

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 03.05.2018

Version number 7

Revision: 03.05.2018

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

- **1.1 Product identifier**
- **Trade name:** Silicone solution SERVA
for siliconizing glass and metal
- **Article number:** 35130
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Laboratory chemicals
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
SERVA Electrophoresis GmbH
Carl-Benz-Str. 7
D-69115 Heidelberg
Tel.: +49 6221 13840-0
FAX: +49 6221 13840-10
msds.info@serva.de
- **Information department:** Product Safety department Tel.: +49 6221 13840-35
- **1.4 Emergency telephone number:**
Medical Emergency Information in case of poisoning:
Poison Information Center Mainz - Phone: +49 (0) 6131 19240
(advisory service in German or English language)



SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS02

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms** GHS02, GHS07
- **Signal word** Danger

- **Hazard-determining components of labelling:**

propan-2-ol

- **Hazard statements**

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

- **Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P243 Take precautionary measures against static discharge.

P261 Avoid breathing mist/vapours/spray.

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 03.05.2018

Version number 7

Revision: 03.05.2018

Trade name: Silicone solution SERVA
for silicizing glass and metal

(Contd. of page 1)

P280 Wear protective gloves/protective clothing/eye protection/face protection.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** PBT - assessment not available.
- **vPvB:** vPvB - assessment not available.

SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterisation: Mixtures**
- **Description:** Mixture of the substances listed below with harmless additions.

· **Dangerous components:**

CAS: 67-63-0	propan-2-ol	80-100%
EINECS: 200-661-7	⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319; STOT SE 3, H336	

- **Additional information** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **After inhalation** Supply fresh air; consult doctor in case of complaints.
- **After skin contact**
Immediately wash with water and soap and rinse thoroughly. Consult doctor if you feel unwell.
- **After eye contact**
Rinse opened eye for several minutes under running water. Remove present contact lenses, if easy to do, and continue rinsing. Consult ophthalmologist In case of complaints.
- **After swallowing**
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; call for medical help immediately.
- **4.2 Most important symptoms and effects, both acute and delayed**
Dizziness
Headache
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2 Special hazards arising from the substance or mixture**
Flammable substance, vapours are heavier than air and spread over the floor.
Vapours can form flammable and explosive mixtures with air.
Formation of dangerous gases or vapours is possible in case of fire.
In case of fire, the following can be formed, but not limited to:
Carbon monoxide and carbon dioxide
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.

GB

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 03.05.2018

Version number 7

Revision: 03.05.2018

Trade name: Silicone solution SERVA
for silicizing glass and metal

(Contd. of page 2)

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective clothing.

Ensure adequate ventilation

Avoid contact with the eyes and skin.

Do not inhale vapours.

Keep away from ignition sources

· 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.

· 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

· 6.4 Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Keep receptacles tightly sealed.

Ensure good ventilation/exhaustion at the workplace.

· Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

· 7.2 Conditions for safe storage, including any incompatibilities

· Storage

· **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.

· **Information about storage in one common storage facility:** Do not store together with oxidizing materials.

· **Further information about storage conditions:** Keep receptacle tightly sealed and store in dry conditions.

· **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

· **Additional information about design of technical systems:** No further data; see item 7.

· 8.1 Control parameters

· **Components with limit values that require monitoring at the workplace:**

67-63-0 propan-2-ol (80-100%)

WEL Short-term value: 1250 mg/m³, 500 ppm

Long-term value: 999 mg/m³, 400 ppm

· **Additional information:** The lists that were valid during the creation were used as basis.

· 8.2 Exposure controls

· Personal protective equipment

· General protective and hygienic measures

Keep away from foodstuffs, beverages and feed.

Store protective clothing separately.

Immediately remove all soiled and contaminated clothing

Avoid contact with the eyes and skin.

Do not inhale gases / fumes / aerosols.

Wash hands before breaks and at the end of work.

· Breathing equipment:

Short term filter device:

(Contd. on page 4)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 03.05.2018

Version number 7

Revision: 03.05.2018

Trade name: Silicone solution SERVA
for siliconizing glass and metal

(Contd. of page 3)

Filter A/P2.

· **Protection of hands:**

Protective gloves.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:**

Nitrile rubber, NBR

Chloroprene rubber, CR

· **Eye protection:** Tightly sealed goggles.

· **Body protection:** Protective work clothing.

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form:	Liquid
Colour:	Colourless
Odour:	Characteristic

· **pH-value (- g/l) at 20 °C:** neutral

· **Change in condition**

Melting point/freezing point: -88 °C

Initial boiling point and boiling range: 82 °C

· **Flash point:** 13 °C

· **Ignition temperature:** 425 °C

· **Self igniting:** Product is not selfigniting.

· **Explosive properties:** Product is not explosive. However, formation of explosive air/ vapour mixtures are possible.

· **Explosion limits:**

Lower:	2 Vol %
Upper:	13.4 Vol %

· **Vapour pressure at 20 °C:** 43 hPa

· **Density at 20 °C:** 0.785 g/cm³

· **Solubility in / Miscibility with**

Water: Fully miscible

· **Solvent content:**

Organic solvents: 97.0 %

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 03.05.2018

Version number 7

Revision: 03.05.2018

Trade name: Silicone solution SERVA
for silicizing glass and metal

(Contd. of page 4)

· VOC %:	97.00 %
· VOC g/l:	970.0 g/l
· Solids content:	3.0 %
· 9.2 Other information	The physico-chemical data correspond to absolute propan-2-ol.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions**
Vapours can form flammable and explosive mixtures with air.
Reactions with strong oxidizing agents
Used empty containers may contain product gases which form explosive mixtures with air
Danger of bursting
- **10.4 Conditions to avoid** high temperatures
- **10.5 Incompatible materials:**
Avoid contact with:
rubber and several plastic materials
Strong oxidizers
Strong acids
- **10.6 Hazardous decomposition products:** In case of fire: See Section 5

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

· **LD/LC50 values that are relevant for classification:**

Oral	LD50	5000 mg/kg (rat)
Dermal	LD50	12800 mg/kg (rabbit)
Inhalative	LC50/4h	30 mg/l (rat)
	LC50/96h	9640 mg/l (Forelle)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation**
Causes serious eye irritation.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure**
May cause drowsiness or dizziness.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

GB

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

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Version number 7

Revision: 03.05.2018

Trade name: Silicone solution SERVA
for siliconizing glass and metal

(Contd. of page 5)

SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic toxicity:

EC50/48h	13299 mg/l (Daphnia magna)
EC50/72h	> 1000 mg/l (Scenedesmus subspicatus)

· 12.2 Persistence and degradability No further relevant information available.

· 12.3 Bioaccumulative potential No further relevant information available.

· 12.4 Mobility in soil No further relevant information available.

· Additional ecological information:

· General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.

Do not allow product to reach ground water, water course or sewage system.

· 12.5 Results of PBT and vPvB assessment

· PBT: PBT - assessment not available.

· vPvB: vPvB - assessment not available.

· 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

· Recommendation

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Disposal must be made according to official regulations.

· Uncleaned packagings:

· Recommendation:

Disposal of uncleaned packagings must be made according to official regulations in the same manner as the product.

· Recommended cleansing agent: Water, if necessary with cleansing agents.

SECTION 14: Transport information

· 14.1 UN-Number

· ADR, IMDG, IATA UN1219

· 14.2 UN proper shipping name

· ADR 1219 ISOPROPANOL (ISOPROPYL ALCOHOL)

· IMDG ISOPROPANOL (ISOPROPYL ALCOHOL)

· IATA Isopropanol

· 14.3 Transport hazard class(es)

· ADR, IMDG, IATA



· Class 3 Flammable liquids.

· Label 3

· 14.4 Packing group

· ADR, IMDG, IATA II

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 03.05.2018

Version number 7

Revision: 03.05.2018

Trade name: Silicone solution SERVA
for siliconizing glass and metal

(Contd. of page 6)

· 14.5 Environmental hazards:	
· Marine pollutant:	No
· 14.6 Special precautions for user	Warning: Flammable liquids.
· Danger code (Kemler):	33
· EMS Number:	F-E,S-D
· Stowage Category	B
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· Transport category	2
· Tunnel restriction code	D/E
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN1219, ISOPROPANOL (ISOPROPYL ALCOHOL), 3, II

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SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **National regulations**
- **Technical instructions (air):**

Class	Share in %
NK	80-100
- **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**
H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
- **Department issuing SDS:** Product safety department
- **Contact:** +49 6221 13840-35
- **Abbreviations and acronyms:**
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
PBT: persistent, bioaccumulative, toxic substance (REACH)

(Contd. on page 8)

Safety data sheet
according to 1907/2006/EC, Article 31

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Revision: 03.05.2018

Trade name: Silicone solution SERVA
for siliconizing glass and metal

(Contd. of page 7)

vPvB: very persistent, very bioaccumulative substance (REACH)

REACH: Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals

CLP: Regulation on classification, labelling and packaging of substances and mixtures

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

· *** Data compared to the previous version altered.**

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