

MATERIAL SAFETY DATA SHEET

(According to Regulation (EC) No 1907/2006 of the EP as amended by Regulation EU 2020/878)

Date of issue: 15 January 2004

Page: 1 / 8

Date of revision: 17 June 2022

Previous date: 30 May 2022

Version: 9.1

Product name:

chloramix dt

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Trade name:

chloramix dt

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

Intended or recommended use of the substance: surface disinfection - manual process. Only for professional use

Uses advised against: The product should not be used for any other purpose than determined.

1.3 Details of the supplier of the safety data sheet

Manufacturer trade name:

Schulke CZ, s.r.o.

Address:

Lidická 445, 735 81 Bohumín, Czech Republic

Company ID:

24301779

Phone number:

+420 558 320 260

e-mail:

schulkecz@schuelke.com

e-mail of person responsible for the Safety Data Sheet:

MSDS@bochemie.cz

1.4 Emergency telephone number

Toxikologické informační středisko, Na Bojišti 1, 128 08 Praha 2, Czech Republic: 224 91 92 93 or 224 91 54 02.

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

According to Regulation 1272/2008/EC

Eye Irrit.2, H319; STOT SE 3, H335; Aquatic Acute 1, H400; Aquatic Chronic 1, H410

For the full text of hazard statements see section 16.

The most important adverse physicochemical, human health and environmental effects:

Causes serious eye and respiratory irritation. Contact with acids liberates toxic gas. May release chlorine. Very danger to environment.

2.2 Label elements

Hazard pictograms:



Signal word:

Warning

Hazard statements:

H319

Causes serious eye irritation.

H335

May cause respiratory irritation.

H410

Very toxic to aquatic life with long lasting effects.

Precautionary statements:

P273

Avoid release to the environment.

P280

Wear protective gloves/protective clothing/eye protection.

P301+P310

IF SWALLOWED: Immediately call a doctor.

P305+P351+P338

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

P337+P313

If eye irritation persists: Get medical advice.

P391

Collect spillage

P501

Dispose of contents/container in accordance with local regulations.

Supplemental Hazard Information:

EUH 031

Contact with acids liberates toxic gas.

2.3 Other hazards

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The product does not meet the PBT/vPvB criteria according to REACH, annex XIII. The substance does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS**3.1 Substances**

Irrelevant.

3.2 Mixtures**3.2.1 Substances in the mixture**

Hazardous components	(%)	CAS EC Index. n Registr. n	Classification acc. to Regulation 1272/2008/EC, CLP	Notes
Troclosene sodium, dihydrate	<80	51580-86-0 220-767-7 613-030-01-7 -	Acute Tox. 4, H302; Eye Irrit.2, H319; STOT SE 3, H335; Aquatic Acute 1, H400; Aquatic Chronic 1, 410	M acute = 1 M chronic = 1
Adipic acid	<20	124-04-9 204-673-3 607-144-00-9 01-2119457561-38	Eye Irrit.2, H319	harmonized classification
Sodium carbonate	<15	207-838-8 497-19-8 011-005-00-2 01-2119485498-19	Eye Irrit.2, H319	harmonized classification worker exposure limits

SECTION 4: FIRST AID MEASURES**4.1 Description of first aid measures**

Inhalation: Shut off source of exposure, if possible. Bring the person to the fresh air, keep at rest (avoid even walking if necessary, seek medical attention).

Skin contact: Take off contaminated clothing and shoes. Wash thoroughly with water. According to the exposure extent, seek medical attention.

Eye contact: Flush immediately with large amounts of fresh water at least 15 minutes, to get the water under the eyelids, remove contact lenses if present and easy to do, seek medical attention.

Ingestion: Rinse mouth with potable water and leave person to drink 0.5 L of water if the subject is conscious. Do not induce vomiting, seek medical aid.

4.2 Most important symptoms and effects, both acute and delayed

Harmful if swallowed, irritates eyes and respiratory tract, releases toxic gas on contact with acids. The product in contact with wet body creates a sticky mixture which can irritate the skin, eyes and mucous membranes. See section 11.

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

In case of eyes contact, ingestion and in other health problems or should the symptoms persist, always seek medical advice and provide information contained in this MSDS.

SECTION 5: FIREFIGHTING MEASURES**5.1 Extinguishing media**

Suitable: water fog, extinguishing powder. Carbon dioxide. Sand.

Unsuitable: Do not use strong flood of water.

5.2 Special hazards arising from the substance or mixture

This product can generate in case of fire toxic and corrosive fumes. By thermal decomposition toxic gases can be released. Avoid contact with acid. Keep away from flammable materials.

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5.3 Advice for fire fighters

In case fires wear full protective clothing, eyes protection and suitable respiratory system protection. In case of release to the sewers act upon emergency plans (capturing and/or diluting with water).

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Ensure removal of leaked product by trained personnel. Wear personal protective equipment according to point 8. Ensure that the area is exhausted (ventilated)..

6.2 Environmental precautions

Avoid water and soil contamination and contact with combustible materials. In the event of a large release of concentrated product into surface water, groundwater or wastewater, notify the competent authorities

6.3 Methods and material for containment and cleaning up

Collect the solid product mechanically to a suitable closed labelled container. Allow the spilled application solution to soak into a suitable sorbent and place in a labelled, sealable waste container.

6.4 Reference to other sections

See section 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Handle with this product in well ventilated areas and wear suitable personal protective equipment. Avoid stirring up dust during handling. Do not inhale dust. Avoid excessive contamination of employees. Ensure good ventilation of the work area. Do not mix the product with acids, substances of an acidic nature, amines, chlorine may be released. Do NOT eat, drink and smoke when handling the product. After skin contamination, wash the affected area thoroughly with soap and water, dry and treat with a regenerating (protective) cream. Keep containers tightly closed. Avoid release to the environment.

7.2 Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry, cool and well-ventilated place. Do not store on direct sunshine. Prevent before acids and acidic substances. Storage temperature: from - 20°C to + 30°C. The temperature in the warehouse should not exceed + 52°C in 24 hours. Do not store in metal packaging.

7.3 Specific and use(s)

Important information is provided by material data safety sheet, by instructions on the label or on the company web pages. Only for professional use.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Exposure limits values

In accordance Regulation of Government No 195/2021 of Czech Act Collection in last wording.

Substance	CAS	PEL (mg/m ³)	NPK-P (mg/m ³)	Conversion factor to ppm	note
Chlorine	7782-50-5	0.5	1.5	0.307	I
Carbonates and bicarbonates sodium and potassium	-	5	10	-	I, V

I Irritates mucous membranes (eyes, respiratory system) respectively skin.

V Respirable aerosol fraction

Short-term exposure limit (15-minute): WEL, (as chlorine) 0.5 ppm 1.5 mg/m³ fume.

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ inhalable dust.

Long-term exposure limit (8-hour TWA): WEL 4.0 mg/m³ respirable dust

TWA = time weighted average

WEL = Workplace Exposure Limit

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8.1.2 Biological limit values

Decree No 107/2013 of Czech Act Collection does not set indication limits of biological exposure tests.

8.1.3 Value of DNEL and PNEC

Troclosene sodium, dihydrate								
DNEL	worker				consumer			
Route of exposure	Acute exposure local	Acute exposure systemic	Long term exposure local	Long term exposure systemic	Acute exposure local	Acute exposure systemic	Long term exposure local	Long term exposure systemic
Inhalation	--	--	--	8.11 mg/m³	--	--	--	--
Dermal	--	--	--	2.3 mg/kg/d	--	--	--	--
Oral	Not required					--	--	--
PNEC								
fresh water		0.002 mg/l						
marine water		1.52 mg/l						
fresh water, sediment		7.56 mg/kg dry						
marine water, sediment		--						
sewerage plant		0.59 mg/kg dry						
soil		0.756 mg/l						
intermittent release		--						

8.2 Exposure controls**8.2.1 Appropriate engineering controls**

Do not eat, drink or smoke while working. Wash your hands thoroughly with soap and water after work and before taking a break for food and rest, dry them and treat them with a regenerating (protective) cream. Follow the safety instructions for working with chemicals.. Personal protective equipment must be kept in a serviceable condition at all times, do not use contaminated or damaged equipment

8.2.2 Individual protection measures, such as personal protective equipment

Eye/face protection (EN 166): wear suitable eye/face protection.

Skin protection (EN 146): protective clothing, shoes.

Hand protection (EN 374): no need to use special protective equipment.

Respiratory protection (EN 143, 14387): ensure adequate ventilation of the premises, if breathing is possible, use a filtering half-mask with a suitable protective filter, type A. In case of accident, fire, high concentration, use isolation breathing apparatus.

8.2.3 Environmental exposure controls

Observe instructions for handling and storage, particularly ensure provisions preventing spill of concentrated product into watercourses, soil and sewerage (for further information see Handling Conditions according to Act No 254/2001 of Czech Act Coll., on Waters).

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state (°C):	tablets
Colour:	white
Odour:	typical light odour of chlorine
Melting point/Freezing point:	not determined
Boiling point or initial boiling point and boiling range:	not determined
Flammability:	not flammable
Lower and upper explosion limit:	not determined
Flash point:	not determined
Auto-ignition temperature:	not flammable
Decomposition temperature:	240
pH (at 20°C):	4-6 (1% solution)
Kinematic viscosity:	not determined
Solubility:	soluble in water (50 g/100 ml)
Partition coefficient n-octanol/water:	not determined
Vapour pressure (°C):	not determined
Density and/or relative density (20°C):	not estimated
Relative vapour density:	not determined
Particle characteristics	irrelevant

9.2 Other information:

Bleaching effects may discolour textiles, content of active chlorine: at least 43 % in weight.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

The product reacts with concentrated and diluted acids or acidic substances, reducing agents (hydride), powder metals, ammonia and ammonium ions.

10.2 Chemical stability

Stable in normal conditions of usage and storage (keep temperature range for storage, ensure against the effects of radiant heat and long-lasting direct exposure to sun).

10.3 Possibility of hazardous reactions

Reaction with concentrated and diluted acids or acidic substances, reducing agents (hydride), powder metals, ammonia and ammonium ions, the possibility of a hazardous chemical reaction.

10.4 Conditions to avoid

Avoid raised temperature (≥ 40 °C), long-lasting effect direct exposure to sun and influence of weather conditions, humidity, rainfall, and especially to acids and acid substances and solutions.

10.5 Incompatible materials

Concentrated and diluted acids or acidic substances, reducing agents (hydride), powder metals, ammonia and ammonium ions.

10.6 Hazardous decomposition products

Chlorine, hydrogen chloride, nitrogen oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

- | | |
|-------------------------------|--|
| a) acute toxicity | Calculated ATE _{mix} oral > 2000 mg/kg
<i>Troclosene sodium, dihydrate</i>
LD50, oral, rat = 1823 mg/kg
LD50, dermal, rat > 2000 mg/kg |
| b) skin corrosion/irritation: | Criteria for classification are not met based on available data. |

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- | | |
|--|--|
| c) serious eye damage/irritation: | Causes serious eye irritation. |
| d) respiratory or skin sensitisation: | Criteria for classification are not met based on available data. |
| e) germ cell mutagenicity: | Criteria for classification are not met based on available data. |
| f) carcinogenicity: | Criteria for classification are not met based on available data. |
| g) reproductive toxicity: | Criteria for classification are not met based on available data. |
| h) STOT-single exposure: | May cause respiratory irritation. |
| i) STOT-repeated exposure: | Criteria for classification are not met based on available data. |
| j) aspiration hazard: | Criteria for classification are not met based on available data. |

11.2 Information on other hazards

The mixture does not have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU)2017/2100 or Commission Regulation (EU) 2018/605

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Dihydrate of sodium dichloroisocyanurate; (trolosene sodium, dihydrate)

Acute toxicity to fish, *Oncorhynchus mykiss*: LC50 = 0.24 mg/l/96 h (M = 1).

Acute toxicity to invertebrates, *Daphnia magna*: EC50 = < 1mg/l.

12.2 Persistence and degradability

Data are not available.

12.3 Bioaccumulative potential

Bioaccumulation is unlikely.

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

The product does not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6 Endocrine disrupting properties

The product does not contain the substances included in the list endocrine disruptors accordance to with Article 59(1) REACH.

12.7 Other adverse effects

Toxicity for the other environment was not identified.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

a) Recommended Methods of Substance and Contaminated Packaging Disposal

It is dangerous waste. Personal protective equipment should be used and provisions to be applied when handling and collecting wastes regarding protection of waste spill into environment. Waste hand over to specialized competent company, if need be hand over within the framework of dangerous waste collection in your community. Contaminated packaging hand over to specialised company as dangerous waste.

b) Physical/chemical properties that may affect waste treatment options

Avoid contact of waste with concentrated and diluted acids or acidic substances, reducing agents (hydride), powder metals, ammonia and ammonium ions.

c) Sewage disposal shall be discouraged

Waste should not be disposed of by release to sewers. Sweep up spilled preparation.

d) Special precautions for any recommended waste treatment

Suggestion of waste classification:

Subgroup	16 03	off-specification batches and unused products
	16 03 05*	organic wastes containing dangerous substances

Suggestion of waste container classification:

Containers with residues of the product:

15 01 10*	packaging containing residues of or contaminated by dangerous substances.
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Waste Legal Regulations:

Directive 2018/851/EC on waste and repealing certain Directives. If this mixture and its packaging become waste, the last user has to assign relevant waste code – European Waste Code (EWC code) according to Commission Decision (2014/955/EU).

SECTION 14: TRANSPORT INFORMATION

14.1 UN number or ID number	UN 3077
14.2 UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S (Sodium dichloroisocyanurate)
14.3 Transport hazard class(es)	9
14.4 Packing group	III
14.5 Environmental hazards	YES
14.6 Special precautions for user	--
14.7 Maritime transport in bulk according to IMO instrument	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S (Sodium dichloroisocyanurate)
14.8 Other information	
Danger code (Kemler)	90
Limited quantities (LQ)	5 kg

SECTION 15: REGULATORY INFORMATION**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

Legislation regulating individual issues of the environmental protection and occupational hygiene conditions.
Regulation EC No. 1907/2006/EC (REACH).
Regulation EC No. 1272/2008/EC (CLP).
Regulation EU No. 528/2012 concerning the making available on the market and use of biocidal products.

15.2 Chemical safety assessment

A chemical Safety assessment was not carried out.

SECTION 16: OTHER INFORMATION**a) Changes during Revision of the MSDS**

Revision 9.0 – new format of MSDS and new information in indicated sections.

Version 9.1 – correction of information in section 4, 6, 7, 8.

The changed sections are indicated with bold line:

b) A key or legend to abbreviations and acronyms used

Acute Tox.	Acute toxicity
Eye Irrit.	Eye irritation
STOT SE	Specific target organ toxicity – single exposure
Aquatic Acute	Hazardous to the aquatic environment, short-term
Aquatic Chronic	Hazardous to the aquatic environment, long-term
LC50	Lethal concentration, 50 percent
LD50	Lethal dose, 50 percent
NPK-P	Maximum Permissible Concentration
PEL	Permissible Exposure Limit
PBT	Persistent, Bioaccumulative and Toxic
vPvB	Very Persistent and Very Bioaccumulative
DNEL	Derived no-effect level
PNEC	Predicted no-effect concentration

c) Key literature references and sources for data

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Information contained herein is based on our best knowledge and current legislation, according to regulation 1272/2008/EC. Further, this Material Safety Data Sheet was elaborated on grounds of information provided by suppliers. The MSDS contains information needed for security of safety and occupational health protection and the environmental protection. The mentioned information refers to present state of knowledge and experience and is in accordance with legislation in force. It cannot be considered warrantee of suitability or usability of the product for particular application.

d) The methods of evaluating information

The product is classified according to method described in Regulation 1272/2008/EC.

e) List of relevant hazard statements

- H 302 Harmful if swallowed.
- H 319 Causes serious eye irritation.
- H 335 May cause respiratory irritation.
- H 400 Very toxic to aquatic life.
- H 410 Very toxic to aquatic life with long lasting effects.

f) Instructions for Training

Personnel handling the preparation must be instructed about manipulation risks and on requirements for health and environmental protection (relevant provisions of the Labor Code as amended) and further, they must be demonstrably familiarized with dangerous properties, occupational health and environmental protection principles and first aid measures (Act No. 258/2000 Coll. on public health protection as amended).

g) Recommended Use Limitations

The substance should not be used for any other purpose than determined (see Section 1.2). As specific conditions of use of the substance are beyond control of the supplier, the user is the only responsible to adapt the information and warnings contained herein to local legislation and regulations. The safety information describes the product from perspective of its safety and it cannot be deemed technical specifications of the product.