

# SAFETY DATA SHEET

## VELOPEX CLEANING TABLETS



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

#### 1.1 Product identifier

Product Name VELOPEX CLEANING TABLETS  
Synonyms Effervescent NaDCC Tablet with Detergent  
Medivance (5.0g NaDCC in 9.95g Finished Weight)

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

Identified Uses Effervescent NaDCC Tablets with added detergent are used as X-Ray film processing machine cleaner  
Uses Advised Against Avoid contact with acids

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

Supplier Medivance Instruments Ltd.  
Barretts Green Road  
Harlesden  
London  
NW10 7AP  
T +44 (0) 20 8965 2913  
F +44 (0) 20 8963 1270  
enquiries@velopex.com

#### 1.4 Emergency telephone number

020 8965 2913

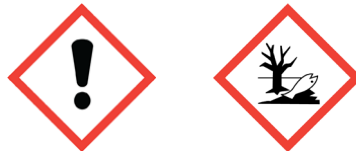
### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

Classification EC 1272/2008	Contact Hazard - Eye	Category 1 - causes serious eye damage.
	Target Organ Toxicity (Single Exposure)	Category 3 - May cause respiratory tract irritation
	Hazardous to Aquatic Environment - Acute Hazard	Category 1 - Very toxic to aquatic life
	Hazardous to Aquatic Environment - Chronic Hazard	Category 1 - Very toxic to aquatic life with long lasting effects.

#### 2.2 Label elements

Labelling



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.
EUH301	Contact with acids liberates toxic gases

Precautionary Statements

P261	Avoid breathing dust/fumes.
P273	Avoid release to the environment.
P280	Wear protective gloves/eye protection.
P305+P351+P338	IF IN EYES - Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P337+P313	If eye irritation persists: Get medical attention.

Precautionary Statements cont.	P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
	P312	Call a POISON CENTRE or doctor if you feel unwell.
	P391	Collect spillage.
	P403+P233	Store in a well-ventilated place. Keep container tightly closed.
	P501	Dispose of contents and container in accordance with applicable local, regional, national, and/or international regulations.

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	Weight in Product (% w/w)	EC (EINECS) No.	CLP Classification
Troclosene Sodium / 1,3,5 Triazine - 2,4,6 (1H, 3H, 5H) trione, 1, 3 - dichloro-, sodium salt CAS No. 2893-78-9	30-60%	220-767-7	Danger Oxidising Solid - Category 2; Eyes Irritant Cat.2; Harmful if swallowed Cat.4; May cause respiratory tract irritation Cat.3; Very toxic to aquatic life Cat.1; H302; H319; H335; H272; H410; EUH031
Adipic Acid CAS No. 124-04-9	10-30%	204-673-3	Warning Eyes Irritant Cat.2; H319
Sodium Carbonate CAS No. 497-19-8	0-8%	207-838-8	Warning Eyes Irritant Cat.2; H319
Tartrazine CAS No. 1934-21-0	0.0-0.4%	217-699-5	Not classified
Surfac SDBS80	<3%	-	Danger Skin irritant Cat.2; Serious eye damage Cat.1; Respiratory Sensitisation Cat.1; H315; H318; H334

Important Note: The classification descriptions given in this section relate to the components in their pure form and do not correspond to the classification of this preparation. The classification of this tablet as supplied is given in Section 2.

### SECTION 4: FIRST AID MEASURES

#### 4.1 Description of first aid measures

##### Inhalation

Move person to fresh air. Keep person at rest in a position comfortable for breathing. If breathing is difficult have trained person administer oxygen. If respiration stops, have a trained person administer artificial respiration. Get medical attention immediately.

##### Ingestion

Never give anything by mouth to an unconscious person. If swallowed do not induce vomiting. Give large quantities of water. (If available give several glasses of milk) If vomiting occurs spontaneously keep airway clear and give more water. Get medical attention if there are signs of discomfort or ill health.

##### Skin Contact

Immediately brush off excess chemical and flush with plenty of soap and water. Remove contaminated clothing Wash clothing before reuse. If signs of irritation or discomfort, seek medical attention.

##### Eye Contact

Immediately flush eyes with a directed stream of water for at least 15 minutes, forcibly holding eyelids apart to ensure complete irrigation of all eye and tissue. Remove contact lenses, if present, after first 5 minutes, then continue rinsing eye. Obtain medical advice

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

##### Inhalation

This material contained in this tablet in solid form is not expected to product respiratory effects. Particles of respirable size are generally not encountered. The respirable fraction for the tablet active ingredient is typically less than 0.1% by weight for the granular and extra granular grades. If it is ground or otherwise in powdered form, effects similar to a corrosive substance may occur. May cause severe irritation of the respiratory tract with coughing, choking, pain and possibly burns of the mucous membranes. If significant or prolonged exposure occurs, pulmonary oedema may develop, either immediately or more often within a period of 5-72 hours. The symptoms may include tightness in the chest, dyspnea, frothy sputum, cyanosis and dizziness. Physical findings may includes moist rales, low blood pressure and high pulse pressure. Severe cases may be fatal.

## Ingestion

Not a likely route of exposure. Harmful if swallowed. Ingestion may cause immediate pain and severe burns of the mucous membranes. There may be discolouration of the tissues. Swallowing and speech may be difficult at first and then almost impossible. The effects on the oesophagus and gastrointestinal tract may range from irritation to severe corrosion. Oedema of the epiglottis and shock may occur.

## Skin Contact

Direct contact with wet material or moist skin may cause severe irritation, pain and possibly burns. Dry material is less irritating than wet material. This material is not a skin sensitiser based on studies with guinea pigs.

## Eye Contact

This material is irritating to the eye. Direct contact may cause severe irritation, pain and burns, possibly severe, and permanent damage including blindness. The degree of injury depends on the concentration and duration of the contact.

### Repeated Exposure (Chronic)

Based on animal studies, exposure to concentration of monosodium cyanurate at the solubility limit may cause cardiovascular, kidney and urinary bladder infections.

### **MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:**

Eye disorders, respiratory disorders, skin disorders and allergies.

### **TARGET ORGANS**

Cardiovascular system, kidneys, bladder.

### **PBT**

The substances contained in this preparation are not identified as PBT substances.

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

Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.

## **SECTION 5: FIREFIGHTING MEASURES**

### **5.1 Extinguishing media**

#### **Extinguishing Media**

Do not attempt to extinguish the fire without a self-contained breathing apparatus. Do not let the fire burn. Flood with copious amounts of water. Do not use dry chemicals, carbon dioxide or halogenated extinguishers since there is potential for a violent reaction.

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

#### **Hazardous Combustion Products**

Thermal decomposition or combustion products: chlorine, nitrogen, nitrogen trichloride, cyanogens chloride, oxides of carbon, phosgene.

#### **Unusual Fire & Explosion Hazards**

Negligible fire hazard. If heated by outside source to temperatures above 240°C (464°F), this product will undergo decomposition with the evolution of noxious gases but no visible flame. Wet material may generate nitrogen trichloride, an explosion hazard.

### **5.3 Advice for firefighters**

#### **Protective Measures In Fire**

Fire-fighters should wear full protective clothing and a self contained breathing apparatus. Using a 10% solution of sodium carbonate, thoroughly decontaminate fire-fighting equipment including all fire-fighting wearing apparel after the incident.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

### **6.1 personal precautions, protective equipment and emergency procedures**

Avoid contact with skin and eyes. Wear chemical safety goggles and chemical resistant gloves. Handle product in a well-ventilated area

### **6.2 Environmental precautions**

Do not release into the environment. Prevent flow of material into water source and begin monitoring chlorine and pH immediately. Notify all downstream users of possible contamination.

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

Contains spilled material. Any spillage should be cleaned up as soon as possible. Do not add water to spilled material. Using clean dedicated equipment, sweep and scoop all spilled material, contaminated soil, and other contaminated material and place into clean, dry containers for disposal. Do not close drums containing wet or damp material. Do not transport wet or damp material.

## 6.4 Reference to other sections

For personal protection, see section 8. For waste disposal, see section 13.

## SECTION 7: HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Do not get in eyes, on skin or on clothing.

Avoid breathing airborne particulates; wear respiratory protection when exposure is possible.

Wear goggles or face shield and rubber gloves when handling.

Wash hands thoroughly with soap and water after handling.

Wash contaminated clothing before use.

Use only outdoors or in a well-ventilated area.

Vapour space in a closed container may contain a slight amount of chlorine gas and compounds from decomposition of the product.

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

Store in original container and in a cool dry area where temperatures do not exceed 25°C. Keep container tightly closed and store away from incompatible materials (refer to section 10 for list of incompatible materials).

Contact with acids liberates toxic gases,

Do not allow water to get into the container. Keep out of reach of children. Store locked up.

### 7.3 Specific end use(s)

Mix only with water. Use clean, dry utensils. Do not mix this product with remnants of any other products. Such uses may cause a violent reaction leading to fire or explosion.

Contamination with moisture, organic matter or other chemicals may start a chemical reaction with generation of heat, liberation of hazardous gases, and possible generation of fire and explosion.

Vapour space in a closed container may contain a slight amount of chlorine gas and other chlorine containing compounds from decomposition of the product. Exposure to chlorine gas may cause burning of the eyes, burning of the nose and mouth and irritation of the linings of the respiratory tract with coughing, a choking sensation, substernal pain, vomiting, nausea, headache, dizziness and fainting.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

The information below relates to Sodium Dichloroisocyanurate in its pure form.

This preparation contains 1,3,5 - Triazine - 2,4,6 (1H, 3H, 5H) - trione, 1,3 - dichloro-, sodium salt (sodium dichloroisocyanuric acid).

Weight of Sodium Dichloroisocyanurate in this preparation product (% w/w): 30-60%.

### 8.1 Control parameters

Regulatory Exposure Limit(s): None

Derived No Effects Level (DNEL): Workers

Acute Exposure: Systematic Effects - N/A - the substance is corrosive. Risk mitigation measures (RMM) apply to prevent exposure.

Acute Exposure: Inhalation - N/A - the substance is corrosive. Risk mitigation measures (RMM) apply to prevent exposure.

Long-Term Exposure (Systematic Effects): Dermal - 2.3 mg/kg bw/day

Long-Term Exposure (Systematic Effects): Inhalation - 8.11 mg/m<sup>3</sup>

Derived No Effects Level (DNEL): Population

Acute Exposure: Systematic Effects - Dermal and Inhalation: N/A - the substance is corrosive. Oral: The acute oral DNEL is covered by the long term oral DNEL.

Acute Exposure Dermal: - The acute dermal DNEL for local effects is not determined as the test material is corrosive to skin on contact.

Acute Exposure: Inhalation: The acute inhalation DNEL for local effects is not determined as the test material is corrosive.

Long-Term Exposure (Systematic Effects): Dermal - 1.15 mg/kg bw/day

Long-Term Exposure (Systematic Effects): Oral - 1.15 mg/kg bw/day

Long-Term Exposure (Systematic Effects): Inhalation - 1.99 mg/m<sup>3</sup>

Predicted No Effect Concentration (PNEC): Environment

PNEC Aquatic:

PNEC aqua (freshwater): 0.00017 mg/L

PNEC aqua (marine water): 1.52 mg/L

PNED aqua (intermittent releases): 0.00017 mg/L

PNEC Soil:

PNEC sediment (freshwater): 7.56 mg/kg sediment dw

PNEC soil: 0.756 mg/kg soil dw

PNEC Sewage Treatment Plant:

PNEC STP: 0.59 mg/L

PNEC Mammals (oral):

There is no concern for secondary poisoning from the substance or the degradant.

Additional Advice: Chlorine and chlorine compounds may be found in slight amounts in the head space of containers of Products.

Risk Management Measures (RMM)

RMM: Health

- The use of half-face respirator with chlorine cartridges (EN140) is required during opening of drums and filling of containers.
- An IOEL of 1.5 mg/m<sup>3</sup> chlorine is applicable.

- RMM: Health**
- The substance is corrosive so risk mitigation measures (wearing PPE consisting of gloves (nitrile), coverall and safety glasses) while handling the raw material and where exposure may be possible, would apply.
  - Local exhaust ventilation should be used where opening of drums and filling of containers occurs.
- RMM Environment:**
- Engineering controls should be used to eliminate emissions of dust and chlorinated fumes as appropriate. All gas emissions should be filtered for dust and treated with sodium hydroxide to remove chlorine and other volatile chlorinated species. Dry solid residues from air filtration systems are collected and either recycled or disposed of. The waste dust from formulation or tableting is sent to an external waste treatment site for disposal.

#### Engineering Controls:

Use only in well-ventilated areas. Provide local exhaust ventilation where dust or mist may be generated. Ensure compliance with applicable exposure limits.

### 8.2 Exposure controls

#### Hand Protection

Wear appropriate chemical resistant gloves.

#### Eye Protection

Wear chemical safety goggles. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

#### Skin Protection

Wear protective clothing to minimise skin contact. When potential for contact with dry material exists, wear disposable coveralls suitable for dust exposure, such as Tyvek®. Contaminated clothing should be removed and laundered before reuse.

#### Protective Material Types

Butyl rubber, Natural rubber, Neoprene, Nitrile, Polyvinyl chloride (PVC), Tyvek®.

#### Respiratory Protection

An approved respirator with EN140 (chlorine) cartridges may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits, or when symptoms have been observed that are indicative of overexposure. The added protection of a full face piece respirator is required when visible dusty conditions are encountered and eye irritation may occur. A respiratory protection program that meets applicable regulatory requirements must be followed whenever workplace conditions warrant the use of a respirator.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Product Name	Velopex Cleaning Tablets
• Colour	White/off white or Orange tablet
• Odour	Slight chlorine odour
• Solubility	Completely soluble in water
• Initial Boiling point and Boiling Range	Not applicable (solid)
• Vapour Density	Not applicable (not volatile)
• pH-Value, Conc. Solution	5-6
• Flash Point (°C)	Not applicable (solid)
• Flammability	Non flammable
• Vapour pressure	Not applicable (solid)
• Partition Coefficient: n-octanol/water	Log Kow = 0
• Evaporation Rate	Not applicable (solid)
• Thermal Decomposition Temp	225 - 250°C

## SECTION 10: STABILITY AND REACTIVITY

### 10.1 Reactivity

Generates toxic gas in contact with acid. Chlorine.

### 10.2 Chemical stability

Stable under normal temperature conditions and recommended use.

### 10.3 Possibility of hazard reactions

Generates toxic gas in contact with acid. Chlorine.

### 10.4 Conditions to avoid

Combustible material. The active ingredient in this preparation is a strong oxidising agent. The preparation of concentrated solutions or slurries is not recommended. Avoid contact with water on concentrated material in the container. Also avoid contact with easily oxidisable organic material: ammonia, urea or similar nitrogen containing compounds; inorganic reducing compounds; floor sweeping compounds; calcium hypochlorite and alkalis.

### 10.5 Incompatible materials

#### Materials To Avoid

Strong acids and/or alkalis. Reducing agents.

### 10.6 Hazardous decomposition products

Chlorine, Nitrogen trichloride, Cyanogen chloride, Oxides of carbon, Phosgene.  
Hazardous Polymerisation will not occur.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

The information below relates to Sodium Dichloroisocyanurate in its pure form.

This preparation contains 1,3,5 - Triazine - 2,4,6 (1H, 3H, 5H) - trione, 1,3 - dichloro-, sodium salt (sodium dichloroisocyanuric acid) at levels that may produce a biological effect.

This ingredient is moderately toxic by ingestion. It is irritating to the eyes and respiratory system. No specific toxicological information is available for this preparation.

Weight of Sodium Dichloroisocyanurate in this preparation product (% w/w): 30-60%.

Acute Toxicity (Oral LD <sub>50</sub> )	1823 mg/kg oral-rat
Acute Toxicity (Dermal LD <sub>50</sub> )	>5000 mg/kg skin-rabbit
Acute Toxicity (Inhalation LC <sub>50</sub> )	0.27-1.17 mg/L/4 hour(s) inhalation-rat
Primary Skin Irritation	Moderate irritation (rabbit, 24hr)
Primary Eye Irritation	Severe irritation, corrosive (rabbit, 24hr)
Mutagenicity	Not mutagenic in 5 salmonella strains and 1 E. coli strain
Carcinogenicity	Not classified by NTP, IARC, or OSHA
Reproductive Toxicity	There are no known or recorded effects on reproductive function or foetal development.
Sensitisation - Skin	No reports found
Sensitisation - Respiratory	No reports found
Repeated Does Toxicity	No reports found

## SECTION 12: ECOLOGICAL INFORMATION

The information below relates to Sodium Dichloroisocyanurate in its pure form.

### Ecotoxicity

This preparation is likely to be highly toxic to aquatic life. No specific ecotoxicological information is available for this preparation  
Weight of Sodium Dichloroisocyanurate in this preparation product (% w/w): 30-60%.

### 12.1 Toxicity

#### Acute Toxicity - Fish

Bluegill Sunfish	LC <sub>50</sub> 96 hours 0.25-1.0 mg/L
Rainbow Trout	LC <sub>50</sub> 96 hours 0.13-0.36 mg/L
Inland Silverside	LC <sub>50</sub> 96 hours 1.21 mg/L

#### Acute Toxicity - Aquatic

##### Invertebrates

Water flea	LC <sub>50</sub> 48 hours 0.196 mg/L
Mysid Shrimp	LC <sub>50</sub> 96 hours 1.65 mg/L

#### Other Toxicity

Mallard Duck	Oral LD <sub>50</sub> : 1916 mg/kg LC <sub>50</sub> : > 10,000 ppm diet
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Bobwhite Quail

Oral LD<sub>50</sub>: 1732 mg/kg

LD<sub>50</sub> 10,000 ppm diet

## 12.2 Persistence and degradability

### Degradability

The materials used in this preparation will not persist in the environment. The free available chlorine from Sodium dichloroisocyanurate is rapidly consumed by reaction with organic and inorganic materials to produce chloride ion. The stable degradation products are chloride ion and cyanuric acid. Sodium Dichloroisocyanurate is subject to hydrolysis. Cyanuric acid produced by hydrolysis is biodegradable.

## 12.3 Bioaccumulative potential

### Bioaccumulative Potential

Trichloroisocyanuric acid hydrolyses in water liberating chlorine and cyanuric acid. These products are not bioaccumulative.

## 12.4 Mobility in soil

### Mobility

The product is soluble in water.

## 12.5 Results of PBT and vPvB assessment

The substances contained in this preparation are not identified as PBT substances.

## 12.6 Other adverse effects

None known.

## **SECTION 13: DISPOSAL CONSIDERATIONS**

### General Information

Do not put product, spilled product, partially filled containers into the waste compactor. Contact with incompatible materials could cause a reaction and fire. Do not transport damp or wet material. Neutralise materials to a non-oxidising state for safe disposal.

### 13.1 Waste treatment methods

Disposal of waste and residues in accordance with local authority requirements.

## **SECTION 14: TRANSPORT INFORMATION**

### General Information

Can be shipped as a limited quantity when packed in inner or single packs ≤ 5 kg. When packed in inner or single packs ≤ 5 kg, Special Provision 375 of 2013 UN Model Regulations for the transportation of dangerous goods (IATA Special Provision A197) exempts this product from the labelling and documentation provisions of Dangerous Goods Regulations.

### 14.1 UN number

UN No. (ADR/RID/ADN)	3077
UN No. (IMDG)	3077
UN No. (ICAO)	3077

### 14.2 UN proper shipping name

Proper Shipping Name Environmentally hazardous substance, solid, n.o.s (Dichloroisocyanuric acid, salts)

### 14.3 Transport hazard class(es)

ADR/RID/ADN Class	9
ADR/RID/ADN Class	Class 9 - Miscellaneous Dangerous Substances and Articles.
ADR Label No.	9
IMDG Class	9
ICAO Class/Division	9

### 14.4 Packing group

ADR/RID/ADN Packing Group	III
IMDG Packing Group	III
ICAO Packing Group	III

### 14.5 Environmental hazards

Environmental Hazardous Substance/Marine Pollutant

Yes

## 14.6 Special precautions for user

EMS	F-A, S-F
Emergency Action Code	2Z
Hazard No. (ADR)	90
Tunnel Restriction Code	(E)

## 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable

## SECTION 15: REGULATORY INFORMATION

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

#### EU Legislation

This safety data sheet was prepared in accordance with Regulation 2006/1907/EC Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and Regulation EC 1272/2008 Classification, Labelling and Packaging (CLP).

#### Authorisations (Title VII Regulation 1907/2006)

No specific authorisations are noted for this product.

#### Restrictions (Title VIII Regulation 1907/2006)

No specific restrictions of use are noted for this product.

### 15.2 Chemical Safety Assessment

No chemical safety assessment has been carried out.

## SECTION 16: OTHER INFORMATION

A UN 6(c) bonfire test conducted on plastic and fibreboard drums of Troclosen Sodium (CAS No. 2893-78-9) showed no evidence of explosive properties. Therefore, per note T in the 30th ATP to Directive 67/548/EEC, this substance is not labelled as explosive when packaged in plastic or fibreboard containers or in bulk bags.

#### CLP Classification Used in Section 3

Physical Hazard(s)	Oxidising Solid - Category 2
Contact Hazard	Respiratory - Category 1: Causes respiratory sensitisation Eye - Category 1: Causes serious eye damage Eye - Category 2: Causes serious eye irritation Skin - Category 2: Causes skin irritation
Acute Toxicity	Oral - Category 4: Harmful if swallowed
Target Organ Toxicity	(Single Exposure) - Category 3: May cause respiratory tract irritation
Hazardous to Aquatic Environment	Acute Hazard - Category 1: Very toxic to aquatic life Chronic Hazard - Category 1: Very toxic to aquatic life with long lasting effects

#### Hazard Statements In Full

H302	Harmful if swallowed
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory irritation
H272	May intensify fire; oxidiser
H410	Very toxic to aquatic life with long lasting effects
EUH301	Contact with acids liberates toxic gases

Issued By	Chemistry Manager
Revision Date	01/06/2015
Revision	GHS1

#### Disclaimer

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.