H400; Aquatic Chronic 1, H410	M=10	-	None

SECTION 4: First aid measures

Rescuers should put on approved personal protective equipment (PPE) before administering first aid

Rescuers should take suitable precautions to avoid becoming casualties themselves

4.1 Description of first aid measures

- Contact with eyes
If substance has got into eyes, immediately wash out with plenty of water for several minutes
Irrigate eyes thoroughly whilst lifting eyelids
Remove contact lenses, if present and easy to do. Continue rinsing.
Get immediate medical advice/attention.
- Contact with skin
After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of soap and water
Contaminated clothing should be laundered before reuse
Get medical advice/attention.
- Ingestion
Rinse mouth with water (do not swallow)
Give plenty of water to drink
Do NOT induce vomiting.
Get immediate medical advice/attention.
- Inhalation
If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for

SECTION 4: First aid measures (....)

breathing.

IF exposed or concerned: Get medical advice/attention.

4.2 Most important symptoms and effects, both acute and delayed

- Contact with eyes
May cause severe damage with formation of corneal ulcers and permanent impairment of vision.
- Contact with skin
May cause redness and irritation
- Ingestion
May cause nausea/vomiting
May cause diarrhoea
The ingestion of significant quantities may cause damage to digestive system
- Inhalation
May cause respiratory irritation
May cause coughing and tightness of chest

4.3 Indication of any immediate medical attention and special treatment needed

- Treat symptomatically

SECTION 5: Firefighting measures**5.1 Extinguishing media**

- Suitable extinguishing media: Not flammable. In case of fire use extinguishing media appropriate to surrounding conditions
- Unsuitable extinguishing media: High volume water jet; DO NOT USE dry extinguishers containing ammonium compounds such as dry powder.

5.2 Special hazards arising from the substance or mixture

- Gives off irritating or toxic fumes (or gases) in a fire.
- Decomposition products may include chlorine, hydrochloric acid, sulphur and nitrous oxides

5.3 Advice for firefighters

- Evacuate the area and keep personnel upwind
- Keep container(s) exposed to fire cool, by spraying with water
- Collect contaminated fire extinguishing water separately. This MUST not be discharged into drains. Prevent fire extinguishing water from contaminating surface or ground water.
- Special protective equipment: Wear self-contained breathing apparatus (SCBA). Wear full protective clothing including chemical protection suit.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

- Rescuers should take suitable precautions to avoid becoming casualties themselves
- Only trained and authorised personnel should carry out emergency response
- Personal precautions for non-emergency personnel: Ensure adequate ventilation; Do not breathe dust; Wear protective clothing as per section 8; Wash thoroughly after handling.
- Personal precautions for emergency responders: Evacuate the area and keep personnel upwind; Wear self-contained breathing apparatus (SCBA); Wear suitable protective clothing, eye/face protection and gloves

6.2 Environmental precautions

- Avoid release to the environment.
- Do not allow to enter public sewers and watercourses

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SECTION 6: Accidental release measures (....)

- If contamination of drainage systems or water courses is unavoidable, immediately inform appropriate authorities

6.3 Methods and material for containment and cleaning up

- Evacuate the area and keep personnel upwind
- Stop leak if safe to do so.
- Avoid formation of dust
- Small spills
 - Wipe up spillage with damp absorbent cloth or towel
- Large spills
 - Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal
 - Seal containers and label them
 - Seek expert advice for removal and disposal of all contaminated materials and wastes
 - Flush spill area with copious amounts of water

6.4 Reference to other sections

- See section(s): 7, 8 & 13
-

SECTION 7: Handling and storage**7.1 Precautions for safe handling**

- Use only in well ventilated areas
- Keep away from heat and sources of ignition
- Do not breathe dust
- Do not mix with other chemicals
- Avoid contact with skin and eyes
- Wear protective clothing as per section 8
- Contaminated clothing should be laundered before reuse
- Contaminated work clothing should not be allowed out of the workplace.
- Use good personal hygiene practices
- Do not eat, drink or smoke when using this product.
- Wash thoroughly after handling.
- Ensure eyewash stations and safety showers are nearby

7.2 Conditions for safe storage, including any incompatibilities

- Keep in a cool, dry, well ventilated place
- Keep container tightly closed.
- Protect from moisture.
- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Keep away from food, drink and animal feedingstuffs
- Keep away from acid
- Avoid contact with metal

7.3 Specific end use(s)

- Pool / spa treatment
-

SECTION 8: Exposure controls/personal protection**8.1 Control parameters**

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SECTION 8: Exposure controls/personal protection (....)

- If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace exposure - Measurement of exposure by inhalation to chemical agents - Strategy for testing compliance with occupational exposure limit values). European Standard EN 14042 (Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents). European Standard EN 482 (Workplace exposure. General requirements for the performance of procedures for the measurement of chemical agents). Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

- The UK HSE (EH40) recommends the following limits for dusts: 10 mg/m³ (8hr TWA) total inhalable dust; 4 mg/m³ (8hr TWA) total respirable dust

- Troclosen sodium, dihydrate

(EU) OELV (short term limit value) (as chlorine) 0.5 ppm 1.5 mg/m³

WEL (short term limit value) (as chlorine) 0.5 ppm 1.5 mg/m³ (UK)

The following exposures are for troclosen sodium, CAS 2893-78-9

DNEL (inhalational) 8.11 mg/m³ Industry, Long Term, Systemic Effects

DNEL (dermal) 2.3 mg/kg (bw/day) Industry, Long Term, Systemic Effects

DNEL (inhalational) 1.99 mg/m³ Consumer, Long Term, Systemic Effects

DNEL (dermal) 1.15 mg/kg (bw/day) Consumer, Long Term, Systemic Effects

PNEC aqua (freshwater) 170 ng/l

PNEC aqua (intermittent releases, freshwater) 1.7 ug/l

PNEC aqua (marine water) 1.52 mg/l

PNEC (STP) 590 ug/l

PNEC sediment (freshwater) 7.56 mg/kg

PNEC terrestrial (soil) 756 ug/kg

- Aluminium sulphate

WEL (long term): 2 mg/m³ (UK as aluminium; salts, soluble)

DNEL (inhalational) 3 mg/m³ Industry, Long Term, Systemic Effects

DNEL (inhalational) 2 mg/m³ Industry, Acute/Short Term, Systemic Effects

DNEL (inhalational) 3 mg/m³ Industry, Long Term, Local Effects

DNEL (inhalational) 2 mg/m³ Industry, Acute/Short Term, Local Effects

DNEL (dermal) 1.71 mg/kg (bw/day) Industry, Long Term, Systemic Effects

DNEL (dermal) 46.7 mg/kg (bw/day) Industry, Acute/Short Term, Systemic Effects

DNEL (dermal) 882 µg/cm² Industry, Long Term, Local Effects

DNEL (dermal) 882 µg/cm² Industry, Acute/Short Term, Local Effects

DNEL (inhalational) 1.5 mg/m³ Consumer, Long Term, Systemic Effects

DNEL (inhalational) 1 mg/m³ Consumer, Acute/Short Term, Systemic Effects

DNEL (inhalational) 1.5 mg/m³ Consumer, Long Term, Local Effects

DNEL (inhalational) 1 mg/m³ Consumer, Acute/Short Term, Local Effects

DNEL (dermal) 855 µg/kg (bw/day) Consumer, Long Term, Systemic Effects

DNEL (dermal) 23.35 mg/kg (bw/day) Consumer, Acute/Short Term, Systemic Effects

DNEL (dermal) 441 µg/cm² Consumer, Long Term, Local Effects

DNEL (dermal) 441 µg/cm² Consumer, Acute/Short Term, Local Effects

DNEL (oral) 1.9 mg/kg (bw/day) Consumer, Long Term, Systemic Effects

DNEL (oral) 92.4 mg/kg (bw/day) Consumer, Acute/Short Term, Systemic Effects

PNEC aqua (freshwater) 4.5 mg/l

PNEC aqua (intermittent releases, freshwater) 30.11 mg/l

PNEC aqua (marine water) 64 mg/l

PNEC (STP) 60.2 mg/l

PNEC sediment (freshwater) 10 mg/kg

PNEC sediment (marine water) 31.4 mg/kg

PNEC (air) 2 mg/m³

PNEC terrestrial (soil) 58 mg/kg

PNEC secondary poisoning (food) 150 mg/kg

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SECTION 8: Exposure controls/personal protection (....)

- Copper sulphate
 - DNEL (inhalational) 1 mg/m³ Industry, Long Term, Systemic Effects
 - DNEL (inhalational) 1 mg/m³ Industry, Long Term, Local Effects
 - DNEL (dermal) 137 mg/kg (bw/day) Industry, Long Term, Systemic Effects
 - DNEL (oral) 41 µg/kg (bw/day) Consumer, Long Term, Systemic Effects
 - DNEL (oral) 82 µg/kg (bw/day) Consumer, Acute/Short Term, Systemic Effects
 - PNEC aqua (freshwater) 7.8 µg/l
 - PNEC aqua (marine water) 5.2 µg/l
 - PNEC (STP) 230 µg/l
 - PNEC sediment (freshwater) 87 mg/kg
 - PNEC sediment (marine water) 676 mg/kg
 - PNEC terrestrial (soil) 65 mg/kg

8.2 Exposure controls

- Selection and use of personal protective equipment should be based on a risk assessment of exposure potential
- Engineering controls
 - Ensure adequate ventilation
 - Engineering controls should be provided to prevent the need for ventilation
 - Use local exhaust ventilation and/or enclosures.
- Respiratory protection
 - No respiratory protection is needed if ventilation/extraction is adequate, otherwise wear approved dust mask
 - Use type FFP2 (EN 143) dust masks
- Eye/face protection
 - Wear goggles giving complete eye protection approved to standard EN 166.
- Skin protection
 - Wear protective gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and standard EN 374.
 - The selection of a suitable glove depends on work conditions and whether the product is present on its own or in combination with other substances. Breakthrough time is dependent on the characteristics of the brand of glove used and the supplier should be consulted.
 - Butyl rubber or nitrile rubber are recommended
 - Wear suitable protective clothing
 - Contaminated work clothing should not be allowed out of the workplace.
 - Contaminated clothing should be laundered before reuse
- Hygiene measures
 - Do not eat, drink or smoke when using this product.
 - Use good personal hygiene practices
 - Wash thoroughly after handling.
 - Ensure eyewash stations and safety showers are nearby
- Environmental exposure controls
 - Do not empty into drains
 - Do not allow to penetrate the ground/soil.



SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Appearance: Solid, white crystals or granules

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SECTION 9: Physical and chemical properties (....)

- Odour: Smells of chlorine
- Odour threshold: 1 - 3 ppm (value for chlorine)
- pH: 6 - 7 @ 20 °C (troclosene sodium, dihydrate)
- Melting point/freezing point: > 240 °C (troclosene sodium, dihydrate)
- Initial boiling point and boiling range: No information available
- Flashpoint: Not applicable
- Evaporation Rate: No information available
- Flammability (solid,gas): Not flammable
- Upper/lower flammability or explosive limits: Not applicable
- Vapour Pressure: No information available
- Vapour Density: No information available
- Relative Density: Tap density = 0.974 g/ml and pour density = 1.083 g/ml (troclosene sodium, dihydrate)
- Solubility(ies): Solubility in water: ca. 250 g/l @ 25° C (troclosene sodium, dihydrate)
- Partition Coefficient (n-Octanol/Water): No information available
- Autoignition Temperature: No information available
- Decomposition temperature: > 240 °C (troclosene sodium, dihydrate)
- Viscosity: Not applicable
- Explosive Properties: Not applicable
- Oxidising properties: Not oxidising

9.2 Other information

- No information available

SECTION 10: Stability and reactivity

10.1 Reactivity

- Warning! Do not use together with other products. May release dangerous gases (chlorine).

10.2 Chemical stability

- Stable under normal conditions

10.3 Possibility of hazardous reactions

- Contact with acids liberates toxic gas.

10.4 Conditions to avoid

- Avoid formation of dust
- Avoid contact with moisture
- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5 Incompatible materials

- Incompatible with acids, ammonia, bases, floor sweeping compounds, calcium hypochlorite, reducing agents, organic solvents and compounds
- Avoid contact with metals

10.6 Hazardous decomposition products

- Decomposition products may include chlorine, hydrochloric acid, sulphur and nitrous oxides

SECTION 11: Toxicological information

11.1 Information on toxicological effects

- Acute Toxicity
Harmful if swallowed.

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SECTION 11: Toxicological information (....)

Substances

Chemical Name	LD50 (oral, rat)	LC50 (inhalation, rat)	LD50 (dermal, rabbit)
Troclosene sodium, dihydrate	1 671 mg/kg	No data available	> 5 000 mg/kg
Aluminium sulphate	2 000 - 5 000 mg/kg	5 - 5.09 mg/l (4 h)	1 167.5 - 5 000 mg/kg
Copper sulphate	481 - 482 mg/kg	No data available	2 000 mg/kg (rat)

- Skin corrosion/irritation
Based on available data, the classification criteria are not met
- Serious eye damage/irritation
Causes serious eye damage.
Classification based on calculation and concentration thresholds
- Respiratory or skin sensitisation
Based on available data, the classification criteria are not met
- Germ cell mutagenicity
No evidence of mutagenic effects
- Carcinogenicity
No evidence of carcinogenic effects

Substances

Chemical Name	NOAEL (oral, rat)	NOAEC (inhalation, rat)	NOAEL (dermal, rat)
Troclosene sodium, dihydrate	No data available	No data available	No data available
Aluminium sulphate	850 mg/kg bw/day (mouse)	6.1 mg/m ³	6.8 mg/kg bw/day (mouse)
Copper sulphate	No data available	No data available	No data available

- Reproductive toxicity
No evidence of reproductive effects

Substances

Chemical Name	NOAEL (oral, rat)	NOAEC (inhalation, rat)	LOAEC (inhalation, rat)	NOAEL (dermal, rat)	LOAEL (dermal, mouse)
Troclosene sodium, dihydrate	No data available	No data available	No data available	No data available	No data available
Aluminium sulphate	5.41 mg/kg bw/day (Effect on fertility) 93 mg/kg bw/day (Effect on developmental toxicity)	38.6 mg/m ³ (Effect on fertility)	12 mg/m ³ (Effect on developmental toxicity)	2.48 mg/kg bw/day (Effect on fertility)	2.21 mg/kg bw/day (Effect on developmental toxicity)
Copper sulphate	No data available	No data available	No data available	No data available	No data available

- Specific target organ toxicity (STOT) - single exposure
May cause respiratory irritation.
Classification based on calculation and concentration thresholds
- Specific target organ toxicity (STOT) - repeated exposure
Based on available data, the classification criteria are not met

Substances

Chemical Name	NOAEL (oral, rat)	NOAEC (inhalation, rat)	NOAEL (dermal, rat)
Troclosene sodium, dihydrate	No data available	No data available	No data available
Aluminium sulphate	342 mg/kg bw/day	15 mg/m ³	8.55 mg/kg bw/day
Copper sulphate	1 000 ppm	2 mg/m ³	No data available

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SECTION 11: Toxicological information (....)

- Aspiration hazard
Based on available data, the classification criteria are not met
- Contact with eyes
Causes redness and swelling
May cause severe damage with formation of corneal ulcers and permanent impairment of vision.
- Contact with skin
May cause redness and irritation
- Ingestion
May cause nausea/vomiting
May cause diarrhoea
The ingestion of significant quantities may cause damage to digestive system
- Inhalation
May cause respiratory tract irritation.
May cause shortness of breath
May cause coughing

SECTION 12: Ecological information

12.1 Toxicity

- Very toxic to aquatic life with long lasting effects.
- Troclosen sodium, dihydrate
LC50 (fish) 0.23 - 0.355 mg/l (4 days)
EC50 (aquatic invertebrates) 0.17 - 0.28 mg/l (48 hr)
LC50 (aquatic algae, daphnia) 0.196 mg/l (48 hr)
- Aluminium sulphate
LC50 (fish) 122.17 mg/l
EC50 (aquatic invertebrates) 242 mg/l
EC50 (aquatic algae) 302 mg/l - 3.011 g/l
- Copper sulphate
LC50 (fish) 2.8 - 9 150 µg/l (4 days)
EC50 (aquatic invertebrates) 1 - 1 213 µg/l (48 hr)
EC50 (aquatic algae) 16.5 - 987 µg/l (72 hr)

12.2 Persistence and degradability

- This substance is not readily biodegradable

12.3 Bioaccumulative potential

- No data available

12.4 Mobility in soil

- Large volumes may penetrate soil and contaminate groundwater

12.5 Results of PBT and vPvB assessment

- Not a PBT according to REACH Annex XIII
- Not a vPvB according to REACH Annex XIII

12.6 Other adverse effects

- Do not empty into drains

SECTION 13: Disposal considerations

13.1 Waste treatment methods

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SECTION 13: Disposal considerations (....)

- Disposal should be in accordance with local, state or national legislation
- Do not discharge into drains or the environment, dispose to an authorised waste collection point
- Do not reuse empty containers without commercial cleaning or reconditioning

13.2 Classification

- The waste must be identified according to the List of Wastes (2000/532/EC)
- Hazardous Property Code(s): HP 4 Irritant; HP 5 Specific Target Organ Toxicity (STOT)/Aspiration Toxicity; HP 6 Acute Toxicity; HP 14 Ecotoxic

SECTION 14: Transport information

UN 3077 and UN 3082, when carried in single or combination packagings containing a net quantity per single or inner packaging of 5L/kg or less, are not subject to the provisions of ADR, RID, IMDG or IATA, provided the package meets the general packing quality provisions.



14.1 UN number

- UN No.: 3077

14.2 UN proper shipping name

- Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S
(Trolosene Sodium, Dihydrate)

14.3 Transport hazard class(es)

- Hazard Class: 9

14.4 Packing group

- Packing Group: III

14.5 Environmental hazards

- Marine pollutant

14.6 Special precautions for user

- No information available

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

- Not applicable

14.8 Road/Rail (ADR/RID)

- Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S
(Trolosene Sodium, Dihydrate)
- ADR UN No.: 3077
- ADR Hazard Class: 9
- ADR Packing Group: III
- Tunnel Code: Not applicable

14.9 Sea (IMDG)

- Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S
(Trolosene Sodium, Dihydrate)
- IMDG UN No.: 3077
- IMDG Hazard Class: 9
- IMDG Pack Group.: III

14.10 Air (ICAO/IATA)

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SECTION 14: Transport information (....)

- Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S
(Trosclosene Sodium, Dihydrate)
 - ICAO UN No.: 3077
 - ICAO Hazard Class: 9
 - ICAO Packing Group: III
-

SECTION 15: Regulatory information
15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

- This safety data sheet is provided in compliance with REACH Regulation (EC) No 1907/2006 as amended by Regulation (EU) 2015/830
- Regulation (EC) No. 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation) applies in Europe
- This product is covered by the EU Biocides Regulation 528/2012 (EU BPR)
- This product is covered by EU Directive 2012/18/EU (the Seveso III Directive)
- UN 3077 and UN 3082, when carried in single or combination packagings containing a net quantity per single or inner packaging of 5L/kg or less, are not subject to the provisions of ADR, RID, IMDG or IATA, provided the package meets the general packing quality provisions.
- Trosclosene sodium dihydrate is listed in Annex III of REACH as # Suspected acutely toxic via the oral route: The Danish QSAR database contains information indicating that the substance is predicted as toxic via the oral route. # Harmonised classification for acute toxicity: The substance has the following harmonised classification in Annex VI of CLP: Acute Tox. 4 # Harmonised classification for aquatic toxicity: The substance has the following harmonised classification in Annex VI of CLP: Aquatic Acute 1; The substance has the following harmonised classification in Annex VI of CLP: Aquatic Chronic 1 # Harmonised classification for eye irritation: The substance has the following harmonised classification in Annex VI of CLP: Eye Irrit. 2 # Harmonised classification for specific target organ toxicity: The substance has the following harmonised classification in Annex VI of CLP: STOT SE 3 # Suspected hazardous to the aquatic environment: The Danish QSAR database contains information indicating that the substance has a 96h LC50 to fish of <1 mg/L; The Danish QSAR database contains information indicating that the substance has a 48h EC50 to Daphnia of <1 mg/L # Suspected persistent in the environment: The Danish QSAR database contains information indicating that the substance is predicted as non readily biodegradable # Suspected skin irritant: The Danish QSAR database contains information indicating that the substance is predicted as skin irritant

15.2 Chemical safety assessment

- No information available
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SECTION 16: Other information

The statements made herein are based on our best present experience and are intended to describe product safety requirements. They should not therefore be considered as a warranty of specific properties.

Sources of data: Information from published literature and supplier safety data sheets

Revision No. 2.0.0. Revised September 2020.

Changes made: Revisions to all sections to conform to Regulation (EU) 2015/830

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

- Acute Tox. 4, H302: Classification based on calculation and concentration thresholds
- Eye Dam. 1, H318: Classification based on calculation and concentration thresholds
- STOT SE 3, H335: Classification based on calculation and concentration thresholds
- Aquatic Acute 1, H400: Classification based on calculation and concentration thresholds
- Aquatic Chronic 1, H410: Classification based on calculation and concentration thresholds

Text not given with phrase codes where they are used elsewhere in this safety data sheet:

SECTION 16: Other information (....)

- H302: Harmful if swallowed
- H318: Causes serious eye damage
- 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
- EUH031: Contact with acids liberates toxic gas

Acronyms

- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstracts Service
- DNEL: Derived No-Effect Level
- EC: European Community
- EC50: Effective Concentration, 50%
- GHS: Globally Harmonised System
- LC50: Lethal Concentration, 50%
- LD50: Lethal Dose, 50%
- LOAEC: Lowest observed adverse effect concentration
- LOAEL: Lowest Observed Adverse Effect Level
- NOAEC: No observed adverse effect concentration
- NOAEL: No observed adverse effect level
- OEL: Occupational Exposure Limit
- PBT: Persistent, Bioaccumulative and Toxic
- PNEC: Predicted No-Effect Concentration
- REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
- SCL: Specific Concentration Limit
- vPvB: very Persistent and very Bioaccumulative
- WEL: Workplace Exposure Limit

--- end of safety datasheet ---
