

# Safety Data Sheet

acc. to OSHA HCS

Printing date 05/14/2024

Reviewed on 05/14/2024

## 1 Identification

- **Product identifier**
- **Trade name:** SERVA Tris-Glycine/LDS sample buffer (4x)
- **Article number:** 42525
- **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**



GHS05

Eye Damage 1 H318 Causes serious eye damage.

- **Label elements**
- **GHS label elements**  
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms:** GHS05
- **Signal word:** Danger
- **Hazard-determining components of labeling:**  
hydrogen chloride  
lithium dodecyl sulphate
- **Hazard statements:**  
Causes serious eye damage.
- **Precautionary statements**  
Wear protective gloves/protective clothing/eye protection/face protection.  
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.  
Continue rinsing.  
Immediately call a poison center/doctor.
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 3  
Fire = 0  
Reactivity = 0

- **HMIS-ratings (scale 0 - 4)**



Health = \*3  
Fire = 0  
Reactivity = 0

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- **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: Mixtures**
- **Description:** aqueous solution

- **Dangerous components:**

7647-01-0	hydrogen chloride	5-15%
	lithium dodecyl sulphate	2.5-7%

- **Additional information:**

The product does not contain any other substances that have to be declared according to REACH (Regulation (EC) No. 1907/2006).

For the wording of the listed hazard phrases refer to section 16.

### 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. Consult an ophthalmologist immediately.
- **After swallowing:** Rinse out mouth. In case of complaints, consult a doctor.
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **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.
- **Special hazards arising from the substance or mixture**  
In case of fire, formation of hazardous fire gases or vapors possible.
- **Advice for firefighters**
- **Protective equipment:** Wear self-contained breathing apparatus.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective clothing.  
Ensure adequate ventilation  
Avoid contact with eyes and skin.
- **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).

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## · Protective Action Criteria for Chemicals

### · PAC-1:

56-81-5	glycerol	45 mg/m <sup>3</sup>
7647-01-0	hydrogen chloride	1.8 ppm
6381-92-6	Disodium dihydrogen ethylenediaminetetraacetate dihydrate	30 mg/m <sup>3</sup>

### · PAC-2:

56-81-5	glycerol	180 mg/m <sup>3</sup>
7647-01-0	hydrogen chloride	22 ppm
6381-92-6	Disodium dihydrogen ethylenediaminetetraacetate dihydrate	330 mg/m <sup>3</sup>

### · PAC-3:

56-81-5	glycerol	1,100 mg/m <sup>3</sup>
7647-01-0	hydrogen chloride	100 ppm
6381-92-6	Disodium dihydrogen ethylenediaminetetraacetate dihydrate	2,000 mg/m <sup>3</sup>

### · 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:

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

### · Information about protection against explosions and fires: No special measures required.

### · Conditions for safe storage, including any incompatibilities

#### · Storage:

#### · Requirements to be met by storerooms and receptacles:

Store only in the original receptacle.

Storage at +2 to +8 °C

#### · Information about storage in one common storage facility: Not required.

#### · Further information about storage conditions: Store container tightly closed and dry.

#### · Specific end use(s): No further relevant information available.

## 8 Exposure controls/personal protection

### · Control parameters

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

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

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

#### 56-81-5 glycerol (20-40%)

PEL Long-term value: 15\* 5\*\* mg/m<sup>3</sup>  
mist; \*total dust \*\*respirable fraction

TLV TLV withdrawn-insufficient data human occup. exp.

#### 7647-01-0 hydrogen chloride (5-15%)

PEL Ceiling limit value: 7 mg/m<sup>3</sup>, 5 ppm

REL Ceiling limit value: 7 mg/m<sup>3</sup>, 5 ppm

TLV Ceiling limit value: 2 ppm

A4

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

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- **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 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.
  - 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:**
  - Natural rubber, NR
  - Nitrile rubber, NBR
- **Eye protection:** Tightly sealed goggles
- **Body protection:** Protective work clothing

## 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information:**
- **Color:** red purple
- **Odor:** Odorless
- **Odor threshold:** Not determined.
- **Melting point/Melting range:** No information available
- **Boiling point/Boiling range:** No information available
- **Flammability (solid, gaseous):** No information available
- **Explosion limits:**
- **Lower:** No information available
- **Upper:** No information available
- **Flash point:** No information available
- **Decomposition temperature:** No information available
- **pH-value at 20 °C (68 °F):** 7.6-7.8
- **Viscosity:**
- **Kinematic viscosity:** No information available
- **Dynamic viscosity:** No information available

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- |   |                          |
|---|--------------------------|
| · <b>Solubility in / Miscibility with:</b>        |                          |
| · <b>Water:</b>                                   | Fully miscible.          |
| · <b>Partition coefficient (n-octanol/water):</b> | No information available |
| · <b>Vapor pressure:</b>                          | No information available |
| · <b>Vapor pressure:</b>                          |                          |
| · <b>Density:</b>                                 | No information available |
| · <b>Relative density:</b>                        | No information available |
- 
- |  |   |
|--|---|
| · <b>Other information</b>   |   |
| · <b>Appearance:</b>   |   |
| · <b>Form:</b>   | Solution                                      |
| · <b>Important information on protection of health and environment, and on safety:</b> |   |
| · <b>Danger of explosion:</b>  | Product does not present an explosion hazard. |
| · <b>VOC %:</b>  |   |
| · <b>VOC content:</b>  | 0.00 %  |

## 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:** No further relevant information available.
- **Conditions to avoid:** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **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.
- **on the eye:**
  - Causes serious eye damage.
  - Causes serious eye damage.
- **Additional toxicological information:**
- **Carcinogenic categories**

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

7647-01-0 hydrogen chloride

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.

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Trade name: SERVA Tris-Glycine/LDS sample buffer (4x)

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- **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 (Self-assessment): 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.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

## 14 Transport information

- |  |                 |
|--|-----------------|
| · <b>UN-Number</b>   |                 |
| · <b>ADR, IMDG, IATA</b>   | Void            |
| · <b>UN proper shipping name</b>   |                 |
| · <b>ADR, IMDG, IATA</b>   | Void            |
| · <b>Transport hazard class(es)</b>  |                 |
| · <b>ADR, IMDG, IATA</b>   |                 |
| · <b>Class:</b>  | Void            |
| · <b>Label:</b>  | -               |
| · <b>Packing group</b>   |                 |
| · <b>ADR, IMDG, IATA</b>   | Void            |
| · <b>Environmental hazards</b>   | Not applicable. |
| · <b>Special precautions for user</b>  | Not applicable. |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable. |

## 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):

7647-01-0 hydrogen chloride

### · Section 313 (Specific toxic chemical listings):

7647-01-0 hydrogen chloride

### · TSCA (Toxic Substances Control Act):

7732-18-5 water, distilled, conductivity or of similar purity

ACTIVE

56-81-5 glycerol

ACTIVE

7647-01-0 hydrogen chloride

ACTIVE

lithium dodecyl sulphate

ACTIVE

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26873-85-8	Ficoll 400	ACTIVE
143-74-8	phenol red	ACTIVE
34725-61-6	bromophenol blue, sodium salt	ACTIVE

· **Hazardous Air Pollutants**

7647-01-0	hydrogen chloride
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· **Proposition 65**

None of the ingredients is listed.
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· **Chemicals known to cause cancer:**

None of the ingredients is listed.
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· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.
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· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.
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· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.
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· **Carcinogenicity categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.
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· **TLV (Threshold Limit Value)**

7647-01-0	hydrogen chloride	A4
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· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.
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· **GHS label elements**

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

· **Hazard pictograms** GHS05

· **Signal word** Danger

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

hydrogen chloride

lithium dodecyl sulphate

· **Hazard statements**

Causes serious eye damage.

· **Precautionary statements**

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

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

Continue rinsing.

Immediately call a poison center/doctor.

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

## 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** 05/14/2024

· **Abbreviations and acronyms:**

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

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*UFI: Unique Formula Identifier**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**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)**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**Eye Damage 1: Serious eye damage/eye irritation – Category 1*

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