

VI-SEPT Tablets

Version 2.0

Revision Date 14.08.2012

Ref. 130000120619

This SDS adheres to the standards and regulatory requirements of Italy and may not meet the regulatory requirements in other countries.

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

1.1. Product identifier

Product name : VI-SEPT Tablets

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

Use of the Substance/Mixture : Disinfectant

1.3. Details of the supplier of the safety data sheet

Company : Medicaline Srl
Piazza Nicolò Tommaseo, 2
34121- Trieste (Italy)

Telephone : +39 040360470

Telefax : +39 040761560

E-mail address : info@medicaline.it

1.4. Emergency telephone number

Emergency telephone number : Poison Center in Milan : +39 02 66101029

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Irritant R38: Irritating to skin.
Dangerous for the R41: Risk of serious damage to eyes.
environment R52: Harmful to aquatic organisms.

2.2. Label elements



Irritant

R38 Irritating to skin.
R41 Risk of serious damage to eyes.
R52 Harmful to aquatic organisms.

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Sensitising components Contains: Dipotassium peroxodisulphate / Contains/ May produce an allergic reaction.

S 2 Keep out of the reach of children.
S24/25 Avoid contact with skin and eyes.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S37/39 Wear suitable gloves and eye/face protection.

2.3. Other hazards

no data available

SECTION 3: Composition/information on ingredients

3.1. Substances

not applicable

3.2. Mixtures

Registration number	Classification according Directive 67/548/EEC	Classification according Regulation 1272/2008 (CLP)	Concentration
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Pentapotassium bis(peroxymonosulphate) bis(sulphate) (CAS-No.70693-62-8) (EC-No.274-778-7)

01-2119485567-22	Xn;R22 C;R34	Acute Tox. 4; H302 Skin Corr. 1B; H314	40 - 55 %
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Malic acid (CAS-No.6915-15-7) (EC-No.230-022-8)

	Xn;R22 Xi;R36/37/38	Eye Irrit. 2; H319 STOT SE 3; H335 Acute Tox. 4; H302 Skin Irrit. 2; H315	20 - 25 %
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Polyphosphoric acids, sodium salts (CAS-No.68915-31-1) (EC-No.272-808-3)

			2 - 8 %
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Sulphamidic acid (CAS-No.5329-14-6) (EC-No.226-218-8)

	Xi;R36/38 R52/53	Eye Irrit. 2; H319 Skin Irrit. 2; H315 Aquatic Chronic 3; H412	4 - 6 %
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Dipotassium peroxodisulphate (CAS-No.7727-21-1) (EC-No.231-781-8)

	O;R 8 Xn;R22 Xi;R36/37/38 R42/43	Ox. Sol. 3; H272 Acute Tox. 4; H302 Eye Irrit. 2; H319 STOT SE 3; H335	< 1.56 %
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		Skin Irrit. 2; H315 Resp. Sens. 1; H334	
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Sodium dodecylbenzenesulfonate (CAS-No.25155-30-0) (EC-No.246-680-4)

	Xn;R22 Xi;R36/37/38	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335	3 - 5 %
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The above products are REACH compliant; Registration number(s) may not be provided because substance(s) are exempted, not yet registered under REACH or are registered under another regulatory process (biocide uses, plant protection products), etc.

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

- General advice : Never give anything by mouth to an unconscious person. When symptoms persist or in all cases of doubt seek medical advice.
- Inhalation : Remove from exposure, lie down. If victim has stopped breathing: Artificial respiration and/or oxygen may be necessary. Consult a physician.
- Skin contact : Wash off immediately with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing before re-use. Consult a physician.
- Eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician.
- Ingestion : Do NOT induce vomiting. If a person vomits when lying on his back, place him in the recovery position. Drink 1 or 2 glasses of water. Call a physician immediately.

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

- Symptoms : Inhalation may provoke the following symptoms:, Irritation, Oedema, Nose bleeding
- : Skin contact may provoke the following symptoms:, Irritation, Discomfort, Itching, Redness, Swelling of tissue, Allergic reactions, Rash
- : Eye contact may provoke the following symptoms:, Irritation, Redness, Discomfort, Lachrymation, Pain, Ulceration
- : Ingestion may provoke the following symptoms:, Irritation, Nausea, Vomiting, Diarrhoea

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

- Treatment : Treat symptomatically.

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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Foam, Dry powder, Carbon dioxide (CO₂)

5.2. Special hazards arising from the substance or mixture

Specific hazards during firefighting : Hazardous decomposition products (see also section 10)

5.3. Advice for firefighters

Special protective equipment for firefighters : Wear self-contained breathing apparatus and protective suit.

Further information : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions : Evacuate personnel to safe areas. Use personal protective equipment.

6.2. Environmental precautions

Environmental precautions : Do not flush into surface water.

6.3. Methods and materials for containment and cleaning up

Methods for cleaning up : Sweep up and shovel into suitable containers for disposal. Avoid dust formation. After cleaning, flush away traces with water.

Other information : Dispose of in accordance with local regulations.

6.4. Reference to other sections

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling : Avoid dust formation in confined areas. Do not breathe spray mist. Provide adequate ventilation. Avoid contact with skin and eyes. For personal protection see section 8.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Protect from contamination. Keep containers dry and tightly closed to avoid moisture absorption and contamination. Store in original container.

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Advice on common storage : Keep away from: Combustible material Strong bases

Other data : Stable at normal ambient temperature and pressure.

7.3. Specific end use(s)

no data available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

If sub-section is empty then no values are applicable.

Components with workplace control parameters

Type Form of exposure	Control parameters	Update	Basis	Remarks
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Dust (inhalable and respirable fraction)

TWA Inhalable dust.	10 mg/m3	12 2011	EH40 WEL	
TWA Respirable dust.	4 mg/m3	12 2011	EH40 WEL	

Derived No Effect Level (DNEL)

- Pentapotassium bis(peroxymonosulphate) bis(sulphate)

 - : Type of Application (Use): Workers
Exposure routes: Skin contact
Health Effect: Acute - systemic effects
80 mg/kg
 - : Type of Application (Use): Workers
Exposure routes: Inhalation
Health Effect: Acute - systemic effects
Value: 50 mg/m3
 - : Type of Application (Use): Workers
Exposure routes: Skin contact
Health Effect: Acute - local effects
Value: 0.449 mg/cm2
 - : Type of Application (Use): Workers
Exposure routes: Inhalation
Health Effect: Acute - local effects
Value: 50 mg/m3
 - : Type of Application (Use): Workers
Exposure routes: Skin contact
Health Effect: Long-term - systemic effects
20 mg/kg

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- : Type of Application (Use): Workers
Exposure routes: Inhalation
Health Effect: Long-term - systemic effects
Value: 0.28 mg/m³
- : Type of Application (Use): Workers
Exposure routes: Inhalation
Health Effect: Long-term - local effects
Value: 0.28 mg/m³
- : Type of Application (Use): Consumers
Exposure routes: Skin contact
Health Effect: Acute - systemic effects
40 mg/kg
- : Type of Application (Use): Consumers
Exposure routes: Inhalation
Health Effect: Acute - systemic effects
Value: 25 mg/m³
- : Type of Application (Use): Consumers
Exposure routes: Ingestion
Health Effect: Acute - systemic effects
10 mg/kg
- : Type of Application (Use): Consumers
Exposure routes: Skin contact
Health Effect: Acute - local effects
Value: 0.224 mg/cm²
- : Type of Application (Use): Consumers
Exposure routes: Inhalation
Health Effect: Acute - local effects
Value: 25 mg/m³
- : Type of Application (Use): Consumers
Exposure routes: Skin contact
Health Effect: Long-term - systemic effects
10 mg/kg
- : Type of Application (Use): Consumers
Exposure routes: Inhalation
Health Effect: Long-term - systemic effects
Value: 0.14 mg/m³
- : Type of Application (Use): Consumers
Exposure routes: Ingestion
Health Effect: Long-term - systemic effects
Value: 10 mg/m³
- : Type of Application (Use): Consumers
Exposure routes: Inhalation
Health Effect: Long-term - local effects
Value: 0.14 mg/m³

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Predicted No Effect Concentration (PNEC)

☒ Pentapotassium bis(peroxymonosulphate) bis(sulphate)	:	Value: 0.022 mg/l
		Compartment: Fresh water
	:	Value: 0.002 mg/l
		Compartment: Marine water
	:	Value: 0.0109 mg/l
		Compartment: Intermittent use/release
	:	Value: 0.017 mg/l
		Compartment: Fresh water sediment
	:	Value: 0.017 mg/kg
	Compartment: Fresh water sediment	
:	Value: 0.00174 mg/kg	
	Compartment: Marine sediment	
:	Value: 0.885 mg/kg	
	Compartment: Soil	
:	Value: 108 mg/l	
	Compartment: Sewage treatment plants	

8.2. Exposure controls

Engineering measures	:	Provide local exhaust ventilation when handling material in bulk.
Eye protection	:	Tightly fitting safety goggles
Hand protection	:	Rubber gloves
Skin and body protection	:	Wear as appropriate: Apron Boots Remove and wash contaminated clothing before re-use.
Hygiene measures	:	Wash hands before breaks and immediately after handling the product. Regular cleaning of equipment, work area and clothing.
Respiratory protection	:	Provide adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Half mask with combination filter A1/P1 (EN 141)

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	:	tablet
Colour	:	white
Odour	:	none

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pH	: 2.6 - 3.2
Flash point	: does not flash
Thermal decomposition	: > 50 °C
Water solubility	: 65 g/l at 20 °C

9.2. Other information

no data available

SECTION 10: Stability and reactivity

- | | |
|---|--|
| 10.1. Reactivity | : Stable under recommended storage conditions. |
| 10.2. Chemical stability | : Stable under normal conditions. |
| 10.3. Possibility of hazardous reactions | : Stable under recommended storage conditions. |
| 10.4. Conditions to avoid | : Exposure to moisture. |
| 10.5. Incompatible materials | : Strong bases
Combustible material |
| 10.6. Hazardous decomposition products | : Sulphur dioxide
Chlorine
Hypochlorite |

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity

LD50 / rat : 4,123 mg/kg

- Pentapotassium bis(peroxymonosulphate) bis(sulphate)
LD50 / rat : 500 mg/kg
- Malic acid
LD50 / mouse : 1,600 mg/kg
- Polyphosphoric acids, sodium salts
LD50 / rat : 3,053 mg/kg

Acute inhalation toxicity

LC50 / 4 h rat : 3.7 mg/l
Method: aerosol

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- Pentapotassium bis(peroxymonosulphate) bis(sulphate)
LC50 / 4 h rat : > 5 mg/l
- Malic acid
LC50 / 4 h rat : 11.4 mg/l
The toxicological data has been taken from products of similar composition.

Acute dermal toxicity

LD50 / rabbit : 2,200 mg/kg

- Pentapotassium bis(peroxymonosulphate) bis(sulphate)
LD50 / rat : > 2,000 mg/kg
- Malic acid
LD50 / rabbit : 20,000 mg/kg
The toxicological data has been taken from products of similar composition.

Skin irritation

Moderate skin irritation

- Pentapotassium bis(peroxymonosulphate) bis(sulphate)
rabbit
Classification: Causes burns.
Result: Corrosive
- Malic acid
rabbit
Classification: Irritating to skin.
Result: Skin irritation
- Polyphosphoric acids, sodium salts
animals (unspecified species)
Classification: Not classified as irritant
Result: slight irritation

Eye irritation

Risk of serious damage to eyes.

- Pentapotassium bis(peroxymonosulphate) bis(sulphate)
rabbit
Classification: Corrosive
Result: Risk of serious damage to eyes.
- Malic acid
rabbit
Classification: Irritating to eyes.
Result: Severe eye irritation

Sensitisation

guinea pig Buehler Test

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Result: Animal test did not cause sensitization by skin contact.

guinea pig Maximisation Test

Result: Animal test did not cause sensitization by skin contact.

- Pentapotassium bis(peroxymonosulphate) bis(sulphate)
guinea pig
Classification: Not a skin sensitizer.
Result: Did not cause sensitization on laboratory animals.
There are rare or inconclusive reports of human skin sensitization. There are no reports of human respiratory sensitization.

Repeated dose toxicity

- Malic acid
Oral - feed rat
No toxicologically significant effects were found.
- Polyphosphoric acids, sodium salts
No adverse effect has been observed in chronic toxicity tests.

Mutagenicity assessment

- Pentapotassium bis(peroxymonosulphate) bis(sulphate)
Animal testing did not show any mutagenic effects.
- Malic acid
Animal testing did not show any mutagenic effects.
- Polyphosphoric acids, sodium salts
Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
- Dipotassium peroxodisulphate
Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
- Sodium dodecylbenzenesulfonate
Animal testing did not show any mutagenic effects.

Carcinogenicity assessment

- Pentapotassium bis(peroxymonosulphate) bis(sulphate)
no data available
- Malic acid
Not classifiable as a human carcinogen.
- Polyphosphoric acids, sodium salts
Animal testing did not show any carcinogenic effects.
- Dipotassium peroxodisulphate
no data available
- Sodium dodecylbenzenesulfonate
Animal testing did not show any carcinogenic effects.

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Not classifiable as a human carcinogen.

Toxicity to reproduction assessment

- Pentapotassium bis(peroxymonosulphate) bis(sulphate)
no data available
- Malic acid
No toxicity to reproduction
- Polyphosphoric acids, sodium salts
No toxicity to reproduction
- Dipotassium peroxodisulphate
no data available
- Sodium dodecylbenzenesulfonate
Animal testing did not show any effects on fertility.

Assessment teratogenicity

- Polyphosphoric acids, sodium salts
Animal testing showed no developmental toxicity.
- Dipotassium peroxodisulphate
no data available

SECTION 12: Ecological information

12.1. Toxicity

Toxicity to fish

- Pentapotassium bis(peroxymonosulphate) bis(sulphate)
LC50 / 96 h / *Cyprinodon variegatus* (sheepshead minnow): 1.09 mg/l

Toxicity to aquatic plants

- Pentapotassium bis(peroxymonosulphate) bis(sulphate)
ErC50 / 72 h / Algae: > 1 mg/l

Toxicity to aquatic invertebrates

- Pentapotassium bis(peroxymonosulphate) bis(sulphate)
EC50 / 48 h / *Daphnia*: 3.5 mg/l
- Malic acid
EC50 / 48 h / *Daphnia magna* (Water flea): 240 mg/l

12.2. Persistence and degradability

Biodegradability

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Expected to be biodegradable

- Pentapotassium bis(peroxymonosulphate) bis(sulphate)
Readily biodegradable.
- Malic acid
Readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulation

- Pentapotassium bis(peroxymonosulphate) bis(sulphate)
Bioaccumulation is unlikely.
- Malic acid
Accumulation in aquatic organisms is unlikely.

12.4. Mobility in soil

no data available

12.5. Results of PBT and vPvB assessment

no data available

12.6. Other adverse effects

no data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product : Dispose of as special waste in compliance with local and national regulations.
The product should not be allowed to enter drains, water courses or the soil.

Contaminated packaging : If recycling is not practicable, dispose of in compliance with local regulations.

SECTION 14: Transport information

ADR

- 14.1. UN number: not applicable
14.2. UN proper shipping name: not applicable
14.3. Transport hazard class(es): not applicable
14.4. Packing group: not applicable
14.5. Environmental hazards: none
14.6. Special precautions for user:
Not classified as dangerous in the meaning of transport regulations.

IATA_C

- 14.1. UN number: not applicable
14.2. UN proper shipping name: not applicable
14.3. Transport hazard class(es): not applicable

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- 14.4. Packing group: not applicable
14.5. Environmental hazards: none
14.6. Special precautions for user:
Not classified as dangerous in the meaning of transport regulations.

IMDG

- 14.1. UN number: not applicable
14.2. UN proper shipping name: not applicable
14.3. Transport hazard class(es): not applicable
14.4. Packing group: not applicable
14.5. Environmental hazards: none
14.6. Special precautions for user:
Not classified as dangerous in the meaning of transport regulations.

- 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**
not applicable

SECTION 15: Regulatory information

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

Other regulations : Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

15.2. Chemical Safety Assessment

In the EU, this product falls under the Directive on biocide products 98/8/EC.

SECTION 16: Other information

Text of R-phrases mentioned in Section 3

R 8 Contact with combustible material may cause fire.
R22 Harmful if swallowed.
R34 Causes burns.
R36/37/38 Irritating to eyes, respiratory system and skin.
R36/38 Irritating to eyes and skin.
R42/43 May cause sensitization by inhalation and skin contact.
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Full text of H-Statements referred to under section 3.

H272 May intensify fire; oxidiser.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.
H412 Harmful to aquatic life with long lasting effects.

Further information

An Exposure Scenario (ES) is not required.

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Significant change from previous version is denoted with a double bar.

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