

1D HPE[™] Gel Kit NF 15% 25S Cat. No. 43364

Safety Data Sheets of the following Kit Components:

43872	1D HPE™ Gel NF 15 % 25S
43383	Buffer Kit for 1D SDS Gels

Buffer Kit for 1D SDS Gels

Cat. No. 43383

Safety Data Sheets of the following Kit Components:

43801	SDS Anode buffer (blue)
43802	SDS Cathode buffer (white)
43803	SDS Buffer Neutral Sample Buffer 2X
43804	SDS Buffer Neutral Sample Diluter 1X
43371	Cooling Fluid

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· Dangerous components: Void

SECTION 4: First aid measures

- · 4.1 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 Immediate rinse with copious amounts of water; Consult doctor In case of complaints.

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· 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.

- After swallowing Seek medical treatment.
- 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
- CO_2 , 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
- In case of fire, the following can be formed, but not limited to: Nitrogen oxides (NOx) Carbon monoxide and carbon dioxide Ammonia (NH₃)
- 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.
- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- 6.3 Methods and material for containment and cleaning up: Dispose contaminated material as waste according to item 13. Pick up mechanically.
- 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 measures required.
- · Information about protection against explosions and fires: No special measures required.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage
- \cdot Requirements to be met by storerooms and receptacles: Store at +2 to +8 °C
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: 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.

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

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· 8.2 Exposure controls	
· Personal protective equipment	
• General protective and hygienic mea	ISURES
Keep away from foodstuffs, beverages	
Store protective clothing separately.	, una jecu.
Immediately remove all soiled and co	ontaminated clothing
Avoid contact with the eyes and skin.	mummarcu croming
Wash hands before breaks and at the	and of work
	ratory protective device recommended.
Protection of hands:	ratory protective device recommended.
0	
Neoprene gloves	
PVC gloves	
	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.	
	consideration of the penetration times, rates of diffusion and th
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 manufact	urer to manufacturer. As the product is a preparation of severa
	ve material can not be calculated in advance and has therefore to b
checked prior to the application.	
Penetration time of glove material	
	e found out by the manufacturer of the protective gloves and has to b
•	e journe our by the manufacturer of the protective gloves and has to be
observed.	
observed. • For the permanent contact of a ma	aximum of 15 minutes gloves made of the following materials ar
observed. • For the permanent contact of a mo suitable:	
observed. For the permanent contact of a ma suitable: Nitrile rubber, NBR	
observed. For the permanent contact of a ma suitable: Nitrile rubber, NBR Natural rubber, NR	
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observed. For the permanent contact of a massitable: Nitrile rubber, NBR Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work close SECTION 9: Physical and chemic	aximum of 15 minutes gloves made of the following materials ar thing. cal properties
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· Explosive properties:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	no information available
Upper:	no information available
· Vapour pressure:	no information available
· Density:	no information available
· Relative density	Not determined.
· Vapour density	Not applicable.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with	
Water:	Insoluble
· Partition coefficient: n-octanol/water:	no information available
· Viscosity:	
dynamic:	no information available
kinematic:	no information available
· 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: In case of fire: See Section 5

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.
- 12.4 Mobility in soil No further relevant information available.

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· Additional ecological information:

· General notes:

Do not allow product to reach ground water, water course or sewage system. Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.

· 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 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.

SECTION 14: Transport information

Void
Void
Void
Void
No
Not applicable.
p f Not applicable.
Not dangerous according to the above specifications.
Void

SECTION 15: Regulatory information

 \cdot 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 1 (Self-assessment): slightly hazardous for water.

• 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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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.

· 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 • * Data compared to the previous version altered.

GB

SECTION 1: Identification	of the substance/mixture and of the co	ompany/undertaking
· 1.1 Product identifier		
· Trade name: SDS Anode buffe	er (blue)	serving scientists
No further relevant information	the substance or mixture and uses advise available. the mixture Laboratory chemicals	ed against
 1.3 Details of the supplier of th 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 		Suno
• 1.4 Emergency telephone numbers Medical Emergency Information	n in case of poisoning: inz - Phone: +49 (0) 6131 19240	40-35
	0	
SECTION 2: Hazards identi	ification	
 2.1 Classification of the substa. Classification according to Reg The product is not classified, ac 2.2 Label elements Labelling according to Regular Hazard pictograms Void Signal word Void Hazard statements Void 2.3 Other hazards Results of PBT and vPvB asses PBT: PBT - assessment not ava vPvB; vPvB - assessment not ava 	gulation (EC) No 1272/2008 ccording to the CLP regulation. tion (EC) No 1272/2008 Void ssment ailable.	
SECTION 3: Composition/in		
	ostances listed below with harmless additio Dodecylsulfate-Na-salt	ons.
,	on detergents / Labelling for contents	
anionic surfactants		<5%
SECTION 4: First aid meas	510200	
	asures	

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Trade name: SDS Anode buffer (blue)

· 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
- In case of fire, the following can be formed, but not limited to: Carbon monoxide and carbon dioxide Nitrogen oxides (NOx)
- · 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.
- · 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- 6.3 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).

- 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 measures required.
- · Information about protection against explosions and fires: No special measures required.
- · 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: Store in cool, dry conditions in well sealed receptacles.
- 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.

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8.2 Exposure controls	
Personal protective equipment	
General protective and hygienic mea	asures
Keep away from foodstuffs, beverages	
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	end of work.
Breathing equipment:	
Short term filter device:	
Filter P2.	
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.	
	consideration of the penetration times, rates of diffusion and th
degradation Material of alones	
Material of gloves	s does not only depend on the material, but also on further marks o
quality and varies from manufacturer	• •
	s does not only depend on the material, but also on further marks o
	urer to manufacturer. As the product is a preparation of severa
	we material can not be calculated in advance and has therefore to b
checked prior to the application.	the material can not be calemated in durance and has increjore to b
Penetration time of glove material	
	pe found out by the manufacturer of the protective ploves and has to b
The exact break trough time has to b	be found out by the manufacturer of the protective gloves and has to b
The exact break trough time has to b observed.	
The exact break trough time has to b observed.	
The exact break trough time has to b observed. For the permanent contact of a mo suitable: Natural rubber, NR	
The exact break trough time has to b observed. For the permanent contact of a mo suitable: Natural rubber, NR Eye protection: Safety glasses	aximum of 15 minutes gloves made of the following materials ar
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The exact break trough time has to b observed. For the permanent contact of a ma suitable: Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work clo SECTION 9: Physical and chemit 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 rat Flash point: Flammability (solid, gaseous)	aximum of 15 minutes gloves made of the following materials are othing. Cal properties ad chemical properties Solution Blue Recognisable Not determined. 7.9-8.1 undetermined inge: undetermined Not applicable Not applicable.

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Trade name: SDS Anode buffer (blue)

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· Explosive properties:	Product does not present an explosion hazard.
· 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:	
<i>VOC</i> %:	0.00 %
VOC g/l:	0.0 g/l
· 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

· 10.1 Reactivity No further relevant informations 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: In case of fire: See Section 5

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.

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Trade name: SDS Anode buffer (blue)

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

• General notes:

Do not allow product to reach ground water, water course or sewage system. Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.

- · 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 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.

· 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	Void	
· Label	-	
· 14.4 Packing group		
· ADR, IMDĞ, IATA	Void	
· 14.5 Environmental hazards:		
· Marine pollutant:	No	
· 14.6 Special precautions for user	Not applicable.	

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.

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Trade name: SDS Anode buffer (blue)

· National regulations

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

· 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.

· 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 \cdot * Data compared to the previous version altered.

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SECTION 1: Identification of	f the substance/mixture and of the co	ompany/undertaking
 1.1 Product identifier Trade name: SDS Cathode buffer 	r (white)	SERVA
• Article number: 43802	e substance or mixture and uses advised available.	■ serving scientists ■ d against
 1.3 Details of the supplier of the second second	safety data sheet	Suno.
• Information department: Product • 1.4 Emergency telephone number Medical Emergency Information i Poison Information Center Mainz (advisory service in German or En	in case of poisoning: z - Phone: +49 (0) 6131 19240	40-35
SECTION 2: Hazards identified	cation	
• 2.1 Classification of the substanc • Classification according to Regu The product is not classified, acco	lation (EC) No 1272/2008	
 2.2 Label elements Labelling according to Regulatio Hazard pictograms Void Signal word Void Hazard statements Void 2.3 Other hazards Results of PBT and vPvB assessm PBT: PBT - assessment not availa vPvB: vPvB - assessment not availa 	nent able.	
SECTION 3: Composition/inf	formation on ingredients	
• 3.2 Chemical characterisation: M • Description: Mixture of the substa	Mixtures ances listed below with harmless additio	ms.
• Dangerous components: Contains < 1 % CAS 151-21-3 De Contains < 0,01 % CAS 26628-22		
,	detergents / Labelling for contents	
anionic surfactants		<5%
SECTION 4: First aid measur	res	
• 4.1 Description of first aid measu • General information No special r		

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Trade name: SDS Cathode buffer (white)

· 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.
- 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
- In case of fire, the following can be formed, but not limited to: Carbon monoxide and carbon dioxide Nitrogen oxides (NOx)
- · 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.
- · 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- 6.3 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).

- 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 measures required.
- · Information about protection against explosions and fires: No special measures required.
- · 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: Store in cool, dry conditions in well sealed receptacles.
- · 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.

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Trade name: SDS Cathode buffer (white)

8.2 Exposure controls Personal protective equipment	
General protective equipment General protective and hygienic me	asuros
Keep away from foodstuffs, beverage	
Store protective clothing separately.	
Immediately remove all soiled and c	
Avoid contact with the eyes and skin	
Wash hands before breaks and at the	
Breathing equipment:	·
Short term filter device:	
Filter P2.	
Protection of hands:	
	neable 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.	
	n consideration of the penetration times, rates of diffusion and the
degradation 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 be
checked prior to the application.	
observed. For the permanent contact of a m suitable:	
observed. For the permanent contact of a m	naximum of 15 minutes gloves made of the following materials are
observed. For the permanent contact of a m suitable: Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work cla	naximum of 15 minutes gloves made of the following materials are othing.
observed. For the permanent contact of a m suitable: Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work cla SECTION 9: Physical and chem	naximum of 15 minutes gloves made of the following materials are othing. ical properties
observed. For the permanent contact of a m suitable: Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work cla SECTION 9: Physical and chem 9.1 Information on basic physical a	naximum of 15 minutes gloves made of the following materials are othing. ical properties
observed. For the permanent contact of a m suitable: Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work cla SECTION 9: Physical and chem	naximum of 15 minutes gloves made of the following materials are othing. ical properties
observed. For the permanent contact of a masuitable: Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work classic SECTION 9: Physical and chem 9.1 Information on basic physical a General Information Appearance: Form:	naximum of 15 minutes gloves made of the following materials are othing. ical properties
observed. For the permanent contact of a m suitable: Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work cla SECTION 9: Physical and chem 9.1 Information on basic physical a General Information Appearance: Form: Colour:	naximum of 15 minutes gloves made of the following materials are othing. ical properties nd chemical properties Solution Colourless
observed. For the permanent contact of a mesuitable: Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work cla SECTION 9: Physical and chem 9.1 Information on basic physical a General Information Appearance: Form: Colour: Odour:	naximum of 15 minutes gloves made of the following materials are othing. ical properties nd chemical properties Solution Colourless Odourless
observed. For the permanent contact of a mesuitable: Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work cla SECTION 9: Physical and chem 9.1 Information on basic physical a General Information Appearance: Form: Colour: Odour:	naximum of 15 minutes gloves made of the following materials are othing. ical properties nd chemical properties Solution Colourless
observed. For the permanent contact of a m suitable: Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work clo SECTION 9: Physical and chem 9.1 Information on basic physical a General Information Appearance: Form: Colour: Odour: Odour threshold:	naximum of 15 minutes gloves made of the following materials are othing. ical properties nd chemical properties Solution Colourless Odourless
observed. For the permanent contact of a m suitable: Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work cla SECTION 9: Physical and chem 9.1 Information on basic physical a General Information Appearance: Form: Colour: Odour: Odour threshold: pH-value at 20 °C:	naximum of 15 minutes gloves made of the following materials are othing. ical properties nd chemical properties Solution Colourless Odourless Not determined.
observed. For the permanent contact of a m suitable: Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work cla SECTION 9: Physical and chem 9.1 Information on basic physical a General Information Appearance: Form: Colour: Odour: Odour: pH-value at 20 °C: Change in condition	naximum of 15 minutes gloves made of the following materials are othing. ical properties nd chemical properties Solution Colourless Odourless Not determined.
observed. For the permanent contact of a m suitable: Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work cla SECTION 9: Physical and chem 9.1 Information on basic physical a General Information Appearance: Form: Colour: Odour: Odour threshold: pH-value at 20 °C:	aximum of 15 minutes gloves made of the following materials are othing. ical properties nd chemical properties Solution Colourless Odourless Not determined. 7.5 undetermined
observed. For the permanent contact of a masuitable: Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work classic SECTION 9: Physical and chem 9.1 Information on basic physical a 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 references	naximum of 15 minutes gloves made of the following materials are othing. ical properties nd chemical properties Solution Colourless Odourless Not determined. 7.5 undetermined
observed. For the permanent contact of a m suitable: Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work cla SECTION 9: Physical and chem 9.1 Information on basic physical a General Information Appearance: Form: Colour: Odour: Odour threshold: pH-value at 20 °C: Change in condition Melting point/freezing point:	aximum of 15 minutes gloves made of the following materials are othing. ical properties ind chemical properties Solution Colourless Odourless Not determined. 7.5 undetermined ange: undetermined
observed. For the permanent contact of a masuitable: Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work cla SECTION 9: Physical and chem 9.1 Information on basic physical a 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 ration Flash point:	ical properties nd chemical properties Solution Colourless Odourless Not determined. 7.5 undetermined ange: undetermined no information available
observed. For the permanent contact of a magnitude: Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work classes SECTION 9: Physical and chem 9.1 Information on basic physical a 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)	naximum of 15 minutes gloves made of the following materials are othing. ical properties ical properties nd chemical properties Solution Colourless Odourless Odourless Not determined. 7.5 undetermined ange: undetermined no information available Not applicable.

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Trade name: SDS Cathode buffer (white)

	(Contd. of page 3)
· Explosive properties:	Product does not present an explosion hazard.
· 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:	
VOC %:	0.00 %
VOC g/l:	0.0 g/l
• 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

· 10.1 Reactivity No further relevant informations 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: In case of fire: See Section 5

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.

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Revision: 22.05.2019

Trade name: SDS Cathode buffer (white)

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

• General notes:

Do not allow product to reach ground water, water course or sewage system.

- Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.
- · 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 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, ADN, IMDG, IATA	Void	
· 14.2 UN proper shipping name · ADR, ADN, IMDG, IATA	Void	
· 14.3 Transport hazard class(es)		
· ADR, ADN, IMDG, IATA · Class	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 Ann. Marpol and the IBC Code	ex II of Not applicable.	
· UN ''Model Regulation'':	Void	

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.

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GB

Printing date 24.05.2019

Version number 4

Revision: 22.05.2019

Trade name: SDS Cathode buffer (white)

· National regulations

• Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

· 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.

· 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 \cdot * Data compared to the previous version altered.

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Printing date 24.05.2019	Version number 4	Revision: 23.05.2019
SECTION 1: Identifi	cation of the substance/mixture and of the o	company/undertaking
· 1.1 Product identifier		
• Trade name: SDS Buff	er Neutral Sample Buffer 2X	SERVA
• Article number: 43803 • 1.2 Relevant identified No further relevant info	uses of the substance or mixture and uses advis	sed against
 1.3 Details of the supple Manufacturer/Supplier SERVA Electrophoresis Carl-Benz-Str. 7 D-69115 Heidelberg Tel.: +49 6221 13840-0 FAX: +49 6221 13840-0 msds.info@serva.de 	GmbH	Suno
• 1.4 Emergency telephon Medical Emergency Info Poison Information Cen	t: Product Safety department Tel.: +49 6221 136 ne number: ormation in case of poisoning: ter Mainz - Phone: +49 (0) 6131 19240 man or English language)	840-35
SECTION 2: Hazard		
· 2.2 Label elements	P B assessment not available.	
SECTION 3: Compos	sition/information on ingredients	
· 3.2 Chemical character	v U	ions.
• Dangerous components		
CAS: 151-21-3 so EINECS: 205-788-1	dium dodecyl sulphate > Flam. Sol. 2, H228; � Eye Dam. 1, H318; � rit. 2, H315; STOT SE 3, H335; Aquatic Chronic	2.5-7% Acute Tox. 4, H302; Skin 2 3, H412
· Regulation (EC) No 64	8/2004 on detergents / Labelling for contents	
anionic surfactants		≥5 - <15%
SECTION 4: First ai	d measures	
• 4.1 Description of first	aid measures	
	aid measures o special measures required.	(Contd. on page 2)

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Trade name: SDS Buffer Neutral Sample Buffer 2X

- · After inhalation Supply fresh air; consult doctor in case of complaints.
- After skin contact Immediate rinse with copious amounts of water; Consult doctor In case of complaints. • 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.

- 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
- CO_2 , 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 Product forms slippery surface when combined with water.
- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- 6.3 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).
- · 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 measures required.
- Information about protection against explosions and fires: No special measures required.
- · 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.
- Additional information: The lists that were valid during the creation were used as basis.

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· Flammability (solid, gaseous)

• Decomposition temperature:

· Self igniting:

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Trade name: SDS Buffer Neutral Sample Buffer 2X

	(Contd. of page 2)
· 8.2 Exposure controls	
· Personal protective equipment	
• General protective and hygienic measure	25
Keep away from foodstuffs, beverages and	
Store protective clothing separately.	, jood.
Immediately remove all soiled and contan	ningted clothing
Avoid contact with the eyes and skin.	indica cioning
Wash hands before breaks and at the end	ofwork
Breathing equipment:	oj work.
Short term filter device:	
Filter P2.	
Protection of hands:	
•	and resistant to the product the substance the proparation
	e and resistant to the product/ the substance/ the preparation. to the glove material can be given for the product/ the preparation/
	sideration of the penetration times, rates of diffusion and the
Material of gloves	
	es not only depend on the material, but also on further marks of manufacturer.
quality and varies from manufacturer substances, the resistance of the glove m checked prior to the application.	es not only depend on the material, but also on further marks of to manufacturer. As the product is a preparation of several material can not be calculated in advance and has therefore to be
	und out by the manufacturer of the protective gloves and has to be
observed. For the permanent contact of a maxim	num of 15 minutes gloves made of the following materials are
suitable:	
Chloroprene rubber, CR	
Natural rubber, NR	
• Eye protection: Safety glasses	
• Body protection: Protective work clothing	<i>z</i> .
SECTION 9: Physical and chemical p	properties
9.1 Information on basic physical and ch	nemical properties
• General Information	
· Appearance:	
Form:	Solution
Colour:	blue-violet
· Odour:	Odourless
Odour threshold:	Not determined.
pH-value at 20 °C:	6-7
Change in condition	
Melting point/freezing point:	undetermined
Initial boiling point and boiling range:	undetermined
Flash point:	Not applicable

Not applicable.

Not determined.

Product is not selfigniting.

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Trade name: SDS Buffer Neutral Sample Buffer 2X

Explosive properties:	(Contd. of pag <i>Product does not present an explosion hazard.</i>
	Trounci uoes noi present un explosion nuzuru.
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:	
ЙОС % :	0.00 %
VOC g/l:	0.0 g/l
Solids content:	5.1 %
9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant informations 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.
- In case of fire: See Section 5

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.

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

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

Do not allow product to reach ground water, water course or sewage system. Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.

- · 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 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 _ · 14.2 UN proper shipping name -· 14.3 Transport hazard class(es) _ · 14.4 Packing group _ · 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.

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

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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 H228 Flammable solid. H302 Harmful if swallowed. H315 Causes skin irritation. H318 Causes serious eye damage. H335 May cause respiratory irritation. H412 Harmful to aquatic life with long lasting effects. · Department issuing SDS: Product safety department · Contact: +49 6221 13840-35 · 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 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. Sol. 2: Flammable solids - Category 2 Acute Tox. 4: Acute toxicity - Category 4 Skin Irrit. 2: Skin corrosion/irritation - Category 2 Eye Dam. 1: Serious eye damage/eye irritation – Category 1 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3 Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard - Category 3 • * Data compared to the previous version altered.

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CCTION 1: Identification of Product identifier ade name: <u>SDS Buffer Neutr</u> ticle number: 43804 2 Relevant identified uses of t o further relevant information oplication of the substance / the 3 Details of the supplier of the anufacturer/Supplier: ERVA Electrophoresis GmbH url-Benz-Str. 7 69115 Heidelberg 1.: +49 6221 13840-0 XX: +49 6221 13840-10 sds.info@serva.de formation department: Product 4 Emergency telephone numb edical Emergency Information dvisory service in German or 1 5 CTION 2: Hazards identif 4 Classification of the substantion assification according to Regulated the product is not classified, according to Regulated azard pictograms Void gaal word Void azard statements Void	ral Sample Diluter 1X the substance or mixt available. the mixture Laborator the safety data sheet uct Safety data sheet safety data sheet n in case of poisoning inz - Phone: +49 (0) 6. English language) ification nce or mixture gulation (EC) No 127. ccording to the CLP re	<u>X</u> ture and uses of try chemicals t Tel.: +49 622 3: 131 19240 Y2/2008 regulation.	advised against	dertaking SERV serving scientis	
ade name: <u>SDS Buffer Neutr</u> ticle number: 43804 2 Relevant identified uses of t o further relevant information oplication of the substance / the 3 Details of the supplier of the anufacturer/Supplier: CRVA Electrophoresis GmbH url-Benz-Str. 7 69115 Heidelberg 1.: +49 6221 13840-0 AX: +49 6221 13840-10 ads.info@serva.de formation department: Product A Emergency telephone numb edical Emergency Information obson Information Center Main dvisory service in German or p 5 CTION 2: Hazards identif A Classification of the substant assification according to Regulated the product is not classified, accord to be product is not classified, accord and pictograms Void gnal word Void	the substance or mixt available. the mixture Laborator as safety data sheet uct Safety department ber: n in case of poisoning inz - Phone: +49 (0) 6 English language) ification nce or mixture gulation (EC) No 127 ccording to the CLP re	ture and uses o ry chemicals t Tel.: +49 622 5131 19240 72/2008 egulation.	cies C		
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ticle number: 43804 2 Relevant identified uses of t o further relevant information oplication of the substance / the 3 Details of the supplier of the anufacturer/Supplier: ERVA Electrophoresis GmbH url-Benz-Str. 7 69115 Heidelberg 1.: +49 6221 13840-0 XX: +49 6221 13840-10 Sds.info@serva.de formation department: Product 4 Emergency telephone numb edical Emergency Information or formation Center Main dvisory service in German or for solvisory service in German or for the substant assification according to Regulate the product is not classified, according to Regulate to Regulat	the substance or mixt available. the mixture Laborator as safety data sheet uct Safety department ber: n in case of poisoning inz - Phone: +49 (0) 6 English language) ification nce or mixture gulation (EC) No 127 ccording to the CLP re	ture and uses o ry chemicals t Tel.: +49 622 5131 19240 72/2008 egulation.	cies C		SIS
anufacturer/Supplier: ERVA Electrophoresis GmbH url-Benz-Str. 7 :69115 Heidelberg 1.: +49 6221 13840-0 AX: +49 6221 13840-10 sds.info@serva.de formation department: Produ 4 Emergency telephone numb edical Emergency Information bison Information Center Main dvisory service in German or 1 ECTION 2: Hazards identif ECTION 2: Hazards identif I Classification of the substan assification according to Reg be product is not classified, accord 2 Label elements abelling according to Regulated azard pictograms Void gnal word Void	uct Safety department ber: n in case of poisoning inz - Phone: +49 (0) 6. English language) ification nce or mixture gulation (EC) No 127. ccording to the CLP re	3: 131 19240 72/2008 egulation.	1 13840-35		
4 Emergency telephone numb edical Emergency Information bison Information Center Main dvisory service in German or A ECTION 2: Hazards identij Classification of the substant assification according to Reg be product is not classified, acc 2 Label elements abelling according to Regulation azard pictograms Void gnal word Void	ber: n in case of poisoning inz - Phone: +49 (0) 6. English language) ification nce or mixture gulation (EC) No 127 ccording to the CLP re	3: 131 19240 72/2008 egulation.	1 13840-35		
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I Classification of the substan assification according to Reg be product is not classified, acc I Label elements belling according to Regulation azard pictograms Void gnal word Void	nce or mixture gulation (EC) No 1272 ccording to the CLP re	egulation.			
<i>azara statements vola</i> 3 Other hazards 2 sults of PBT and vPvB assess 3 T: PBT - assessment not avail 2 vB: vPvB - assessment not avail	uilable.				
ECTION 3: Composition/in	nformation on ingre	edients			
Chemical characterisation: escription: Mixture of the subs		vith harmless a	additions.		
ingerous components:					
AS: 151-21-3 NECS: 205-788-1 🚯 Flam. S	odecyl sulphate Sol. 2, H228; 💎 Eye 315; STOT SE 3, H33.	Dam. 1, H318 5; Aquatic Ch	?; () Acute Tox. 4 ronic 3, H412		1-3%
gulation (EC) No 648/2004 o	on detergents / Labell	ling for conten	ıts		
ionic surfactants				<	<5%
ECTION 4: First aid measu					
	ures				
I Description of first aid mea se eneral information No special	isures				

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- · After inhalation Supply fresh air; consult doctor in case of complaints.
- After skin contact Immediate rinse with copious amounts of water; Consult doctor In case of complaints. • 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.

- 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
- CO_2 , 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 Product forms slippery surface when combined with water.
- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- 6.3 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).
- · 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 measures required.
- Information about protection against explosions and fires: No special measures required.
- · 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.
- Additional information: The lists that were valid during the creation were used as basis.

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Trade name: SDS Buffer Neutral Sample Diluter 1X

8) Ernosura controla	(Contd. of page
8.2 Exposure controls	
Personal protective equipment	
General protective and hygienic me	
Keep away from foodstuffs, beverage	es and feed.
Store protective clothing separately.	
Immediately remove all soiled and c	
Wash hands before breaks and at the	
Avoid contact with the eyes and skin.	
Breathing equipment: Short term filter device:	
Filter P2.	
Protection of hands:	
•	neable 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.	
Selection of the glove material or	n consideration of the penetration times, rates of diffusion and th
degradation	
Material of gloves	
	s does not only depend on the material, but also on further marks of
quality and varies from manufacture	
	s does not only depend on the material, but also on further marks of
	turer to manufacturer. As the product is a preparation of sever
	ove material can not be calculated in advance and has therefore to l
checked prior to the application.	
Penetration time of glove material	he found out by the manufactures of the protective clover and has to b
observed.	be found out by the manufacturer of the protective gloves and has to b
	naximum of 15 minutes gloves made of the following materials ar
suitable:	auximum of 15 minutes stores made of the following materials a
Natural rubber, NR	
Natural rubber, NR	othing.
Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work clo	
Natural rubber, NR Eye protection: Safety glasses	
Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work clo SECTION 9: Physical and chem 9.1 Information on basic physical a	ical properties
Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work clo SECTION 9: Physical and chem 9.1 Information on basic physical and General Information	ical properties
Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work clo SECTION 9: Physical and chem 9.1 Information on basic physical a	ical properties
Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work cla SECTION 9: Physical and chem 9.1 Information on basic physical and General Information Appearance:	ical properties nd chemical properties
Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work cla SECTION 9: Physical and chem 9.1 Information on basic physical and General Information Appearance: Form:	ical properties nd chemical properties Solution
Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work closed SECTION 9: Physical and chem 9.1 Information on basic physical and General Information Appearance: Form: Colour:	ical properties nd chemical properties Solution dark-red
Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work closed SECTION 9: Physical and chem 9.1 Information on basic physical and General Information Appearance: Form: Colour: Odour:	ical properties nd chemical properties Solution dark-red Odourless
Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work classic SECTION 9: Physical and cheme 9.1 Information on basic physical and General Information Appearance: Form: Colour: Odour: Odour threshold:	ical properties nd chemical properties Solution dark-red Odourless Not determined.
Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work cla SECTION 9: Physical and cheme 9.1 Information on basic physical and General Information Appearance: Form: Colour: Odour: Odour: pH-value at 20 °C: Change in condition	ical properties nd chemical properties Solution dark-red Odourless Not determined.
Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work classical SECTION 9: Physical and chem 9.1 Information on basic physical and General Information Appearance: Form: Colour: Odour: Odour threshold: pH-value at 20 °C:	ical properties nd chemical properties Solution dark-red Odourless Not determined. 6-7 undetermined
Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work classic SECTION 9: Physical and cheme 9.1 Information on basic physical and General Information Appearance: Form: Colour: Odour: Odour: pH-value at 20 °C: Change in condition Melting point/freezing point:	ical properties nd chemical properties Solution dark-red Odourless Not determined. 6-7 undetermined
Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work classical SECTION 9: Physical and cheme 9.1 Information on basic physical and 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 references	ical properties nd chemical properties Solution dark-red Odourless Not determined. 6-7 undetermined ange: undetermined
Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work classic SECTION 9: Physical and chem 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 roc Flash point:	ical properties nd chemical properties Solution dark-red Odourless Not determined. 6-7 undetermined ange: undetermined Not applicable
Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work classic 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 nd chemical properties Solution dark-red Odourless Not determined. 6-7 undetermined ange: undetermined Not applicable Not applicable.
Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work classical SECTION 9: Physical and cheme 9.1 Information on basic physical and 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:	ical properties nd chemical properties Solution dark-red Odourless Not determined. 6-7 undetermined ange: undetermined Not applicable Not applicable. Not determined.

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		(Contd. of page 3
· 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:		
<i>VOC</i> %:	0.00 %	
VOC g/l:	0.0 g/l	
· 9.2 Other information	No further relevant information available.	

SECTION 10: Stability and reactivity

· 10.1 Reactivity No further relevant informations 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.

In case of fire: See Section 5

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.

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

· General notes:

Do not allow product to reach ground water, water course or sewage system.

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.

- · 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 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.

14.1 UN-Number	- Void
ADR, IMDG, IATA	Vola
14.2 UN proper shipping name	-
ADR, IMDG, IATA	Void
14.3 Transport hazard class(es)	-
ADR, IMDG, IATA	
Class	Void
Label	-
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 Anne	ex II of
Marpol and the IBC Code	Not applicable.
Transport/Additional information:	Not dangerous according to the above specifications.

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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 1 (Self-assessment): slightly hazardous for water.
- · 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	
H228 Flammable solid.	
H302 Harmful if swallowed.	
H315 Causes skin irritation.	
H318 Causes serious eye damage.	
H335 May cause respiratory irritation.	
H412 Harmful to aquatic life with long lasting effects.	
• Department issuing SDS: Product safety department	
· Contact: +49 6221 13840-35	
· Abbreviations and acronyms:	
PBT: persistent, bioaccumulative, toxic substance (REACH)	
<i>vPvB: very persistent, very bioaccumulative substance (REACH)</i>	Description of Chaming In
REACH: Regulation concerning the Registration, Evaluation, Authorisation	
<i>CLP: Regulation on classification, labelling and packaging of substances a</i>	ia mixtures
bw: body weight	
ADR: Accord européen sur le transport des marchandises dangereuses p Carriage of Dangerous Goods by Road)	ar Route (European Agreement concerning the International
IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association	
GHS: Globally Harmonised System of Classification and Labelling of Chem	icals
EINECS: European Inventory of Existing Commercial Chemical Substances	
ELINCS: European List of Notified Chemical Substances	
CAS: Chemical Abstracts Service (division of the American Chemical Socie.	5.)
PBT: Persistent, Bioaccumulative and Toxic	y)
vPvB: very Persistent and very Bioaccumulative	
Flam. Sol. 2: Flammable solids – Category 2	
Acute Tox. 4: Acute toxicity – Category 4	
Skin Irrit. 2: Skin corrosion/irritation – Category 2	
Eye Dam. 1: Serious eye damage/eye irritation – Category 1	
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3	
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aqua	tic hazard – Category 3
• * Data compared to the previous version altered.	ne nazara Calegory 5
- Data comparea to the previous version attered.	

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inting date 24.05.2019	version number 4	<i>Revision: 23.05.20</i>
SECTION 1: Identification of	the substance/mixture and of the company/u	ndertaking
· 1.1 Product identifier		CEDI 7A
• Trade name: Cooling Fluid		
• Article number: 43371 • 1.2 Relevant identified uses of the No further relevant information at • Application of the substance / the		
 1.3 Details of the supplier of the second second	safety data sheet	jnno.
 Information department: Product 1.4 Emergency telephone number Medical Emergency Information i Poison Information Center Mainz (advisory service in German or End 	in case of poisoning: - Phone: +49 (0) 6131 19240	
	0	
SECTION 2: Hazards identified	cation	
• 2.1 Classification of the substanc • Classification according to Regul The product is not classified, acco	lation (EC) No 1272/2008	
 2.2 Label elements Labelling according to Regulatio Hazard pictograms Void Signal word Void Hazard statements Void 2.3 Other hazards Results of PBT and vPvB assessment PBT: PBT - assessment not availation vPvB: vPvB - assessment not availation 	nent able.	
\sim		
SECTION 3: Composition/infe	ormation on ingredients	
• 3.2 Chemical characterisation: M • Description: Contains < 0,01 % C		
• Dangerous components: Void		
SECTION 4: First aid measur	res	
• After skin contact Immediately wash with water and • After eve contact	soap and rinse thoroughly. Consult doctor if you j	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.

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Trade name: Cooling Fluid

- · After swallowing Wash out mouth. Seek medical advice if discomfort occurs.
- \cdot 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
- CO_2 , 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
- In case of fire, the following can be formed, but not limited to: Carbon monoxide and carbon dioxide
- · 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

6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
6.3 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).

• 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 Avoid contact with eyes and skin. No special measures required.

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

· 7.2 Conditions for safe storage, including any incompatibilities

· Storage

- \cdot Requirements to be met by storerooms and receptacles: Store at +2 to +8 °C
- · 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.

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

(Contd. on page 3)

- GB

Printing date 24.05.2019

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Version number 4

Revision: 23.05.2019

Trade name: Cooling Fluid

8.2 Exposure controls Personal protective and hyginic measures Keep avexy from foodstuffs, beverages and feed. Store protective clothing separately. Immediately remove all solied and contaminated clothing Avoid contact with the eyes and skin. Wash hands before breaks and at the end of work. Percenting 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. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation. The 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. Form he resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. Penetration time has to be found out by the manufacturer of the protective gloves and has to be observed. Set Truch Step glasses Body protection: Set glasses Body protection: Set glasses Body protection: Protective work clothing. SECTION 9: Physical and chemical properties General Information abaic physical and chemical properties Odour threshold: Not determined. Physica at 20 *C: 6 -8.3 Change in condition Melting point/freeing point: undetermined Flash point: Not determined. Flash point: Not determined Flash point: Not determined. Flash poi		(Contd. of page 2
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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:		
<i>VOC</i> %:	0.00 %	
VOC g/l:	0.0 g/l	
· Solids content:	15.0 %	
· 9.2 Other information	No further relevant information available.	

SECTION 10: Stability and reactivity

· 10.1 Reactivity No further relevant informations 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: In case of fire: See Section 5

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.

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

• General notes:

Do not allow product to reach ground water, water course or sewage system.

- Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.
- · 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 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	n	
· 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 Ann Marpol and the IBC Code	nex II of Not applicable.	

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.

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· National regulations

• Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

· 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.

· 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 \cdot * Data compared to the previous version altered.

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