

**SCI® 5582**

According to the Regulation No. 1907/2006/EC (REACH)  
Annex II, as amended by Regulation No. 2020/878/EC

Date of revision: 2024-10-03 / EN  
Date of previous revision: 2020-12-18 / EN

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

**Product name:** SCI® 5582  
**Product description:** organic acids aqueous solution.  
**Product type:** Liquid.  
**UFI:** 3XF1-G039-X009-D0Q3

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

Relevant identified uses: Membrane system acid cleaner.

**Uses advised against:**

Do not use for non-specified uses.

**1.3. Details of the supplier of the safety data sheet**

**Company:** JSC „Arionex LT“  
**Address:** Ašigalio str. 6c, LT-49142, Kaunas, Lithuania  
**Telephone:** +370 37 214669  
**E-mail:** [info@arionex.eu](mailto:info@arionex.eu)

**1.4. Emergency telephone**

Poisoning control and information bureau  
**Telephone number:** 8 5 236 20 52  
**E-mail:** [info@tox.lt](mailto:info@tox.lt)  
**Work time:** All day (24 hours).  
**General emergency number:** 112

**SECTION 2: Hazards Identification****2.1. Classification of the substance or mixture**

**Product type:** Mixture.  
**According to Regulation (EC) No 1272/2008 [CLP]**

Hazard categories:  
Serious eye damage/eye irritation: Eye Irrit. 2  
Hazard phrases:  
Causes serious eye irritation

**2.2. Label elements**

**According to Regulation (EC) No 1272/2008 [CLP].**

**Pictogram:**



GHS07

**Signal Word:** Caution

**Hazardous substances in the mixture:**

Citric acid.

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**Hazard Statement:**

H319 Causes serious eye irritation.

**Precautionary Statements:****Prevention:**

P280 Wear protective gloves/protective clothing/eye protection/face protection.

**Response:**

P305+P351+P338 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/attention.

**Storage:**

P405 Store locked up.

**Disposal:**

P501 Dispose of contents/container to accordance with local regulations.

**2.3. Other hazards****Evaluation of PBT and vPvB results**

**PBT:** Not applicable.

**vPvB:** Not applicable.

No specific dangers known, if the regulations/notes for storage and handling are considered.

**SECTION 3: Composition/Information on Ingredients****3.1. Substances**

Not applicable.

**3.2. Mixtures**

Chemical name: organic acids aqueous solution.

Name	CAS No.	EINECS No.	Index No.	REACH Registration No.	Concentration range (%)	Classification according to Regulation (EC) No 1272/2008 [CLP]
Citric acid monohydrate	5949-29-1	201-069-1	-	01-2119457026-42-XXXX	20-<50	Eye Irrit. 2; H319

For the full text of the H-statements mentioned in the Section 16.

**Additional information:**

Specific concentration limits: None.

M-factor: None.

ATE (Acute toxicity estimates): None.

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**SECTION 4: First-Aid Measures****4.1. Description of first aid measures**

Remove contaminated clothing.

**If inhaled:**

The product is not volatile. If symptoms are felt, it is recommended to bring to fresh air to breathe.

**On skin contact:**

Remove contaminated clothing, footwear, watches, etc. And clean thoroughly before re-using them.  
Wash immediately with plenty of water. Seek medical treatment in all cases of irritation.

**On contact with eyes:**

Rinse immediately with plenty of water for at least 10-15 minutes. Immediately obtain medical attention.

**On ingestion:**

Immediately rinse mouth and drink at least 0.5 liters of water, seek medical attention.

**4.2. Most important symptoms and effects, both acute and delayed****Both acute symptoms:**

If inhaled:	May cause respiratory irritation.
On skin contact:	May cause skin irritation or skin burns.
On contact with eyes:	May causes eye irritation and damage eyes.
On ingestion:	May cause burns of mouth, throat and stomach.

**Delayed symptoms:**

If inhaled:	Respiratory tract irritation.
On skin contact:	Irritation, allergic reactions, skin burns.
On contact with eyes:	Tearing, redness, pain, eye damage.
On ingestion:	Stomach ache.

**4.4. Indication of any immediate medical attention and special treatment needed**

Treatment: No information available.

**SECTION 5: Firefighting Measures****5.1. Extinguishing media****Suitable extinguishing media:**

All types of extinguishing media are suitable: water, dry powder, carbon dioxide, foam, sand and other.

**Unsuitable extinguishing media:**

None known.

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

Dangerous products of combustion of the mixture was not observed.

**5.3. Advice for firefighters**

Wear protective working tools such boots, coveralls, gloves, eye and face protection.  
EN 469 - Protective clothing for firemen.

**SECTION 6: Accidental Release Measures****6.1. Personal precautions, protective equipment and emergency procedures****6.1.1. For non-emergency personnel**

Avoid contact with skin and eyes. Wear personal protective equipment as described under Heading 8.  
Ensure adequate ventilation in the workplace.

**6.1.2. For emergency responders**

Avoid contact with skin and eyes. Wear personal protective equipment as described under Heading 8.  
Evacuate persons not participating in the liquidation of the accident from the room. Ensure the maximum possible ventilation of the premises.

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**6.2. Environmental precautions**

Do not wash product down sewage and drainage systems or into bodies of water. If getting really happened, heavily diluted with water. The mixture don't pose a significant risk to health.

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

Absorb the spillage into sand or other inert material, shovel into suitable containers. If containment is not possible and material enters the drain, dilute as much as possible with water.

**6.4. Reference to other sections**

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

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**SECTION 7: Handling and Storage****7.1. Precautions for safe handling**

In the workplace should be equipped good ventilation. Do not eat, drink or smoke in the workplace. Avoid possible contact with skin, eyes or mouth. Wash hands after use. If work clothes or protective equipment become contaminated, remove them immediately. Follow good manufacturing practices. Avoid release to the environment. Keep away from water-reactive substances. Protection against fire and explosion: No special precautions necessary.

**7.2. Conditions for safe storage, including any incompatibilities**

The product should be stored in a cool, dry area in original manufacturer's packaging.

**Storage stability:**

Keep storage area should be dry, cool, 0 to 35 ° C and ventilated. Avoid freezing and high temperature change.

Unsuitable (incompatible) storage of chemicals: alkalis.

The mixture don't present a risk of ignition or explosion.

**7.3. Specific end use(s)**

Used as at acidic concentrate for RO membranes.

Diluted by permeate product must be constantly and proportionally dosed at the inlet. Recommended dilution – 1:20 (product: permeate).

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**SECTION 8: Exposure Controls/Personal Protection****8.1. Control parameters**

Components with occupational exposure limits:  
No occupational exposure limits known.

**DNEL value: none**

## SAFETY DATA SHEET

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## PNEC value:

Name	Type	Effect	Limit value
Citric acid monohydrate CAS no. 5949-29-1	PNEC	water (freshwater)	0,44 mg/l
	PNEC	water (marine water)	0,044 mg/l
	PNEC	sediment (freshwater)	0.752 mg/kg
	PNEC	sediment (marine water)	7.52 mg/kg
	PNEC	soil	33.1 mg/l
	PNEC	sewage treatment plant	>1000 mg/l

## 8.2. Exposure controls

## 8.2.1. Personal protective equipment

**General safety and hygiene measures:** General indoor ventilation. Do not eat, drink or smoke when working with product to avoid contact with skin or mouth. Remove contaminated clothing, footwear, etc., and clean thoroughly before re-using them.

**Respiratory protection.** Not necessary.

**Eye protection.** Wear approved glasses or safety goggles (EN 166) to prevent contact with eyes.

**Skin protection.** Wear rubber gloves (EN 374), usual work clothes, rubber boots to prevent contact with skin. Information on gloves:

Material: Chloroprene

Penetration time: 480 min.

Thickness of gloves: 0.65 mm

Material: Natural rubber

Penetration time: 480 min

Thickness of gloves: 0.65 mm

Material: Butadiene nitrile rubber

Penetration time: 480 min.

Thickness of gloves: 0.65 mm

## 8.2.2. Environmental exposure controls

Do not wash product down sewage and drainage systems or into bodies of water.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

## 9.1. Information on basic physical and chemical properties

**Physical state:**

Liquid;

**Colour:**

Colorless;

**Odour:**

Weak smell product;

**Odour threshold:**

Not determined;

**Melting/freezing point:**

<-7 °C;

**Boiling point/range:**

100 °C;

**Flammability (solid, gas):**

Not applicable;

**Upper/lower flammability:**

Not determined;

**Flash point:**

Not determined;

**Auto-ignition temperature:**

Not determined;

**Decomposition temperature:**

Not determined;

**pH (20 °C):**

2,5;

**Viscosity:**

Not determined;

**Solubility:**

Soluble in water;

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<b>Partitioning coefficient n-octanol/water (log Kow):</b>	Not applicable;
<b>Vapour pressure:</b>	Not determined;
<b>Density (20 °C):</b>	1,1 g/cm <sup>3</sup> ;
<b>Relative vapor density:</b>	Not determined;
<b>Particle size:</b>	Not applicable;

All the listed properties apply to the product (mixture).

**9.2. Other Information**

Explosive materials:	Not applicable.
Flammable gases:	Not applicable.
Aerosols:	Not applicable.
Oxidizing gases:	Not applicable.
Compressed gas:	Not applicable.
Flammable liquids:	Not applicable.
Flammable solids:	Not applicable.
Self-reactive substances:	Not applicable.
Pyrophoric liquids:	Not applicable.
Pyrophoric solids:	Not applicable;
Substances and mixtures which, in contact with water, emit flammable gases:	Not applicable.
Self-heating substances and mixtures:	Not applicable.
Oxidizing liquids:	Not applicable.
Oxidising solids:	Not applicable.
Organic peroxides:	Not applicable.
Corrosive to metals:	Not applicable.
Desensitized explosives:	Not applicable.

No data available.

**SECTION 10: Stability and Reactivity****10.1. Reactivity**

No hazardous reactions if stored and handled as prescribed/indicated.

**10.2. Chemical stability**

The product is stable if stored and handled as prescribed/indicated (see Heading 7).

**10.3. Possibility of hazardous reactions**

The heat released by mixing with strong alkalis (exothermic reaction).

**10.4. Conditions to avoid**

Avoid freezing.

**10.5. Incompatible materials**

Avoid contact with strong oxidizing agents and strong bases.

**10.6. Hazardous decomposition products**

The product is stable, but heating may release hazardous decomposition products: CO, CO<sub>2</sub>, PO<sub>x</sub>, NO<sub>x</sub>.

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**SECTION 11: Toxicological Information****11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Acute toxicity**

Ingestion: Tests with mice: LD50: 5400 mg/kg bw (citric acid). Based on available data, the classification are not met.

Skin contact: Direct contact with product may cause skin irritation. Test with rats: LD50 > 2000 mg/kg bw (citric acid). Based on available data, the classification are not met.

Inhalation: Not volatile. Based on available data, the classification are not met.

**Skin corrosion / irritation**: Skin corrosion Category 1. Causes severe skin burns and eye damage.

**Eye damage / irritation**: Eye damage Category 1. Causes serious eye damage.

**Sensitisation**: Skin: Based on available data, the classification are not met.

Respiratory: Based on available data, the classification are not met.

**Mutagenicity**: Based on available data, the classification are not met.

**Carcinogenicity**: Based on available data, the classification are not met.

**Reproductive toxicity**: Based on available data, the classification are not met.

**Specific target organ toxicity (STOT SE) – single exposure**: STOT SE 3. May cause respiratory irritation.

**Specific target organ toxicity (STOT RE) – repeated exposure**: Based on available data, the classification are not met.

**Aspiration hazard**: Based on available data, the classification are not met.

**Information on likely routes of exposure**

Skin contact: Direct contact with product may cause skin irritation and skin corrosion.

Eye contact: Mixture causes eye irritation and damage. Eye protection must be worn.

Inhalation: The mixture may cause respiratory irritation.

Ingestion: The mixture does present a risk of ingestion.

**Symptoms related to the physical, chemical and toxicological characteristics**

Skin contact: Direct contact with product may cause skin irritation and skin corrosion.

Eye contact: Mixture causes eye irritation and damage. Eye protection must be worn.

Inhalation: The mixture may cause respiratory irritation.

Ingestion: The mixture is not dangerous if swallowed.

**Delayed and immediate effects as well as chronic effect from short and long-term exposure**Short time exposure:

Potential immediate effect: Not available.

Potential delayed effect: Not available.

Long term exposure:

Potential immediate effect: Not available.

Potential delayed effect: Not available.

**Potential chronic health effect:**

Carcinogenicity: No known significant effect or critical hazards.

Mutagenicity: No known significant effect or critical hazards.

Reproductive toxicity: No known significant effect or critical hazards.

**11.2. Information on other hazards**Endocrine disrupting properties:

Based on available data, the classification are not met.

Other information: None.

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**SECTION 12: Ecological Information****12.1. Toxicity**

The product does not have any known adverse effects on the aquatic organisms tested. The addition of large amounts of product to water may cause a fall in pH (acidity).

Information about Citric acid:

Daphnia toxicity:

EC50: Daphnia magna (Big water flea): 1535 mg/l/24 h.

Fish toxicity:

LC50: 440 mg/l/48h.

Algae toxicity:

NOEC Desmodesmus subspicatus (green algae): 425 mg/l/8 days.

Conclusion: Based on available data, the classification are not met.

**12.2. Persistence and degradability**

Completely soluble in water.

Information on Citric acid:

Biodegradable.

**12.3. Bioaccumulative potential**

Information on Citric acid:

Not likely to bioaccumulate.

**12.4. Mobility in soil**

Information on Citric acid:

Small (Koc: 10).

**12.5. Results of PBT and vPvB assessment**

The product does not fulfill the criteria for PBT (Persistent/bioaccumulative/toxic) and vPvB (very persistent/very bioaccumulative).

**12.6. Endocrine disrupting properties**

The substances in the mixture don't have endocrine disrupting properties.

**12.7. Other adverse effects**

None.

**SECTION 13: Disposal Considerations****13.1. Waste treatment methods**

Not classified as harmful to aquatic organisms. Not classified as harmful to birds. Not allowed to dispose of empty containers or waste into the environment. Dispose of according to the local legislation. Empty containers should be returned to the supplier.

Waste code of packages:

15 01 02

plastic packaging

15 01 10\*

packaging containing residues of or contaminated by hazardous substances

Waste code of mixture:

06 01 06

Other acids

**SECTION 14: Transport Information****14.1. UN Number or ID number**

None.

**14.2. UN Proper Shipping Name**

None.

**14.3. Transport hazard class(es)**

None.

**14.4. Packing Group**

None.

**14.5. Environmental hazards**

None.



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**14.6. Special precautions for user**

None.

**14.7. Maritime transport in bulk according to IMO instruments**

None.

The product is not covered by the international regulation on the transport of dangerous goods (IMDG/ IATA, ADR/RID) and therefore no classification is required. No special precautions are needed apart from those mentioned under Heading 8.

**SECTION 15: Regulatory Information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

This safety datasheet complies with the requirements of Regulation (EC) No. 453/2010/EC, Regulation (EC) No 1272/2008 [CLP] and Regulation (EC) No. 2020/878.

**15.2. Chemical Safety Assessment**

Chemical Safety Assessment not required.

**SECTION 16: Other Information**

**SCI® 5582** - For industrial use only.

**SCI® 5582** safety data sheets and technical information developed by the manufacturer.

**Full text of H-Statements**

H319 Causes serious eye irritation.

**Abbreviations:**

CAS	Chemical Abstracts Service
EINECS	European Inventory of Existing Chemical Substances
GHS	Globally Harmonised System of Classification and Labelling of Chemicals
CLP	Classification, labelling and packaging of substances and mixtures
LD50	Lethal Concentration
LC50	Median lethal dose
EC50	Median effective concentration
ATE	Acute toxicity estimate
DNEL	Derived no effect level
PNEC	Predicted non-effect concentration
PBT	Persistent, bioaccumulative and toxic
vPvB	Very persistent and very bioaccumulative

*The information on this data sheet reflects the currently available knowledge and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product, including the use of the product in combination with any other product or any other process, is the responsibility of the user. It is implicit that the user is responsible for determining appropriate safety measures and for applying the legislation covering his own activities. Safety data sheet available for professional user on request.*