

# Safety Data Sheet

acc. to OSHA HCS

Printing date 08/27/2024

Reviewed on 08/27/2024

## 1 Identification

- **Product identifier**
- **Trade name:** Silicone solution SERVA for siliconizing glass and metal
- **Article number:** 35130
- **CAS Number:**  
67-63-0
- **EC number:**  
200-661-7
- **Index number:**  
603-117-00-0
- **Application of the substance / the mixture:** Laboratory chemicals
- **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
- **Emergency telephone number:**  
Emergency medical information in case of poisoning  
Poison Information Center Mainz-Tel: +49 (0) 6131 19240  
(Advice in German and English)



## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS02

Flammable Liquids 2

H225 Highly flammable liquid and vapor.



GHS07

Eye Irritation 2A

H319 Causes serious eye irritation.

Specific Target Organ Toxicity - Single Exposure 3 H336 May cause drowsiness or dizziness.

- **Label elements**
- **GHS label elements**  
The substance is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms:** GHS02, GHS07
- **Signal word:** Danger
- **Hazard-determining components of labeling:**  
propan-2-ol
- **Hazard statements:**  
Highly flammable liquid and vapor.  
Causes serious eye irritation.  
May cause drowsiness or dizziness.
- **Precautionary statements**  
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
Take precautionary measures against static discharge.

(Contd. on page 2)



# Safety Data Sheet

acc. to OSHA HCS

Printing date 08/27/2024

Reviewed on 08/27/2024

**Trade name: Silicone solution SERVA for siliconizing glass and metal**

(Contd. of page 1)

Avoid breathing mist/vapours/spray.

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

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 2

Fire = 3

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = 2

Fire = 3

Reactivity = 0

· **Other hazards**

· **Results of PBT and vPvB assessment:**

· **PBT:** PBT - Assessment not available.

· **vPvB:** vPvB - Assessment not available.

## 3 Composition/information on ingredients

· **Chemical characterization: Substances**

· **CAS No. Description:**

67-63-0 propan-2-ol

· **Identification number(s):**

· **EC number:** 200-661-7

· **Index number:** 603-117-00-0

· **Dangerous components:**

107-54-0 3,5-dimethylhex-1-yn-3-ol

0.5-1.5%

## 4 First-aid measures

· **Description of first aid measures**

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:**

Wash off immediately with soap and water and rinse thoroughly. In case of complaints, consult a doctor.

· **After eye contact:**

Rinse opened eye for several minutes with running water. Remove existing contact lenses, if possible, and continue rinsing. In case of complaints, consult an ophthalmologist.

· **After swallowing:** Rinse out mouth. In case of complaints, consult a doctor.

· **Most important symptoms and effects, both acute and delayed**

Dizziness

Headache

· **Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

## 5 Fire-fighting measures

· **Extinguishing media**

· **Suitable extinguishing agents:**

CO<sub>2</sub> extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

(Contd. on page 3)



# Safety Data Sheet

## acc. to OSHA HCS

Printing date 08/27/2024

Reviewed on 08/27/2024

**Trade name: Silicone solution SERVA for siliconizing glass and metal**

(Contd. of page 2)

- **Special hazards arising from the substance or mixture**  
*Flammable substance, vapours are heavier than air and spread over the floor.  
 Vapors may form flammable and explosive mixtures with air.  
 In case of fire, formation of hazardous fire gases or vapors possible.  
 In case of fire, the following can be released:  
 Carbon monoxide and carbon dioxide*
- **Advice for firefighters**
- **Protective equipment:** *Wear self-contained breathing apparatus.*
- **Additional information**  
*Collect contaminated fire fighting water separately. It must not enter the sewage system.  
 Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.*

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
*Wear protective clothing.  
 Ensure adequate ventilation  
 Avoid contact with eyes and skin.  
 Do not inhale vapors.  
 Keep away from ignition sources*
- **Environmental precautions:** *Do not allow to enter sewers/ surface or ground water.*
- **Methods and material for containment and cleaning up**  
*Dispose contaminated material as waste according to section 13.  
 Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).*
- **Protective Action Criteria for Chemicals**

#### · PAC-1:

400 ppm

#### · PAC-2:

2000\* ppm

#### · PAC-3:

12000\*\* ppm

- **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.*

### 7 Handling and storage

- **Precautions for safe handling:**  
*Keep receptacles tightly sealed.  
 Prevent formation of aerosols.  
 Ensure good ventilation/exhaustion at the workplace.*
- **Information about protection against explosions and fires:**  
*Protect against electrostatic charges.  
 Keep ignition sources away - Do not smoke.*
- **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:** *Store container tightly closed and dry.*
- **Specific end use(s):** *No further relevant information available.*

US

(Contd. on page 4)



# Safety Data Sheet

acc. to OSHA HCS

Printing date 08/27/2024

Reviewed on 08/27/2024

Trade name: Silicone solution SERVA for siliconizing glass and metal

(Contd. of page 3)

## 8 Exposure controls/personal protection

### · Control parameters

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

The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.

At this time, the remaining constituent has no known exposure limits.

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

PEL	Long-term value: 980 mg/m <sup>3</sup> , 400 ppm
REL	Short-term value: 1225 mg/m <sup>3</sup> , 500 ppm Long-term value: 980 mg/m <sup>3</sup> , 400 ppm
TLV	Short-term value: 400 ppm Long-term value: 200 ppm BEI, A4

### · Ingredients with biological limit values:

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

BEI	40 mg/L Medium: urine Time: end of shift at end of workweek Parameter: Acetone (background, nonspecific)
-----	---

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

### · Exposure controls

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

### · 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.

Wash hands before breaks and at the end of work.

### · Breathing equipment:

Short term filter device:

Filter A/P2

### · Protection of hands:

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.

### · 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

US

(Contd. on page 5)



# Safety Data Sheet

acc. to OSHA HCS

Printing date 08/27/2024

Reviewed on 08/27/2024

Trade name: Silicone solution SERVA for siliconizing glass and metal

(Contd. of page 4)

## 9 Physical and chemical properties

### · Information on basic physical and chemical properties

#### · General Information:

· Color:	Colorless
· Odor:	Characteristic
· Odor threshold:	Not determined.
· Melting point/Melting range:	-88 °C (-126.4 °F)
· Boiling point/Boiling range:	82 °C (179.6 °F)
· Flammability (solid, gaseous):	Highly flammable liquid and vapor according to CLP Regulation (EU) No. 1272/2008: Flam. Liq. 2 H225
· Explosion limits:	
· Lower:	2 Vol %
· Upper:	13.4 Vol %
· Flash point:	13 °C (55.4 °F)
· Auto igniting:	425 °C (797 °F)
· Decomposition temperature:	No information available
· pH-value:	No information available
· Viscosity:	
· Kinematic viscosity:	No information available
· Dynamic viscosity at 20 °C (68 °F):	2.43 mPas
· Solubility in / Miscibility with:	
· Water:	Fully miscible.
· Partition coefficient (n-octanol/water):	Not determined.
· Vapor pressure at 20 °C (68 °F):	43 hPa (32.3 mm Hg)
· Vapor pressure at 50 °C (122 °F):	229 hPa (171.8 mm Hg)
· Density at 20 °C (68 °F):	0.785 g/cm <sup>3</sup> (6.55083 lbs/gal)
· Relative density:	No information available

#### · Other information

The physico-chemical data correspond to absolute propan-2-ol.

#### · Appearance:

· Form: Liquid

#### · Important information on protection of health and environment, and on safety:

· Danger of explosion: Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

· VOC content: 0.00 %

· Molecular weight: 60.1 g/mol

## 10 Stability and reactivity

· Reactivity: No further relevant information available.

· Chemical stability:

· Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

· Possibility of hazardous reactions:

Vapors may form flammable and explosive mixtures with air.

Reacts with strong oxidizing agents.

Used empty containers may contain product gases which form explosive mixtures with air.

Danger of bursting.

· Conditions to avoid: High temperatures

· Incompatible materials:

Avoid contact with:

rubber and several plastic materials

Strong oxidizers

Strong acids

(Contd. on page 6)



# Safety Data Sheet

## acc. to OSHA HCS

Printing date 08/27/2024

Reviewed on 08/27/2024

**Trade name:** Silicone solution SERVA for siliconizing glass and metal

(Contd. of page 5)

· **Hazardous decomposition products:** In case of fire: see section 5

### 11 Toxicological information

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

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

#### 67-63-0 propan-2-ol

Oral	LD50	4,570 mg/kg (rat)
Dermal	LD50	13,400 mg/kg (rabbit)
Inhalative	LC50/4h	30 mg/l (rat)

- **on the eye:** Causes serious eye irritation.
- **Specific target organ toxicity - single exposure:** May cause drowsiness or dizziness.
- **Additional toxicological information:**
- **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

3

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

### 12 Ecological information

- **Toxicity:**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability:** No further relevant information available.
- **Bioaccumulative potential:** No further relevant information available.
- **Mobility in soil:** No further relevant information available.
- **Results of PBT and vPvB assessment:**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects:**
- **Additional ecological information:**
- **General notes:**
- Do not allow product to reach ground water, water course or sewage system.
- Water hazard class 1 (Assessment by list): slightly hazardous for water

### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
- Dispose of in accordance with official regulations.
- Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:**
- Uncleaned packaging must be disposed of in the same way as the product in accordance with official regulations.

(Contd. on page 7)



# Safety Data Sheet

acc. to OSHA HCS

Printing date 08/27/2024

Reviewed on 08/27/2024

Trade name: Silicone solution SERVA for siliconizing glass and metal

(Contd. of page 6)

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

## 14 Transport information

· UN-Number

· DOT, ADR, IMDG, IATA

UN1219

· UN proper shipping name

· DOT

Isopropanol solution

· ADR

1219 ISOPROPANOL (ISOPROPYL ALCOHOL) solution

· IMDG, IATA

ISOPROPANOL (ISOPROPYL ALCOHOL) solution

· Transport hazard class(es)

· DOT



· Class

3 Flammable liquids

· Label

3

· ADR, IMDG, IATA



· Class:

3 Flammable liquids

· Label:

3

· Packing group

· DOT, ADR, IMDG, IATA

II

· Environmental hazards

· Marine pollutant:

No

· Special precautions for user

Warning: Flammable liquids

· Hazard identification number (Kemler code): 33

· EMS Number:

F-E,S-D

· Stowage Category

B

· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

· Transport/Additional information:

· ADR

· Excepted quantities (EQ)

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· 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":

UN 1219 ISOPROPANOL (ISOPROPYL ALCOHOL) SOLUTION, 3, II

(Contd. on page 8)



# Safety Data Sheet

acc. to OSHA HCS

Printing date 08/27/2024

Reviewed on 08/27/2024

Trade name: Silicone solution SERVA for siliconizing glass and metal

(Contd. of page 7)

## 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**  
No further relevant information available.

- **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

- **Section 313 (Specific toxic chemical listings):**

67-63-0 | propan-2-ol

- **TSCA (Toxic Substances Control Act):**

All components have the value ACTIVE.

- **Hazardous Air Pollutants**

None of the ingredients is listed.

- **Proposition 65**

None of the ingredients is listed.

- **Chemicals known to cause cancer:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

- **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

- **Carcinogenicity categories**

- **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

- **TLV (Threshold Limit Value)**

A4

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

- **GHS label elements**

The substance is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms** GHS02, GHS07

- **Signal word** Danger

- **Hazard-determining components of labeling:**

propan-2-ol

- **Hazard statements**

Highly flammable liquid and vapor.

Causes serious eye irritation.

May cause drowsiness or dizziness.

- **Precautionary statements**

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Take precautionary measures against static discharge.

Avoid breathing mist/vapours/spray.

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

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

US

(Contd. on page 9)



# Safety Data Sheet

## acc. to OSHA HCS

Printing date 08/27/2024

Reviewed on 08/27/2024

**Trade name: Silicone solution SERVA for siliconizing glass and metal**

(Contd. of page 8)

### 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.*

• **Department issuing SDS:** Product Safety Department

• **Contact:** +49 6221 13840-35

• **Date of preparation / last revision** 08/27/2024 / -

• **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)

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

bw: body weight

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

BEI: Biological Exposure Limit

Flammable Liquids 2: Flammable liquids – Category 2

Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A

Specific Target Organ Toxicity - Single Exposure 3: Specific target organ toxicity (single exposure) – Category 3