

<b>SAFETY DATA SHEET</b> <b>Solutio Ixodies</b> according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU	Vetrisol, s.r.o. Renoirova 1051/2A 152 00 Prague Czech Republic Revision date : 15/2/2020
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## 1 Identification of the substance/mixture and of the company

<b>Manufacturer product name:</b>	<b>Solutio Ixodies</b>	
<b>Manufacturer Trade names:</b>	<b>Solutio Ixodies</b> <b>TickSolution</b> <b>Zeckenmeister</b> <b>TiquesSolution</b> <b>GarrapataSolución</b> <b>ZeccaSoluzione</b> <b>Klíšťák</b>	
<b>Use of product:</b>	Medical device class I –  The product works to immediately incapacitate ticks without causing any other defensive reactions.	
<b>Description of the product:</b>	Medical device class I – The product is packet in aluminium tubes with special epoxy phenolic coating containing 10 ml of product solution.  Medical device registration No: 00041793 Tested by Institute of parasitology Czech Academy of Sciences	
<b>Company:</b>	Vetrisol,s.r.o. Renoirova 1051/2A 152 00 Prague 5 Czech Republic	
<b>Company ID:</b>	27601781	
<b>Telephone:</b>	+ 420 739 642 027	
<b>e-mail:</b>	<a href="mailto:info@vetrisol.cz">info@vetrisol.cz</a>	
<b>Emergency contact:</b>	Toxicological Enquiry Point Na Bojišti 1, Prague, Czech Republic +420-224919293 +420-224915402	

## 2 Hazards Identification

<b>Classifications</b>	Flammable Liquid – Category 1	H225
	Acute toxicity (oral) – Category 4	H302
	Specific target organ toxicity, single exposure; Category 3	H336

	Full text H -code text in section 16:	
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<b>Hazard Statements</b>	
H225	Highly Flammable liquid and vapour
H302	Harmful if swallowed.
H336	May cause drowsiness or dizziness.
EUH019	May form explosive peroxides.
EUH066	Repeated exposure may cause skin dryness or cracking.

<b>Precautionary statements</b>	
<b>Prevention/Response/Storage</b>	
P102	Keep out of reach of children.
P103	Read label before use.
P211	Take any precaution to avoid mixing with combustibles/...
P410	Protect from sunlight.
P210	Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.

### Disposal

Dispose of contents/ containers to approved disposal sites in accordance with local, regional, national, and/or international regulations

<b>3 Composition /information on ingredients</b>				
<b>General description of product:</b> Solution of collodion and phenol				
Component	CAS-No:	ES (EINECS)-No:	Weight %	H Code
Diethyl ether	60-29-7	200-467-2	40,0	204,302,336
Ethanol	64-17-5	200-578-6	54,0	225,319
Nitrocellulose (Nitrogen < 12,6 %)	9004-70-0	-	4,0	228,319,
Phenol	108-95-2	203-632-7	2,0	336,341,331,311,301,373,314

<b>4 First Aid Measures</b>	
<b>General</b>	Remove contaminated, saturated clothing immediately. In case of accident or unwellness, seek medical advice immediately (show direction for use or safety data sheet if possible)

<b>Inhalation</b>	If inhaled, remove casualty to fresh air.
<b>Skin contact</b>	Rinse cautiously with water for several minutes. Remove/Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. If skin irritation persists, seek medical attention.
<b>Eye contact</b>	Remove contact lenses. Rinse immediately with water with eyelids open, for at least 15 minutes. If eye irritation persists: Get medical advice/attention.
<b>Ingestion</b>	If accidentally swallowed: Rinse mouth. Do NOT induce vomiting. Drink 2-3 glasses of water. Get medical advice/attention.

### 5 Fire-fighting measures

<b>Suitable extinguishing media:</b>	Foam, Dry chemical, Carbon dioxide (CO <sub>2</sub> )
<b>Specific hazards during firefighting:</b>	Fire Hazard fire will produce hazardous vapours. Vapours heavier-than-air. Vapours may form explosive mixture with air.
<b>Special protective equipment for fire fighters:</b>	Approved positive pressure self-contained breathing apparatus and fully protective clothing. Flash back possible over considerable distance.
<b>Further information</b>	Isolate area around container involved in fire. Cool tanks, shells and containers exposed to fire and excessive heat with water over considerable distance. Exposure to decomposition products may be a hazard to health. Contained fire extinguishing water may be prohibited to disposal into groundwater and surface water – HS Code 2207 10 00.

### 6 Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Use personal protective equipment. Avoid direct contact with the content. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. No smoking. Follow common safety and health regulations For personal protection see section 8.
<b>Environmental precautions:</b>	Prevent further leakage or spillage if safe to do so. Do not let product enter drains, environment, surface and ground water. Discharge into the environment must be avoided. Inform relevant authorities if leakage occurs.
<b>Methods for cleaning up:</b>	Soak up with inert absorbent material (sand, soil, vermiculite, chemisorb). Dispose of the absorbent material as a special waste in compliance with local and national regulations. Clean up the area.

7 Handling and Storage	
<b>Precautions for safe handling:</b>	<p>Wear personal protective clothing (see section 8)            Ensure adequate ventilation.            Remove all sources of ignition. No smoking. Take measures to prevent the build-up of electrostatic charge.            Avoid breathing vapours, mist or gas.            Wash hands with water and soap before breaks, eating, drinking and smoking and after work and take shower if necessary.            For precautions see section 2.2.</p>
<b>Conditions for safe storage, including any incompatibilities</b>	<p>Protect against damage            Store in closed original package in cool, dry and well-ventilated place.            Remove all sources of ignition. No smoking. Take measures to prevent the build-up of electrostatic charge.            No smoking. No manipulation close to sources of ignition.            Protect from sunlight.</p> <p>Quantitative limits given by conditions for storage of flammable liquids Class 3</p>

8 Exposure controls / personal protection				
<p>Handle in accordance with good industrial hygiene and safety practice.            Ensure adequate ventilation or technical measures to keep below exposure limits.            Wash hands before breaks and at the end of workday. Do not eat, drink, smoke during work</p>				
Components	CAS – No.	PEL mg/m <sup>3</sup>	MAC mg/m <sup>3</sup>	Comment
Diethyl ether	60-29-7	300	600	Conversion (25°C, 100 kPa): 0,330
Ethanol	64-17-5	1000	3000	Conversion: 0,532
Nitrocellulose	9004-70-0	500	1000	Conversion NA
Phenol	108-95-2	7,5	15	Conversion (25°C, 100 kPa): 0,260
<b>Biological exposure limit values:</b>				
Components	Indicator	Limit values		Comment
Phenol	Phenol	300 mg/g of creatinine	360 µmol/mmol of creatinine	Urine, end of workday
<b>Recommended monitoring procedures:</b>	Monitoring procedures of exposure control and personal protective clothing will be defined by responsible person for health and safety of workers.			

<b>Exposure control</b>	Ensure adequate ventilation or technical measures to keep below exposure limits.
<b>Exposure control/personal protection</b>	Ensure adequate ventilation or technical measures to keep below exposure limits. Monitoring of exposure limits Use of protective clothing
<b>Environmental Exposure controls</b>	Do not let product enter drains, environment, surface and ground water.
<b>Personal protective equipment</b>	
<b>General</b>	adequate ventilation
<b>Respiratory protection</b>	Not required under normal conditions of use. Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination type ABEK (filter type A) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as CEN (EU).
<b>Eye/face protection</b>	Safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as EN 166(EU)
<b>Hand protection</b>	Handle with gloves. Material: butyl rubber gloves, 0,7 mm Thickness, initiation time > 480 min. natural rubber latex, 0,4 mm Thickness, initiation time > 120 min.
<b>Skin Protection</b>	Use of protective clothing, Take off contaminated closing.

<b>9 Physical and chemical properties</b>	
<b>Form</b>	Liquid
<b>Colour</b>	Colourless until weak light white
<b>Odour</b>	Characteristic hydrocarbon like (ether and fenol)
<b>Odour threshold</b>	Not available
<b>pH</b>	6,5 (20°C)
<b>Melting point</b>	No data available
<b>Boiling point</b>	36 °C
<b>Flash point</b>	No data available
<b>Flammability (liquid)</b>	Highly Flammable
<b>Ignition temperature</b>	No data available
<b>Explosiveness</b>	Vapors may form explosive mixture with air – IIA

<b>Upper explosion limit (% by vol.)</b>	30
<b>Lower explosion limit (% by vol.)</b>	3,5
<b>Oxidizing properties</b>	No data available
<b>Vapour pressure</b>	50 kPa (20°C)
<b>Density</b>	0,72 – 0,73 g/cm <sup>3</sup> (20°C)
<b>Water solubility</b>	Negligible
<b>Solubility in other fat</b>	No data available
<b>Solubility in other solvents</b>	No data available
<b>Partition coefficient (n-octanol/water)</b>	No data available
<b>Viscosity, dynamic</b>	No data available
<b>Vapour density</b>	No data available

#### 10 Stability and reactivity

<b>Stability</b>	When stored, handled and used as prescribed the product is stable
<b>Chemical stability</b>	Stable under normal conditions
<b>Conditions to avoid</b>	Avoid high temperatures, open flames
<b>Possibility of hazardous reactions</b>	Avoid Alkali, alkaline-earth metals, alkaline oxides, strong oxidising agents, halogens or halogen compounds, chromium trioxide, chromyl chloride, ethylene oxide, fluorine, perchlorates, potassium permanganate, sulphuric acid, perchloric acid, permanganic acid, phosphorus oxides, nitric acid, dinitrogen pentoxide, uranium hexafluoride, hydrogen peroxide
<b>Hazardous decomposition products</b>	None under normal conditions. Fire Hazard fire will produce hazardous vapours.
<b>Other</b>	Inappropriate handling materials: plastics, gum Vapours may form explosive mixture with air

#### 11 Toxicological information

<b>Skin Irritation</b>	Irritation/corrosion to skin. If case of long term exposure dermatitis may occur. can be partially absorbed through skin.
<b>Inhalation</b>	Respiratory tract irritation. Danger of absorption through mucous membranes
<b>Eye irritation</b>	Serious eye damage
<b>Ingestion</b>	Ingestion of even small volume may cause corrosion to mucous membrane and gastrointestinal disturbances including nausea and vomiting.

<b>Sensibilisation</b>	No data available
<b>Narcotic effects</b>	May cause drowsiness or dizziness
<b>Carcinogenicity</b>	No data available
<b>Germ cell mutagenicity</b>	No data available
<b>Reproductive toxicity</b>	No data available

## 12 Ecological information

<b>Wastewater</b>	If used properly no effects on wastewater treatment plant function
<b>Persistence and degradability</b>	
<b>Biodegradability</b>	90 % readily biodegradable
<b>CHSK</b>	1,99 g/g
<b>BSK<sub>5</sub></b>	0,93 – 1,67 g/g
<b>TSK</b>	2,1 g/g
<b>Mobility into soil:</b>	No data available
<b>Bioaccumulative potential</b>	No data available Bioaccumulation not expected (log P (o/v)<1 ) Log P (oct): -0,32
<b>Surface tension</b>	No data available
<b>Adsorption and desorption</b>	No data available
<b>Other</b>	In high concentration can be harmful to aquatic life
<b>WGK</b>	1



## 13 Disposal consideration

	Waste disposal should be in accordance with local, national and European legislation.
<b>Waste treatment method:</b>	Waste disposal according to the directive 2008/98/EC, covering waste and dangerous waste
<b>Classification</b>	Classified as hazardous waste
<b>Waste disposal</b>	Waste disposal to be handled through licenced waste disposal management company
<b>Product packaging disposal</b>	Handle contaminated packages in the same way as the product

## 14 Transport information

<b>CFR</b>	
Proper shipping name:	Nitrocellulose solution, Flammable
UN-No.	UN 2059
Class	3
Packing group	II

Environmentally hazardous	-----
Tunnel restriction Code (ADR)	B
<b>ADR / RID</b>	
Proper shipping name:	Nitrocellulose solution, Flammable
UN-No.	UN 2059
Class	3
Packing group	II
Environmentally hazardous	-----
Tunnel restriction Code (ADR)	B
<b>AITA</b>	
Proper shipping name:	Nitrocellulose solution, Flammable
UN-No.	UN 2059
Class	3
Packing group	II
Environmentally hazardous	-----
ERG Code	3H
<b>IMO / IMDG</b>	
Proper shipping name:	Nitrocellulose solution, Flammable
UN-No.	UN 2059
Class	3
Packing group	II
Environmentally hazardous	-----
EMS Number	F-E S-D

15 Regulatory information	
<b>Labelling according to EC directives</b>	This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006 on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
<b>SAFETY/HAZARD PICTOGRAMS AND CODES</b>	 
<b>Hazard statements</b>	
H225	Highly Flammable liquid and vapour.
H302	Harmful if swallowed.
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EUH019	May form explosive peroxides.
EUH066	Repeated exposure may cause skin dryness or cracking
<b>Precautionary statements</b>	
<b>Prevention/Response/Storage</b>	
P102	Keep out of reach of children.
P103	Read label before use.
P211	Take any precaution to avoid mixing with combustibles/...
P410	Protect from sunlight.
P210	Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
<b>Safety, health and environmental regulations/legislation specific for the substance or mixture</b>	
	Classification and labelling are according to CLP and DSN
	Regulation (EC) No. 1907/2006 on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)
	Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

<b>16 Other information</b>	
	<b>Full text of H-Statements referred to under sections 2 and 3.</b>
H225	Highly Flammable liquid and vapour
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P403 + P233	Store in a well-ventilated place. Keep container tightly closed.

**Further information:**

The product is packet in aluminium tubes with special epoxy phenolic coating containing 10 ml of product solution.

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In case of mixing the product with other products the information is not necessarily valid for the new made up material.