

Date 21.11.2011

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## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING

### 1.1 Product identifier

#### 1.1.1 Commercial Product Name

SILKOSTAT 9210 R2

#### 1.1.2 Product code

FF2411 1 L, FF2411 2 L

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

#### 1.2.1 Recommended use

MP0112 - Laboratory use: R&D laboratory use

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

#### 1.3.1 Supplier

Oy FF-Chemicals Ab

#### P.O.Box

Teollisuustie 4

#### Postcode and post office

FI-90830 Haukipudas

Finland

#### Telephone

+358 (0)8 5563 193

#### Telefax

+358 (0)8 5563 194

#### Email

ffc@ff-chemicals.fi

### 1.4 Emergency telephone number

#### 1.4.1 Telephone number, name and address

Emergency telephone number 112

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

This mixture is not classified as dangerous according to European Union legislation.

### 2.2 Label elements

Not a dangerous substance according to GHS.

The product does not need to be labelled in accordance with EC directives or respective national laws.

### 2.3 Other hazards

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2 Mixtures

#### Hazardous components

##### CAS/EC and Reg. number

607-007-00-3

##### Chemical name of the substance

saltsoxalicacid

##### Concentration Classification

4%

Xn; R21/22;  
Acute Tox. 4 , H312; Acute Tox. 4  
, H302

144-62-7

oxalicacid

Xn; R21/22;  
Acute Tox. 4 ( ), H312; Acute Tox.  
4 ( ), H302

### 3.3 Other information

(COOH)<sub>2</sub> \* 2H<sub>2</sub>O

CAS[6153-56-6]

## 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

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- 4.1.2 Inhalation**  
If inhaled, remove to fresh air.
- 4.1.3 Skin contact**  
If on skin, rinse well with water.
- 4.1.4 Eye contact**  
Flush eyes with water as a precaution.
- 4.1.5 Ingestion**  
Drink 1 or 2 glasses of water. Call a physician if symptoms occur.
- 4.2 Most important symptoms and effects, both acute and delayed**  
Information refers to the main component.  
Cough, Shortness of breath, Nausea, Vomiting
- 4.3 Indication of immediate medical attention and special treatment needed**

## 5. FIREFIGHTING MEASURES

- 5.1 Extinguishing media**
- 5.1.1 Suitable extinguishing media**  
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- 5.1.2 Extinguishing media which must not be used for safety reasons**  
Product is compatible with standard fire-fighting agents.
- 5.2 Special hazards arising from the substance or mixture**  
No information available.
- 5.3 Advice for firefighters**  
In the event of fire, wear self-contained breathing apparatus.
- 5.4 Specific methods**  
Suppress (knock down) gases/vapours/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

## 6. ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions, protective equipment and emergency procedures**  
Evacuate personnel to safe areas.
- 6.2 Environmental precautions**  
Do not let product enter drains.
- 6.3 Methods and materials for containment and cleaning up**  
Large spills should be collected mechanically (remove by pumping) for disposal.
- 6.4 Reference to other sections**

## 7. HANDLING AND STORAGE

- 7.1 Precautions for safe handling**  
General industrial hygiene practice.
- 7.2 Conditions for safe storage, including any incompatibilities**  
Keep tightly closed. Store at room temperature.
- 7.3 Specific end use(s)**

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1 Control parameters**
- 8.1.1 Threshold limits**

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144-62-7      oxalicacid      1 mg/m<sup>3</sup> (8 h)  
 skin      3 mg/m<sup>3</sup> (15 min)

**8.2 Exposure controls**

**8.2.1 Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice.

**8.2.2 Individual protection measures**

**8.2.2.1 Respiratory protection**

Required, if fumes/vapours are generated

**8.2.2.2 Hand protection**

Protective gloves complying with EN 374.

**8.2.2.3 Eye/face protection**

Goggles

**8.2.2.4 Skin protection**

Lab coat, Long sleeved clothing

**8.2.3 Environmental exposure controls**

Do not let product enter drains.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**9.1 Important Health Safety and Environmental Information**

**9.1.1 Appearance**

Liquid, colourless

**9.1.2 Odour**

odourless

**9.1.3 Odour threshold**

No information available.

**9.1.4 pH**

No information available.

**9.1.5 Melting point/freezing point**

No information available.

**9.1.6 Initial boiling point and boiling range**

No information available.

**9.1.7 Flash point**

No information available.

**9.1.8 Evaporation rate**

No information available.

**9.1.9 Flammability (solid, gas)**

No information available.

**9.1.10 Explosive properties**

**9.1.10.1 Lower explosion limit**

No information available.

**9.1.10.2 Upper explosion limit**

No information available.

**9.1.11 Vapour pressure**

No information available.

**9.1.12 Vapour density**

No information available.

**9.1.13 Relative density**

1,0109 kg/l

**9.1.14 Solubility(ies)**

**9.1.14.1 Water solubility**

soluble

**9.1.15 Partition coefficient: n-octanol/water**

No information available.

**9.1.16 Auto-ignition temperature**

No information available.

**9.1.17 Decomposition temperature**

No information available.

**9.1.18 Viscosity**

No information available.

**9.1.19 Explosive properties**

No information available.

**9.1.20 Oxidising properties**

No information available.

**9.2 Other information**

**10. STABILITY AND REACTIVITY**

**10.1 Reactivity**

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- 10.2 Chemical stability**  
Stable at normal ambient temperature and pressure.
- 10.3 Possibility of hazardous reactions**  
Information refers to the main component.  
Risk of explosion. Reacts with the following substances: sodium hypochlorite, Chlorates, Strong oxidizing agents, Silver, Salts of oxyhalogenic acids  
Exothermic reaction with: Bases, Ammonia, Mercury
- 10.4 Conditions to avoid**  
No information available.
- 10.5 Incompatible materials**  
no data available
- 10.6 Hazardous decomposition products**  
No information available.

## 11. TOXICOLOGICAL INFORMATION

- 11.1 Information on toxicological effects**
- 11.1.1 Acute toxicity**  
No information available.
- 11.1.2 Irritation and corrosion**  
According to the classification criteria of the European Union, the product is not considered as being a skin irritant.  
According to the classification criteria of the European Union, the product is not considered as being an eye irritant.
- 11.1.5 STOT-single exposure**  
The substance or mixture is not classified as specific target organ toxicant, single exposure.
- 11.1.6 STOT-repeated exposure**  
The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
- 11.1.7 Aspiration hazard**  
No aspiration toxicity classification

## 12. ECOLOGICAL INFORMATION

- 12.1 Toxicity**
- 12.1.1 Aquatic toxicity**  
No information available.
- 12.1.2 Toxicity to other organisms**  
No information available.
- 12.2 Persistence and degradability**
- 12.2.1 Biodegradation**  
No information available.
- 12.2.2 Chemical degradation**  
No information available.
- 12.3 Bioaccumulative potential**  
No information available.
- 12.4 Mobility in soil**  
No information available.
- 12.5 Results of PBT and vPvB assessment**
- 12.6 Other adverse effects**

## 13. DISPOSAL CONSIDERATIONS

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**13.1 Waste treatment methods**

**13.2 Waste from residues / unused products**

The product has to be disposed of as laboratory chemical in accordance with local regulations.

**14. TRANSPORT INFORMATION**

	<b>Land transport ADR/RID</b>	<b>Sea transport IMDG/IMO</b>	<b>Air transport ICAO/IATA</b>
<b>14.1 UN number</b>			
<b>14.2 UN proper shipping name</b>			
<b>14.3 Transport hazard class(es)</b>			
<b>14.4 Packing group</b>			
<b>14.5 Environmental hazards</b>			
<b>Other information</b>	Not classified as dangerous in the meaning of transport regulations.		

**14.6 Special precautions for users**

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

**15. REGULATORY INFORMATION**

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

Directive 96/82/EC does not apply

**15.2 Chemical safety assessment**

**16. OTHER INFORMATION**

**16.4 Classification procedure**

REGULATION (EC) No 1272/2008

**16.6 Training advice**

Provide adequate information, instruction and training for operators.

**16.8 Additional information available from:**

Oy FF-Chemicals Ab, Tel. +358 8-5563 193  
 ffc@ff-chemicals.fi

The information contained herein is based on the present state of our knowledge and does therefore not guarantee certain properties.