Printing date 17.01.2019	Version number 3	Revision: 17.01.2019
SECTION 1: Identification of	f the substance/mixture and of the company/u	ndertaking
· 1.1 Product identifier · Trade name: TAE Buffer (40x),	1.2 M	SERVA
• Article number: 42548	e substance or mixture and uses advised against wailable.	serving sciencists
 1.3 Details of the supplier of the 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 	safety data sheet	SULO
• Information department: Produc • 1.4 Emergency telephone numbe Medical Emergency Information Poison Information Center Mainz (advisory service in German or E	in case of poisoning: z - Phone: +49 (0) 6131 19240	
SECTION 2: Hazards identifi	ination	
• 2.1 Classification of the substand • Classification according to Regu The product is not classified, acco	ce or mixture lation (EC) No 1272/2008	
 2.2 Label elements Labelling according to Regulation Hazard pictograms Void Signal word Void Hazard statements Void 2.3 Other hazards Results of PBT and vPvB assession PBT: PBT - assessment not availated vPvB: vPvB - assessment not availated 	ment able.	
SECTION 3: Composition/inf	formation on ingredients	
• 3.2 Chemical characterisation: M • Description: Mixture of the subst	Mixtures ances listed below with harmless additions.	
· Dangerous components:		
CAS: 64-19-7 acetic acid EINECS: 200-580-7 🚸 Flam. Li	100 % iq. 3, H226; 🔗 Skin Corr. 1A, H314; 🚸 Acute Tox	<i>x. 4, H312</i> 2-4%
CAS: 6381-92-6 Disodium di	ihydrogen ethylenediaminetetraacetate dihydrate E 2, H373; 🗘 Acute Tox. 4, H332	0.5-1.5%
• Additional information For the w	vording of the listed hazard phrases refer to section	ı 16.

SECTION 4: First aid measures

*

• 4.1 Description of first aid measures

• After inhalation Supply fresh air; consult doctor in case of complaints.

(Contd. on page 2) GB

Printing date 17.01.2019

Version number 3

Revision: 17.01.2019

(Contd. of page 1)

Trade name: TAE Buffer (40x), 1.2 M

· 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.

 $\cdot \textit{After swallowing}$ Wash out mouth. Seek medical advice if discomfort occurs.

• 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.

• **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 No further relevant information available.
- · 5.3 Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

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.
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 No special precautions are necessary if used correctly.
- · Information about protection against explosions and fires: The product is not flammable

· 7.2 Conditions for safe storage, including any incompatibilities

- · Storage
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- 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:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

(Contd. on page 3)

Printing date 17.01.2019

Version number 3

Revision: 17.01.2019

Trade name: TAE Buffer (40x), 1.2 M

1 manonal injormanon. 1 ne noto na	at were valid during the creation were used as basis.
9 2 Exposure controls	
8.2 Exposure controls Personal protective equipment	
General protective and hygienic me	asures
Keep away from foodstuffs, beverage	
Store protective clothing separately.	
Immediately remove all soiled and co	ontaminated clothing
Avoid contact with the eyes and skin.	•
Wash hands before breaks and at the	
	iratory protective device recommended.
Protection of hands:	
	eable and resistant to the product/ the substance/ the preparation.
	tion to the glove material can be given for the product/ the preparation
the chemical mixture.	a consideration of the non-stration times, rates of diffusion and th
degradation	n consideration of the penetration times, rates of diffusion and th
Material of gloves	
	s does not only depend on the material, but also on further marks o
quality and varies from manufacture.	
	s does not only depend on the material, but also on further marks o
	turer to manufacturer. As the product is a preparation of severa
· · · ·	ove material can not be calculated in advance and has therefore to b
checked prior to the application.	
Penetration time of glove material	
The exact break trough time has to l observed.	be found out by the manufacturer of the protective gloves and has to b
suitable: Natural rubber, NR Nitrile rubber, NBR	aaximum oj 15 minutes gloves maae oj ine jottowing materiais ar
<i>suitable:</i> Natural rubber, NR Nitrile rubber, NBR Eye protection: Safety glasses	
suitable: Natural rubber, NR Nitrile rubber, NBR Eye protection: Safety glasses	othing.
suitable: Natural rubber, NR Nitrile rubber, NBR Eye protection: Safety glasses Body protection: Protective work clo SECTION 9: Physical and chemu 9.1 Information on basic physical and	ical properties
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suitable: Natural rubber, NR Nitrile rubber, NBR Eye protection: Safety glasses Body protection: Protective work clo SECTION 9: Physical and cheme 9.1 Information on basic physical and General Information Appearance: Form: Colour: Odour: Odour threshold: pH-value at 20 °C: Change in condition Melting point/freezing point: Initial boiling point and boiling ra Flash point:	othing. ical properties ind chemical properties Solution Colourless Odourless Not determined. 8.3 - 8.7 undetermined unge: undetermined Not applicable
suitable: Natural rubber, NR Nitrile rubber, NBR Eye protection: Safety glasses Body protection: Protective work clo SECTION 9: Physical and cheme 9.1 Information on basic physical and General Information Appearance: Form: Colour: Odour: Odour threshold: pH-value at 20 °C: Change in condition Melting point/freezing point: Initial boiling point and boiling ra Flash point: Flammability (solid, gaseous)	ical properties ical properties ind chemical properties Solution Colourless Odourless Not determined. 8.3 - 8.7 undetermined unge: undetermined Not applicable Not applicable.
suitable: Natural rubber, NR Nitrile rubber, NBR Eye protection: Safety glasses Body protection: Protective work clo SECTION 9: Physical and cheme 9.1 Information on basic physical an General Information Appearance: Form: Colour: Odour: Odour: Odour threshold: pH-value at 20 °C: Change in condition Melting point/freezing point: Initial boiling point and boiling ra Flash point: Flammability (solid, gaseous) Decomposition temperature:	othing. ical properties ind chemical properties Solution Colourless Odourless Not determined. 8.3 - 8.7 undetermined inge: undetermined Not applicable Not applicable. Not determined.

Printing date 17.01.2019

Version number 3

Revision: 17.01.2019

Trade name: TAE Buffer (40x), 1.2 M

		(Contd. of page
· Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
· Vapour pressure:	Not determined.	
· Density:	Not determined	
· Relative density	Not determined.	
· Vapour density	Not determined.	
· Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
Water:	Fully miscible	
· Partition coefficient: n-octanol/water:	Not determined.	
· Viscosity:		
dynamic:	Not determined.	
kinematic:	Not determined.	
· Solvent content:		
Organic solvents:	0.0 %	
· VOC %:	0.00 %	
· 9.2 Other information	No further relevant information available.	

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 No further relevant informations available.
- 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- 10.6 Hazardous decomposition products: No further relevant informations available.

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.
- Primary irritant effect:
- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation Based on available data, the classification criteria are not met.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · CMR effects (carcinogenity, 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 Based on available data, the classification criteria are not met.
- · 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.

SECTION 12: Ecological information

- · 12.1 Toxicity
- Aquatic toxicity: No further relevant information available.
- · 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.

(Contd. on page 5)

Printing date 17.01.2019

Version number 3

Revision: 17.01.2019

(Contd. of page 4)

Trade name: TAE Buffer (40x), 1.2 M

- 12.4 Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 2 (German Regulation) (Self-assessment): 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	Void	
14.2 UN proper shipping name ADR, IMDG, IATA	Void	
14.3 Transport hazard class(es)		
ADR, IMDG, IATA Class Label	Void	
14.4 Packing group ADR, IMDG, IATA	Void	
14.5 Environmental hazards: Marine pollutant:	No	
14.6 Special precautions for user	Not applicable.	
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.	
Transport/Additional information:	Not dangerous according to the above specifications.	

SECTION 15: Regulatory information

· 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

· Directive 2012/18/EU

- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · National regulations

• Water hazard class: Water hazard class 2 (Self-assessment): hazardous for water.

(Contd. on page 6)

GB

¹

Printing date 17.01.2019

Version number 3

Revision: 17.01.2019

Trade name: TAE Buffer (40x), 1.2 M

(Contd. of page 5)

GB

· 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

H226 Flammable liquid and vapour. H312 Harmful in contact with skin. H314 Causes severe skin burns and eye damage. H332 Harmful if inhaled. H373 May cause damage to organs through prolonged or repeated exposure. · 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) 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 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) PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Flam. Liq. 3: Flammable liquids - Category 3 Acute Tox. 4: Acute toxicity – Category 4 Skin Corr. 1A: Skin corrosion/irritation - Category 1A STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2 • * Data compared to the previous version altered.