Printing date 11/22/2024 Reviewed on 11/22/2024

1 Identification

· Product identifier

· Trade name: Tris buffer pH 8.8, 1 M solution

· Article number: 39794

· 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

The product is not classified, according to the Globally Harmonized System (GHS).

- · Label elements
- · GHS label elements Void
- · Hazard pictograms: Void
- · Signal word: Void
- · Hazard statements: Void
- · Precautionary statements

Wash thoroughly after handling.

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

If on skin: Wash with plenty of water.

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

If eye irritation persists: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 0 Fire = 0Reactivity = 0

· HMIS-ratings (scale 0 - 4)



- · Other hazards
- · Results of PBT and vPvB assessment:
- · PBT: PBT Assessment not available.

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· vPvB: vPvB - Assessment not available.

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3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: aqueous buffer solution
- · Dangerous components:

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

4 First-aid measures

- · Description of first aid measures
- · General information: No special measures required.
- · 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 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*₂ 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, the following can be released:

Carbon monoxide and carbon dioxide

Nitrogen oxides (NOx)

- · 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.

Particular danger of slipping on leaked/spilled product.

- · 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:

None of the ingredients is listed.

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· PAC-2:

None of the ingredients is listed.

PAC-3:

None of the ingredients is listed.

· 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: No special measures required.
- · Information about protection against explosions and fires: The product is not flammable.
- · 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: 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 product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · 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: Suitable respiratory protective device recommended.
- · 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 trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

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· 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: Safety glasses

· Body protection: Protective work clothing

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information:

Color:
 Odor:
 Odor threshold:

Colorless

 Odorless
 not determined.

Melting point/Melting range:
 Boiling point/Boiling range:
 Flammability (solid, gaseous):

No information available
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): 8.7-8.9

· Viscosity:

Kinematic viscosity:
 Dynamic viscosity:
 No information available
 No information available

· Solubility in / Miscibility with:

· Water: Fully miscible.

• Partition coefficient (n-octanol/water): No information available • Vapor pressure: No information available

· Vapor pressure:

Density: No information available
 Relative density: No information available

· Other information

 \cdot Appearance:

· Form: Solution

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

• Danger of explosion: Product does not present an explosion hazard.

· *VOČ* %:

· VOC content: 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: Avoid contact with: strong oxidizing agents, strong bases
- · Hazardous decomposition products: In case of fire: see section 5

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11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity: Based on available data, the classification criteria are not met.
- · on the skin: Based on available data, the classification criteria are not met.
- on the eye: Based on available data, the classification criteria are not met.
- · Sensitization: Based on available data, the classification criteria are not met.
- · 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.
- · Specific target organ toxicity single exposure:

Based on available data, the classification criteria are not met.

· Specific target organ toxicity - repeated exposure:

Based on available data, the classification criteria are not met.

- · Aspiration hazard: Based on available data, the classification criteria are not met.
- · Additional toxicological information:
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· 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 (Self-assessment): slightly hazardous for water

13 Disposal considerations

- · Waste treatment methods
- · Recommendation: Dispose of in accordance with official regulations.
- · 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.

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4 Transport information	
· UN-Number · DOT, ADR, ADN, IMDG, IATA	Void
· UN proper shipping name · DOT, ADR, ADN, IMDG, IATA	Void
· Transport hazard class(es)	
DOT, ADR, ADN, IMDG, IATA Class	Void
Packing group DOT, ADR, IMDG, IATA	Void
Environmental hazards Marine pollutant:	No
Special precautions for user	Not applicable.
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	Not dangerous according to the above specifications.
· UN ''Model Regulation'':	Void

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):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

None of the ingredients is listed.

· 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.

- · Cancerogenity categories
- · EPA (Environmental Protection Agency)

None of the ingredients is listed.

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· TLV (Threshold Limit Value)

None of the ingredients is listed.

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

None of the ingredients is listed.

- · GHS label elements Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · Precautionary statements

Wash thoroughly after handling.

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

If on skin: Wash with plenty of water.

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

If eye irritation persists: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

· 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 11/22/2024 / -
- · 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

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

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)

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