Printing date 09/14/2022

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Reviewed on 09/14/2022

Identification	
Product identifier	SERV/
Trade name: <u>TBS Buffer (10x)</u>	serving scientist
Article number: 42596 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	Griph
Information department: Product Safety department Tel.: +49 6221 13840-3 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)	25
Hazard(s) identification	
The product is not classified, according to the Globally Harmonized System (Label elements GHS label elements Void Hazard pictograms: Void Signal word: Void Hazard statements: Void Classification system: NFPA ratings (scale $0 - 4$) Health = 0 Fire = 0 Reactivity = 0 HMIS-ratings (scale $0 - 4$) HEALTH 0 FIRE 0 Reactivity = 0 Other hazards Results of PBT and vPvB assessment: PBT: PBT - assessment not available. vPvB: vPvB - assessment not available.	
Composition/information on ingredients	
Chemical characterization: Mixtures Description: aqueous buffer solution	

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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:
- 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 immediately.

- · After swallowing: Wash out mouth. Call a doctor immediately.
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- \cdot 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 No further relevant information available.
- · Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

6 Accidental release measures

 Personal precautions, protective equipment and emergency procedures Wear protective clothing.
Ensure adequate ventilation Avoid contact with the 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 item 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.

· 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: No special measures required.

· Conditions for safe storage, including any incompatibilities

· Storage:

• Requirements to be met by storerooms and receptacles: No special requirements.

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- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Keep receptacle tightly sealed and store in dry conditions.
- *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 item 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:

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.

- 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: Goggles recommended during refilling.
- · Body protection: Protective work clothing

9 Physical and chemical properties · Information on basic physical and chemical properties • General Information: · Color: Colorless · Odor: not determined · Odor threshold: no information available · 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 (Contd. on page 4)

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Upper:	no information available	
Flash point:	no information available	
Decomposition temperature:	no information available	
<i>pH-value at 20 °C (68 °F):</i>	7.2-7.6	
Viscosity:		
Kinematic viscosity:	no information available	
Dynamic viscosity:	no information available	
Solubility in / Miscibility with:		
Water:	Not determined.	
Partition coefficient (n-octanol/water):	Not determined.	
Vapor pressure:	Not determined.	
Density:	Not determined.	
Relative density:	Not determined.	
Other information		
Appearance:		
Form:	Solution	
Important information on protection of healt environment, and on safety:	h and	
Danger of explosion:	Not determined.	
<i>VOC</i> %:		
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 informations available.
- *Conditions to avoid:* No further relevant information available.
- *Incompatible materials:* No further relevant information available.
- Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

· Information on toxicological effects

- \cdot 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.

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- · 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: 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.

14 Transport information

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

15 Regulatory information

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

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Safety Data Sheet acc. to OSHA HCS

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· 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.
· 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
- · 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

· Date of preparation / last revision 09/14/2022 / -

· 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 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

[·] Contact: +49 6221 13840-35