

2D HPE[™] Large Gel NF 10 - 15% Kit Cat. No. 43305

Safety Data Sheets of the following Kit Components:

43860	2D HPE™ Large Gel NF 10 - 15%
43801	SDS Anode buffer (blue)
43802	SDS Cathode buffer (white)
43371	Cooling Fluid
43805	Equilibration Buffer

Revision: 15.05.2018



· Dangerous components: Void

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · General information No special measures required.

polyesterfilm.Contains < 0.1 % *free acrylamide.*

- · After inhalation Supply fresh air.
- After skin contact Immediately wash with water and soap and rinse thoroughly.

(Contd. on page 2)

GB

Printing date 05.10.2018

Version number 3

Revision: 15.05.2018

(Contd. of page 1)

Trade name: 2D HPETM Large Gel

· 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 fire with 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) 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: No special measures required.
- 6.3 Methods and material for containment and cleaning up: Pick up mechanically.

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 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.

(Contd. on page 3)

GB

Printing date 05.10.2018

×

Version number 3

Revision: 15.05.2018

Trade name: 2D HPETM Large Gel

	(Contd. of pag
8.2 Exposure c	ntrols
Personal prote	
	ve and hygienic measures
	tionary measures should be adhered to when handling chemicals.
	foodstuffs, beverages and feed.
	re breaks and at the end of work.
	<i>nent:</i> Suitable respiratory protective device recommended.
Protection of h	
The glove mate	al has to be impermeable and resistant to the product/ the substance/ the preparation. ests no recommendation to the glove material can be given for the product/ the preparation.
Selection of the degradation	glove material on consideration of the penetration times, rates of diffusion and
Material of glo	25
The selection of quality and version of substances, the	the suitable gloves does not only depend on the material, but also on further marks ies from manufacturer to manufacturer. As the product is a preparation of seve resistance of the glove material can not be calculated in advance and has therefore to the application.
	of glove material
	trough time has to be found out by the manufacturer of the protective gloves and has to
For the perma suitable:	ent contact of a maximum of 15 minutes gloves made of the following materials of
Natural rubber	√R
Nitrile rubber,	BR
Eye protection.	Safety glasses
	Protective work clothing.

9.1 Information on basic physical and ch	nemical properties	
General Information		
Appearance:		
Form:	gel between two plastic films	
Colour:	Colourless	
Odour:	Odourless	
Change in condition		
Melting point/freezing point:	undetermined	
Initial boiling point and boiling range:	undetermined	
Flash point:	Not applicable	
Self igniting:	Product is not selfigniting.	
Explosive properties:	Product does not present an explosion hazard.	
Density:	Not determined	
Solubility in / Miscibility with		
Water:	Insoluble	
Solvent content:		
Organic solvents:	0.0 %	
<i>VOC</i> %:	0.00 %	
9.2 Other information	No further relevant information available.	

(Contd. on page 4)

Printing date 05.10.2018

Version number 3

Revision: 15.05.2018

Trade name: 2D HPETM Large Gel

(Contd. of page 3)

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.
- Additional ecological information:
- · General notes:
- Water hazard class 1 (German Regulation) (Self-assessment): slightly 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.

(Contd. on page 5)

GB

Printing date 05.10.2018

Version number 3

Revision: 15.05.2018

(Contd. of page 4)

Trade name: 2D HPETM Large Gel

· 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, IMDG, IATA · Class · Label	Void -
· ADN/R Class:	Void
· 14.4 Packing group · ADR, IMDG, IATA	Void
· 14.5 Environmental hazards: · Marine pollutant:	No
\cdot 14.6 Special precautions for user	Not applicable.
· 14.7 Transport in bulk according to Anne Marpol and the IBC Code	e x II of Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· UN "Model Regulation":	Void

SECTION 15: Regulatory information

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

· 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

- vPvB: very persistent, very bioaccumulative substance (REACH)
- REACH: Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals

 ${\it CLP: Regulation \ on \ classification, \ labelling \ and \ packaging \ of \ substances \ and \ mixtures}}$

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

(Contd. on page 6)

[·] 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)

Printing date 05.10.2018	Version number 3	Revision: 15.05.2018
Trade name: 2D HPE TM Large Gel		
CAS: Chemical Abstracts Service (division PBT: Persistent, Bioaccumulative and Tox, vPvB: very Persistent and very Bioaccumu • * Data compared to the previous	ic lative	(Contd. of page 5)

Version number 3

Printing date 05.10.2018

Revision: 05.10.2018

· 1.1 Product identifier		
•	SERVA	
• Trade name: <u>SDS Anode buffer (blue)</u>	serving scientists	
Article number: 43801		
1.2 Relevant identified uses of the substance or mi	ixture and uses advised against	
No further relevant information available.		
Application of the substance / the mixture Laborat	tory chemicals	•
1.3 Details of the supplier of the safety data sheet		
Manufacturer/Supplier:		
SERVA Electrophoresis GmbH		
Carl-Benz-Str. 7		
D-69115 Heidelberg		
Tel.: +49 6221 13840-0	. Ca	
FAX: +49 6221 13840-10		
msds.info@serva.de	C	
Information department: Product Safety department	nt Tel.: +49 6221 13840-35	
1.4 Emergency telephone number:		
Medical Emergency Information in case of poisonin	ng:	
Poison Information Center Mainz - Phone: +49 (0)		
(advisory service in German or English language)		
	0	
SECTION 2: Hazards identification		
The product is not classified, according to the CLP 2.2 Label elements		
Labelling according to Regulation (EC) No 1272/2	2008 Void	
Hazard pictograms Void		
Signal word Void		
Hazard statements Void		
2.3 Other hazards		
Results of PBT and vPvB assessment PBT: PBT - assessment not available.		
vPvB: vPvB - assessment not available.		
vi vb. vi vb - ussessment not uvutuote.		
Cov		
SECTION 3: Composition/information on ing	redients	
3.2 Chemical characterisation: Mixtures		
Description:		
Contains < 1 % CAS 151-21-3 Dodecylsulfate-Na-s	salt	
Contains < 0.01 % CAS 26628-22-8 Sodium azide		
Mixture of the substances listed below with harmles	ss additions.	
Dangerous components:		
CAS: 77-86-1 trometamol	Skin Invit 2 H315. End Invit 2 H210	<10
EINECS: 201-064-4	(1) Skin Irrit. 2, H315; Eye Irrit. 2, H319	<10
Regulation (EC) No 648/2004 on detergents / Labo	elling for contents	
anionic surfactants		<5%

(Contd. on page 2)

Printing date 05.10.2018

Version number 3

Revision: 05.10.2018

Trade name: SDS Anode buffer (blue)

(Contd. of page 1)

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 Immediately wash with water and soap and rinse thoroughly.
- · 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 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.
- · 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 Ensure good ventilation/exhaustion at the workplace.

· Information about protection against explosions and fires: Keep ignition sources away - Do not smoke.

- · 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.

(Contd. on page 3)

GB

GB

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 05.10.2018

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Version number 3

Revision: 05.10.2018

Trade name: SDS Anode buffer (blue)

	(Contd. of page 2
8.1 Control parameters	
	lues that require monitoring at the workplace:
	ntain any relevant quantities of materials with critical values that have to b
monitored at the workplace	2.
Additional information: T	he lists that were valid during the creation were used as basis.
8.2 Exposure controls	
Personal protective equip	nent
General protective and hy	
Keep away from foodstuffs	, beverages and feed.
Store protective clothing se	
	iled and contaminated clothing
Wash hands before breaks	
Avoid contact with the eye.	
Breathing equipment:	
Short term filter device:	
Filter P2.	
Protection of hands:	
	be impermeable and resistant to the product/ the substance/ the preparation.
	commendation to the glove material can be given for the product/ the preparation
the chemical mixture.	
Selection of the glove m	aterial on consideration of the penetration times, rates of diffusion and th
degradation	
Material of gloves	
	ble gloves does not only depend on the material, but also on further marks o mufacturer to manufacturer.
	ble gloves does not only depend on the material, but also on further marks of
quality and varies from	manufacturer to manufacturer. As the product is a preparation of severa of the glove material can not be calculated in advance and has therefore to b
checked prior to the applic	
Penetration time of glove	
	ne has to be found out by the manufacturer of the protective gloves and has to b
	uct of a maximum of 15 minutes gloves made of the following materials ar
suitable:	
Natural rubber, NR	
Eye protection: Safety glas	sses
Body protection: Protectiv	
~ 1	
SECTION 0. Dhusiant	and a homized properties
SECTION 9: Physical a	na chemical properties
	physical and chemical properties
General Information	
Appearance:	
Form:	Solution
Colour:	Blue

• Odour: • Odour threshold:	Recognisable Not determined.
· pH-value at 20 °C:	7.9-8.1
• Change in condition Melting point/freezing point: Initial boiling point and boiling range:	undetermined : undetermined
· Flash point:	Not applicable
	(Contd. on page 4)

Printing date 05.10.2018

Version number 3

Revision: 05.10.2018

Trade name: SDS Anode buffer (blue)

	(Contd. of page 2
Flammability (solid, gaseous)	Not applicable.
Decomposition temperature:	Not determined.
Self igniting:	Product is not selfigniting.
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.
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.

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.

(Contd. on page 5)

GB

Printing date 05.10.2018

Version number 3

Revision: 05.10.2018

Trade name: SDS Anode buffer (blue)

(Contd. of page 4)

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:

- 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.

· 14.1 UN-Number	X 7 · 1	
· ADR, IMDG, IATA	Void	
\cdot 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.	
· 14.7 Transport in bulk according to Ann	ex II of	
Marpol and the IBC Code	Not applicable.	

(Contd. on page 6)

GB

Printing date 05.10.2018

Version number 3

Revision: 05.10.2018

Trade name: SDS Anode buffer (blue)

(Contd. of page 5)

SECTION 15: Regulatory information

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

· Relevant phrases

H315 Causes skin irritation. H319 Causes serious eye irritation.

· Department issuing SDS: Product safety department

· 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 Skin Irrit. 2: Skin corrosion/irritation - Category 2 Eye Irrit. 2: Serious eye damage/eye irritation - Category 2 • * Data compared to the previous version altered.

[·] Contact: +49 6221 13840-35

Version number 3

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Revision: 05.10.2018

I I Product identities		
1.1 Product identifier	SERVA	
Trade name: <u>SDS Cathode buffer (white)</u>	serving scientists	
Article number: 43802		
1.2 Relevant identified uses of the substance or i	mixture and uses advised against	
No further relevant information available.		
Application of the substance / the mixture Labor	ratory chemicals	
1.3 Details of the supplier of the safety data she	et	
Manufacturer/Supplier:		
SERVA Electrophoresis GmbH		
Carl-Benz-Str. 7	(Δ)	
D-69115 Heidelberg		
Tel.: +49 6221 13840-0	. 6-	
FAX: +49 6221 13840-10		
msds.info@serva.de	C	
Information department: Product Safety departm	nent Tel.: +49 6221 13840-35	
1.4 Emergency telephone number:		
Medical Emergency Information in case of poiso	ning:	
Poison Information Center Mainz - Phone: +49 (
(advisory service in German or English language		
SECTION 2: Hazards identification		
2.1 Classification of the substance or mixture		
Classification according to Regulation (EC) No	1272/2008	
The product is not classified, according to the Cl		
2.2 Label elements	0 /0000 XX + 1	
Labelling according to Regulation (EC) No 127.	2/2008 Void	
Hazard pictograms Void		
Signal word Void		
Hazard statements Void		
2.3 Other hazards		
Results of PBT and vPvB assessment		
PBT: PBT - assessment not available. vPvB: vPvB - assessment not available.		
VI VD: VF VD - USSESSMENT NOT AVAIIADIE.		
	ηστρητρητς	
SECTION 3: Composition/information on in	ngreatents	
SECTION 3: Composition/information on in	ngreatents	
SECTION 3: Composition/information on in 3.2 Chemical characterisation: Mixtures Description:		
SECTION 3: Composition/information on in 3.2 Chemical characterisation: Mixtures Description: Contains < 1 % CAS 151-21-3 Dodecylsulfate-No	a-salt	
SECTION 3: Composition/information on in 3.2 Chemical characterisation: Mixtures Description: Contains < 1 % CAS 151-21-3 Dodecylsulfate-Na Contains < 0,01 % CAS 26628-22-8 Sodium azid	a-salt le	
	a-salt le	
SECTION 3: Composition/information on in 3.2 Chemical characterisation: Mixtures Description: Contains < 1 % CAS 151-21-3 Dodecylsulfate-Na Contains < 0,01 % CAS 26628-22-8 Sodium azid	a-salt le	
SECTION 3: Composition/information on in 3.2 Chemical characterisation: Mixtures Description: Contains < 1 % CAS 151-21-3 Dodecylsulfate-Na Contains < 0,01 % CAS 26628-22-8 Sodium azid Mixture of the substances listed below with harm. Dangerous components:	a-salt le less additions.	< 109
SECTION 3: Composition/information on in 3.2 Chemical characterisation: Mixtures Description: Contains < 1 % CAS 151-21-3 Dodecylsulfate-Ne Contains < 0,01 % CAS 26628-22-8 Sodium azid Mixture of the substances listed below with harm. Dangerous components: CAS: 77-86-1 trometamol	a-salt le	<10%
SECTION 3: Composition/information on it 3.2 Chemical characterisation: Mixtures Description: Contains < 1 % CAS 151-21-3 Dodecylsulfate-Na Contains < 0,01 % CAS 26628-22-8 Sodium azid Mixture of the substances listed below with harm. Dangerous components: CAS: 77-86-1 trometamol EINECS: 201-064-4	a-salt le less additions. () Skin Irrit. 2, H315; Eye Irrit. 2, H319	<10%
SECTION 3: Composition/information on in 3.2 Chemical characterisation: Mixtures Description: Contains < 1 % CAS 151-21-3 Dodecylsulfate-Na Contains < 0,01 % CAS 26628-22-8 Sodium azid Mixture of the substances listed below with harm. Dangerous components: CAS: 77-86-1 trometamol	a-salt le less additions. () Skin Irrit. 2, H315; Eye Irrit. 2, H319	<10%

(Contd. on page 2)

Printing date 05.10.2018

Version number 3

Revision: 05.10.2018

Trade name: SDS Cathode buffer (white)

(Contd. of page 1)

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 Immediately wash with water and soap and rinse thoroughly.
- · 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

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

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: 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 Ensure good ventilation/exhaustion at the workplace.
- · 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.

(Contd. on page 3)

[•] *Protective equipment:* Wear self-contained respiratory protective device.

GB

Printing date 05.10.2018

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Version number 3

Revision: 05.10.2018

Trade name: SDS Cathode buffer (white)

	(Contd. of page 2
8.1 Control parameters	in monitoring at the work-lass.
Components with limit values that requi	· ·
monitored at the workplace.	evant quantities of materials with critical values that have to be
	ere valid during the creation were used as basis.
·	0
8.2 Exposure controls Personal protective equipment	
General protective equipment General protective and hygienic measur	res
	d be adhered to when handling chemicals.
Breathing equipment:	0
Short term filter device:	
Filter P2.	
Protection of hands:	
· ·	le and resistant to the product/ the substance/ the preparation.
the chemical mixture.	to the glove material can be given for the product/ the preparation.
	nsideration of the penetration times, rates of diffusion and the
degradation	nsueranon of the penetration times, rates of atflusion and the
Material of gloves	
	pes not only depend on the material, but also on further marks o
quality and varies from manufacturer to	manufacturer.
<i>i</i> 0	pes not only depend on the material, but also on further marks o
	r to manufacturer. As the product is a preparation of severa
	material can not be calculated in advance and has therefore to be
checked prior to the application.	
Penetration time of glove material	
	and out by the manufacturer of the protective cloves and has to be
The exact break trough time has to be for	ound out by the manufacturer of the protective gloves and has to be
The exact break trough time has to be for observed.	
The exact break trough time has to be for observed.	
The exact break trough time has to be for observed. For the permanent contact of a maxi- suitable: Natural rubber, NR	
The exact break trough time has to be for observed. For the permanent contact of a maxis suitable: Natural rubber, NR Eye protection: Safety glasses	mum of 15 minutes gloves made of the following materials are
The exact break trough time has to be for observed. For the permanent contact of a maxis suitable: Natural rubber, NR Eye protection: Safety glasses	mum of 15 minutes gloves made of the following materials are
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The exact break trough time has to be for observed. For the permanent contact of a maxis suitable: Natural rubber, NR Eye protection: Safety glasses	mum of 15 minutes gloves made of the following materials are
The exact break trough time has to be for observed. For the permanent contact of a maxin suitable: Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work clothin SECTION 9: Physical and chemical	mum of 15 minutes gloves made of the following materials are ng. Pproperties
The exact break trough time has to be for observed. For the permanent contact of a maxin suitable: Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work clothin SECTION 9: Physical and chemical 9.1 Information on basic physical and c	mum of 15 minutes gloves made of the following materials are ng. Pproperties
The exact break trough time has to be for observed. For the permanent contact of a maxi- suitable: Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work clothin SECTION 9: Physical and chemical 9.1 Information on basic physical and c General Information	mum of 15 minutes gloves made of the following materials are ng. Pproperties
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The exact break trough time has to be for observed. For the permanent contact of a maxi- suitable: Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work clothin SECTION 9: Physical and chemical 9.1 Information on basic physical and c General Information Appearance: Form: Colour: Odour:	mum of 15 minutes gloves made of the following materials are ng. properties chemical properties Solution
The exact break trough time has to be for observed. For the permanent contact of a maxi- suitable: Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work clothin SECTION 9: Physical and chemical 9.1 Information on basic physical and c General Information Appearance: Form: Colour: Odour:	mum of 15 minutes gloves made of the following materials are ^{1g.} properties whemical properties Solution Colourless
The exact break trough time has to be for observed. For the permanent contact of a maxi- suitable: Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work clothin SECTION 9: Physical and chemical 9.1 Information on basic physical and c General Information Appearance: Form: Colour: Odour: Odour threshold:	mum of 15 minutes gloves made of the following materials are ng. properties hemical properties Solution Colourless Odourless
The exact break trough time has to be for observed. For the permanent contact of a maxin suitable: Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work clothin SECTION 9: Physical and chemical 9.1 Information on basic physical and c General Information Appearance: Form: Colour: Odour: Odour threshold: pH-value at 20 °C:	mum of 15 minutes gloves made of the following materials are ag. properties chemical properties Solution Colourless Odourless Not determined.
The exact break trough time has to be for observed. For the permanent contact of a maxin suitable: Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work clothin SECTION 9: Physical and chemical 9.1 Information on basic physical and c General Information Appearance: Form: Colour: Odour: Odour: Dodour threshold: pH-value at 20 °C:	mum of 15 minutes gloves made of the following materials are ^{1g.} ^T properties ^{Themical properties} Solution Colourless Odourless Not determined.
The exact break trough time has to be for observed. For the permanent contact of a maxin suitable: Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work clothin SECTION 9: Physical and chemical 9.1 Information on basic physical and c General Information Appearance: Form: Colour: Odour: Odour: pH-value at 20 °C: Change in condition	mum of 15 minutes gloves made of the following materials are ng. properties Phemical properties Solution Colourless Odourless Not determined. 7.4-7.6 undetermined
The exact break trough time has to be for observed. For the permanent contact of a maxin suitable: Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work clothin SECTION 9: Physical and chemical 9.1 Information on basic physical and c 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 range	mum of 15 minutes gloves made of the following materials are ng. properties chemical properties Solution Colourless Odourless Not determined. 7.4-7.6 undetermined
The exact break trough time has to be for observed. For the permanent contact of a maxin suitable: Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work clothin SECTION 9: Physical and chemical 9.1 Information on basic physical and c General Information Appearance: Form: Colour: Odour: Odour threshold: pH-value at 20 °C: Change in condition Melting point/freezing point:	properties themical properties Solution Colourless Odourless Not determined. 7.4-7.6 undetermined :: undetermined
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Printing date 05.10.2018

Version number 3

Revision: 05.10.2018

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.
· 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.

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.

(Contd. on page 5)

GB

Printing date 05.10.2018

Version number 3

Revision: 05.10.2018

Trade name: SDS Cathode buffer (white)

· Additional ecological information:

· General notes:

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

SECTION 15: Regulatory information

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

· 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.

(Contd. on page 6)

GB

(Contd. of page 4)

Printing date 05.10.2018

Version number 3

Revision: 05.10.2018

Trade name: SDS Cathode buffer (white)

(Contd. of page 5)

This information is based on our present knowledge. However, this shall not constitute a guarantee for specific product features and shall not establish a legally valid contractual relationship. Relevant phrases H315 Causes skin irritation. H319 Causes serious eye irritation. 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 Concern 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 Interne Correise of Democrave Coods by Read)	
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ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the Intern	
Camiago of Dangonous Coode by Poad	ation
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	
Skin Irrit. 2: Skin corrosion/irritation – Category 2	
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2	
* Data compared to the previous version altered.	

Printing date 05.10.2018	Version number 2	Revision: 05.10.2018
SECTION 1: Identification of	of the substance/mixture and of the com	npany/undertaking
· 1.1 Product identifier		CEDI IV
• Trade name: <u>Cooling Fluid</u>		serving scientists
 Article number: 43371 1.2 Relevant identified uses of the No further relevant information of the substance / the sub		against
 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 	e safety data sheet	5 GMD.
 Information department: Produ 1.4 Emergency telephone numb Medical Emergency Information Poison Information Center Main (advisory service in German or I 	n in case of poisoning: nz - Phone: +49 (0) 6131 19240	-35
SECTION 2: Hazards identif	figation	
• 2.1 Classification of the substan • Classification according to Regu The product is not classified, acc	ulation (EC) No 1272/2008	
 2.2 Label elements Labelling according to Regulati Hazard pictograms Void Signal word Void Hazard statements Void 2.3 Other hazards Results of PBT and vPvB assess PBT: PBT - assessment not avai vPvB: vPvB - assessment not avai 	sment ilable.	
	р , , , , , , , , , , , , , , , , , , ,	
SECTION 3: Composition/in • 3.2 Chemical characterisation: • Description: Contains < 0,01 % CAS 26628-2 Mixture of the substances listed of • Dangerous components: Void	Mixtures 22-8 Sodium azide	
SECTION 4: First aid measu • 4.1 Description of first aid meas • General information No special • After inhalation Supply fresh air • After skin contact	sures	

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Printing date 05.10.2018

Version number 2

Revision: 05.10.2018

(Contd. of page 1)

Trade name: Cooling Fluid

· 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
- 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 Wear respiratory protection.
6.2 Environmental precautions: Inform respective authorities in case of seepage into water course or sewage system. Dilute with plenty of water. 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. Ensure adequate ventilation.

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

- *Ensure good ventilation/exhaustion at the workplace. Avoid contact with eyes and skin.*
- Information about protection against explosions and fires: Keep ignition sources away Do not smoke.
- · 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.

(Contd. on page 3)

Printing date 05.10.2018

· Odour threshold:

• pH-value at 20 °C:

· Change in condition

Melting point/freezing point:

Version number 2

Revision: 05.10.2018

Trade name: Cooling Fluid

(Contd. of page 2) 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. · 8.2 Exposure controls · Personal protective equipment · General protective and hygienic measures Keep away from foodstuffs, beverages and feed. Store protective clothing separately. Immediately remove all soiled and contaminated clothing Avoid contact with the eves and skin. Wash hands before breaks and at the end of work. • Breathing equipment: Short term filter device: Filter P2. · Protection of hands: The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation · Material of gloves The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. · Penetration time of glove material The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed. · For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable: Natural rubber, NR · Eye protection: Safety glasses · Body protection: Protective work clothing. **SECTION 9: Physical and chemical properties** · 9.1 Information on basic physical and chemical properties General Information · Appearance: Form: Solution Colour: Colourless · Odour: **Odourless**

Not determined.

undetermined

6.0-8.3

Printing date 05.10.2018

Version number 2

Revision: 05.10.2018

Trade name: Cooling Fluid

	(Contd. of page 3
Initial boiling point and boiling range	e: undetermined
Flash point:	Not applicable
Flammability (solid, gaseous)	Not applicable.
Decomposition temperature:	Not determined.
Self igniting:	Product is not selfigniting.
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.
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.
- \cdot 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.
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- $\cdot \textit{ Germ cell mutagenicity Based on available data, the classification criteria are not met.}$
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- 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.

(Contd. on page 5)

GR

Printing date 05.10.2018

Version number 2

Revision: 05.10.2018

Trade name: Cooling Fluid

(Contd. of page 4)

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:

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

14.1 UN-Number		
ADR, IMDG, IATA	Void	
14.2 UN proper shipping name		
ADR, IMDĞ, 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.	
14.7 Transport in bulk according to Ann	ex II of	
Marpol and the IBC Code	Not applicable.	

(Contd. on page 6)

Printing date 05.10.2018

Version number 2

Revision: 05.10.2018

Trade name: Cooling Fluid

(Contd. of page 5)

SECTION 15: Regulatory information

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· 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
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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 • * Data compared to the previous version altered.

inting date 05.10.2018		
SECTION 1: Identification og	f the substance/mixture and of the o	company/undertaking
· 1.1 Product identifier		SFRVA
• Trade name: Equilibration Buff	<u>er</u>	serving scientists
 Article number: 43805 1.2 Relevant identified uses of the No further relevant information of the substance / the sub		sed against
• 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	Suno
• Information department: Product • 1.4 Emergency telephone number Medical Emergency Information Poison Information Center Main: (advisory service in German or E	in case of poisoning: z - Phone: +49 (0) 6131 19240	840-35
SECTION 2: Hazards identif	ication	
• 2.1 Classification of the substant • Classification according to Regu The product is not classified, acc	ulation (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 assess PBT: PBT - assessment not avail vPvB: vPvB - assessment not avail 	ment lable.	
SECTION 3: Composition/inj	formation on ingredients	
• 3.2 Chemical characterisation: 1 • Description: Contains < 1 % CAS 151-21-3 D Mixture of the substances listed b	Mixtures odecylsulfate-Na-salt	
• Dangerous components: Void		
SECTION 4: First aid measu	res	
• 4.1 Description of first aid meas • General information No special • After inhalation Supply fresh air • After skin contact		

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Printing date 05.10.2018

Version number 2

Revision: 05.10.2018

(Contd. of page 1)

Trade name: Equilibration Buffer

· 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 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. • 6.2 Environmental precautions:
- Dilute with plenty of water.
- 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).
- 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 Ensure good ventilation/exhaustion at the workplace.
- 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.

(Contd. on page 3)

GB

Printing date 05.10.2018

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Version number 2

Revision: 05.10.2018

Trade name: Equilibration Buffer

	(Contd. of page 2
8.2 Exposure controls	
Personal protective equipment	
General protective and hygienic med	asures
Keep away from foodstuffs, beverage	s and feed.
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:	
The glove material has to be imperme	eable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation	tion to the glove material can be given for the product/ the preparation
the chemical mixture.	
Selection of the glove material on	a 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 o
quality and varies from manufactures	v v
	s does not only depend on the material, but also on further marks o
quality and varies from manufact	turer to manufacturer. As the product is a preparation of severa
substances, the resistance of the glo	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 b	be found out by the manufacturer of the protective gloves and has to b
observed.	
For the permanent contact of a m	aximum of 15 minutes gloves made of the following materials ar
suitable:	
Natural rubber, NR	
Natural rubber, NR Eye protection: Safety glasses	
Natural rubber, NR	othing.
Natural rubber, NR Eye protection: Safety glasses	othing.
Natural rubber, NR Eye protection: Safety glasses	-
Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work clo SECTION 9: Physical and chemi 9.1 Information on basic physical an	ical properties
Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work clo SECTION 9: Physical and chemi 9.1 Information on basic physical an General Information	ical properties
Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work clo SECTION 9: Physical and chemi 9.1 Information on basic physical an General Information Appearance:	ical properties nd chemical properties
Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work clo SECTION 9: Physical and chemi 9.1 Information on basic physical an General Information Appearance: Form:	ical properties nd chemical properties Solution
Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work clo SECTION 9: Physical and chemi 9.1 Information on basic physical an General Information Appearance: Form: Colour:	ical properties nd chemical properties Solution Violet
Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work clo SECTION 9: Physical and chemi 9.1 Information on basic physical an General Information Appearance: Form: Colour: Odour:	ical properties nd chemical properties Solution Violet Odourless
Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work clo SECTION 9: Physical and chemi 9.1 Information on basic physical an General Information Appearance: Form: Colour: Odour: Odour threshold:	ical properties nd chemical properties Solution Violet Odourless Not determined.
Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work closed SECTION 9: Physical and chemin 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 Violet Odourless
Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work clo SECTION 9: Physical and chemi 9.1 Information on basic physical an General Information Appearance: Form: Colour: Odour: Odour threshold: pH-value at 20 °C: Change in condition	ical properties nd chemical properties Solution Violet Odourless Not determined. 8.9-9.3
Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work clo SECTION 9: Physical and chemi 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 Violet Odourless Not determined. 8.9-9.3 undetermined
Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work closed SECTION 9: Physical and chemin 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 rates	ical properties nd chemical properties Solution Violet Odourless Not determined. 8.9-9.3 undetermined unge: undetermined
Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work clo SECTION 9: Physical and chemi 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:	ical properties nd chemical properties Solution Violet Odourless Not determined. 8.9-9.3 undetermined inge: undetermined Not applicable
Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work clo SECTION 9: Physical and chemi 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 ind chemical properties Solution Violet Odourless Not determined. 8.9-9.3 undetermined unge: undetermined Not applicable Not applicable.
Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work closed SECTION 9: Physical and chemic 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 rat Flash point: Flammability (solid, gaseous) Decomposition temperature:	ical properties ind chemical properties Solution Violet Odourless Not determined. 8.9-9.3 undetermined inge: undetermined Not applicable Not applicable. Not determined.
Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work closed SECTION 9: Physical and chemic 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) Decomposition temperature: Self igniting:	ical properties ind chemical properties Solution Violet Odourless Not determined. 8.9-9.3 undetermined inge: undetermined Not applicable Not applicable. Not determined. Product is not selfigniting.
Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work closed SECTION 9: Physical and chemic 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 rat Flash point: Flammability (solid, gaseous) Decomposition temperature:	ical properties ind chemical properties Solution Violet Odourless Not determined. 8.9-9.3 undetermined inge: undetermined Not applicable Not applicable. Not determined.

Printing date 05.10.2018

Version number 2

Revision: 05.10.2018

Trade name: Equilibration Buffer

	(Contd. of page 2
· 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.
\cdot 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.

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.
- \cdot 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.

(Contd. on page 5)

GB

Printing date 05.10.2018

Version number 2

Revision: 05.10.2018

Trade name: Equilibration Buffer

- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly 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 Anne. Marpol and the IBC Code	x II of Not applicable.

SECTION 15: Regulatory information

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

· 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.

(Contd. on page 6)

(Contd. of page 4)

Printing date 05.10.2018

Version number 2

Revision: 05.10.2018

Trade name: Equilibration Buffer

(Contd. of page 5)

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.

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- · 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
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- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- * Data compared to the previous version altered.

GB