

1D SDS TA Gel Kit 7.5 % Cat. No. 43416

Safety Data Sheets of the following Kit Components:

43896	1D SDS TA Gels 7.5 % 25S
43390	Buffer Kit for 1D SDS TA NF Gels

Buffer Kit for 1D SDS TA NF Gels

Cat. No. 43390

Safety Data Sheets of the following Kit Components:

43801	SDS Anode buffer (blue)
43802	SDS Cathode buffer (white)

Printing date 23.05.2019	Version number 2	Revision: 23.05.2019
* SECTION 1: Identification	n of the substance/mixture and of the con	npany/undertaking
• 1.1 Product identifier		SERVA
· Trade name: <u>1D SDS TA Gel</u>	<u>ls 7.5 % 255</u>	serving scientists
 Article number: 43896 1.2 Relevant identified uses of No further relevant information Application of the substance of Gels for electrophoresis Laboratory chemicals 		against
 1.3 Details of the supplier of the supplier: Manufacturer/Supplier: SERVA Electrophoresis Gmble Carl-Benz-Str. 7 D-69115 Heidelberg Tel.: +49 6221 13840-0 FAX: +49 6221 13840-10 msds.info@serva.de 		SCIL
• 1.4 Emergency telephone nur Medical Emergency Informati	ion in case of poisoning: ainz - Phone: +49 (0) 6131 19240	0-35
* SECTION 2: Hazards iden	ntification	
· 2.2 Label elements	egulation (EC) No 1272/2008 according to the CLP regulation. lation (EC) No 1272/2008 Void essment vailable.	
* SECTION 3: Composition	/information on ingredients	
• 3.2 Chemical characterisation • Description: Polyacrylamidegel, crosslink polyesterfilm.Contains < 0.1	xed with methylenebisacrylamide, prepared	between 2 sheets of preactivated

· 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.

(Contd. on page 2) GB

Printing date 23.05.2019

Version number 2

Revision: 23.05.2019

(Contd. of page 1)

Trade name: 1D SDS TA Gels 7.5 % 25S

· 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.

(Contd. on page 3)

GB

Printing date 23.05.2019

*

Version number 2

Revision: 23.05.2019

Trade name: 1D SDS TA Gels 7.5 % 25S

8.2 Exposure controls	
Personal protective equipment	
General protective and hygienic measure	28
Keep away from foodstuffs, beverages and	
Store protective clothing separately.	
Immediately remove all soiled and contar	ninated clothing
Avoid contact with the eyes and skin.	
Wash hands before breaks and at the end	of work.
Breathing equipment: Suitable respirator	ry protective device recommended.
Protection of hands:	
	e and resistant to the product/ the substance/ the preparation.
	to the glove material can be given for the product/ the preparatio
the chemical mixture.	
	sideration of the penetration times, rates of diffusion and t
degradation	
Material of gloves	a not only donored on the material but also on further marks
quality and varies from manufacturer to n	es not only depend on the material, but also on further marks
	nanujaciurer. es not only depend on the material, but also on further marks
	to manufacturer. As the product is a preparation of sever
	naterial can not be calculated in advance and has therefore to
checked prior to the application.	idieridi cun noi de culculated in davance and has inerejore to
Penetration time of glove material	
	und out by the manufacturer of the protective gloves and has to
observed.	and out by the managacturer of the protective gloves and has to
	num of 15 minutes gloves made of the following materials a
suitable:	ium of 15 minutes gloves mude of the following materials a
Nitrile rubber, NBR	
Natural rubber, NR	
Eye protection: Safety glasses	
Body protection: Protective work clothing	<i>q</i> .
SECTION 9: Physical and chemical	properties
· · · · · ·	
9.1 Information on basic physical and ch	
9.1 Information on basic physical and ch General Information	
9.1 Information on basic physical and ch General Information Appearance:	nemical properties
9.1 Information on basic physical and ch General Information Appearance: Form:	gel between two plastic films
9.1 Information on basic physical and ch General Information Appearance: Form: Colour:	gel between two plastic films Colourless
9.1 Information on basic physical and ch General Information Appearance: Form: Colour: Odour:	gel between two plastic films Colourless Odourless
9.1 Information on basic physical and ch General Information Appearance: Form: Colour: Odour: Odour threshold:	gel between two plastic films Colourless Odourless Not determined.
9.1 Information on basic physical and ch General Information Appearance: Form: Colour: Odour: Odour threshold: pH-value:	gel between two plastic films Colourless Odourless
9.1 Information on basic physical and ch General Information Appearance: Form: Colour: Odour: Odour threshold: pH-value: Change in condition	pemical properties gel between two plastic films Colourless Odourless Not determined. no information available
9.1 Information on basic physical and ch General Information Appearance: Form: Colour: Odour: Odour threshold: pH-value: Change in condition Melting point/freezing point:	pemical properties gel between two plastic films Colourless Odourless Not determined. no information available no information available
9.1 Information on basic physical and ch General Information Appearance: Form: Colour: Odour: Odour threshold: pH-value: Change in condition	pemical properties gel between two plastic films Colourless Odourless Not determined. no information available no information available
9.1 Information on basic physical and ch General Information Appearance: Form: Colour: Odour: Odour threshold: pH-value: Change in condition Melting point/freezing point: Initial boiling point and boiling range:	pemical properties gel between two plastic films Colourless Odourless Not determined. no information available no information available
9.1 Information on basic physical and ch General Information Appearance: Form: Colour: Odour: Odour threshold: pH-value: Change in condition Melting point/freezing point: Initial boiling point and boiling range: Flash point:	pemical properties gel between two plastic films Colourless Odourless Not determined. no information available no information available no information available
9.1 Information on basic physical and ch General Information Appearance: Form: Colour: Odour: Odour threshold: pH-value: Change in condition Melting point/freezing point: Initial boiling point and boiling range: Flash point: Flammability (solid, gaseous)	pemical properties gel between two plastic films Colourless Odourless Odourless Not determined. no information available no information available no information available no information available no information available
9.1 Information on basic physical and ch General Information Appearance: Form: Colour: Odour: Odour threshold: pH-value: Change in condition Melting point/freezing point: Initial boiling point and boiling range: Flash point: Flammability (solid, gaseous) Decomposition temperature:	pemical properties gel between two plastic films Colourless Odourless Not determined. no information available no information available no information available no information available no information available no information available
Colour: Odour: Odour threshold: pH-value: Change in condition Melting point/freezing point:	pemical properties gel between two plastic films Colourless Odourless Odourless Not determined. no information available no information available no information available no information available no information available

(Contd. on page 4)

GB

Printing date 23.05.2019

Version number 2

Revision: 23.05.2019

Trade name: 1D SDS TA Gels 7.5 % 25S

	(Contd. of pag
· 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:	Not determined.
· Viscosity:	
dynamic:	no information available
kinematic:	no information available
\cdot 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.
- \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.
- · 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 23.05.2019

Version number 2

Revision: 23.05.2019

Trade name: 1D SDS TA Gels 7.5 % 25S

· 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.

(Contd. on page 6)

GB

(Contd. of page 4)

Printing date 23.05.2019

Version number 2

Revision: 23.05.2019

Trade name: 1D SDS TA Gels 7.5 % 25S

(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.

· 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

Version number 3

Printing date 23.05.2019

*

*

*

Revision: 23.05.2019

0	version number 5	
SECTION 1: Identification of	f the substance/mixture and of the compa	ny/undertaking
· 1.1 Product identifier		CFD\/A
• Trade name: <u>SDS Anode buffer</u>	(blue)	serving scientists
 Article number: 43801 1.2 Relevant identified uses of the No further relevant information of the substance / the sub		ninst
 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	GMO
 Information department: Product 1.4 Emergency telephone number Medical Emergency Information Poison Information Center Mains (advisory service in German or E 	in case of poisoning: z - Phone: +49 (0) 6131 19240	
SECTION 2: Hazards identif	ïcation	
 • 2.1 Classification of the substant • Classification according to Regulation • The product is not classified, according 	ılation (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: A Description: Mixture of the subst	Mixtures tances listed below with harmless additions.	
• Dangerous components: Contains < 1 % CAS 151-21-3 D Contains < 0,01 % CAS 26628-2.		
· · · · · · · · · · · · · · · · · · ·	n detergents / Labelling for contents	
anionic surfactants		<5%
SECTION 4: First aid measu	res	
• 4.1 Description of first aid meas • General information No special	ures	
		(Contd. on page

Printing date 23.05.2019

Version number 3

Revision: 23.05.2019

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.

(Contd. on page 3)

Printing date 23.05.2019

*

Version number 3

Revision: 23.05.2019

Trade name: SDS Anode buffer (blue)

8.2 Exposure controls	
Personal protective equipment	
General protective and hygienic mea	isures
Keep away from foodstuffs, beverages	s and feed.
Store protective clothing separately.	
Immediately remove all soiled and co	ntaminated 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 gloves	
	does not only depend on the material, but also on further marks of
quality and varies from manufacturer	
	to manufacturer. t does not only depend on the material, but also on further marks of
	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.	to match an and be calculated in durance and has increjore to b
Penetration time of glove material	
A VIVEN WIVE VIIVE OI CLUFE HULLEIMIL	
	e found out by the manufacturer of the protective gloves and has to b
The exact break trough time has to b	e 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 material observed.	
The exact break trough time has to b observed. For the permanent contact of a ma suitable: Natural rubber, NR Eye protection: Safety glasses	aximum of 15 minutes gloves made of the following materials ar
The exact break trough time has to b observed. For the permanent contact of a ma suitable: Natural rubber, NR	aximum of 15 minutes gloves made of the following materials ar
The exact break trough time has to b observed. For the permanent contact of a ma suitable: Natural rubber, NR Eye protection: Safety glasses	aximum of 15 minutes gloves made of the following materials ar
The exact break trough time has to b observed. For the permanent contact of a ma suitable: Natural rubber, NR Eye protection: Safety glasses	aximum of 15 minutes gloves made of the following materials ar thing.
The exact break trough time has to be observed. For the permanent contact of a massive suitable: Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work close	aximum of 15 minutes gloves made of the following materials ar thing. cal properties
The exact break trough time has to be observed. For the permanent contact of a massitable: 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
The exact break trough time has to be observed. For the permanent contact of a massivable: Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work close SECTION 9: Physical and chemic 9.1 Information on basic physical and	aximum of 15 minutes gloves made of the following materials ar thing. cal properties
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 clou SECTION 9: Physical and chemic 9.1 Information on basic physical an General Information Appearance: Form:	aximum of 15 minutes gloves made of the following materials ar thing. cal properties ad chemical properties Solution
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 clou SECTION 9: Physical and chemic 9.1 Information on basic physical an General Information Appearance: Form: Colour:	aximum of 15 minutes gloves made of the following materials ar thing. cal properties ad chemical properties Solution Blue
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 clou SECTION 9: Physical and chemic 9.1 Information on basic physical an General Information Appearance: Form: Colour: Odour:	aximum of 15 minutes gloves made of the following materials ar thing. cal properties ad chemical properties Solution Blue Recognisable
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 clou SECTION 9: Physical and chemic 9.1 Information on basic physical an General Information Appearance: Form: Colour:	aximum of 15 minutes gloves made of the following materials ar thing. cal properties ad chemical properties Solution Blue
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 clou SECTION 9: Physical and chemic 9.1 Information on basic physical an General Information Appearance: Form: Colour: Odour:	aximum of 15 minutes gloves made of the following materials are thing. cal properties ad chemical properties Solution Blue Recognisable
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 clou 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:	aximum of 15 minutes gloves made of the following materials are thing. cal properties ad chemical properties Solution Blue Recognisable Not determined.
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 clou 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	aximum of 15 minutes gloves made of the following materials ar thing. cal properties ad chemical properties Solution Blue Recognisable Not determined.
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 clou 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:	aximum of 15 minutes gloves made of the following materials ar thing. cal properties ad chemical properties Solution Blue Recognisable Not determined. 7.9-8.1 undetermined
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 clou 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 rate	aximum of 15 minutes gloves made of the following materials ar thing. cal properties ad chemical properties Solution Blue Recognisable Not determined. 7.9-8.1 undetermined nge: undetermined
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 clou SECTION 9: Physical and chemic 9.1 Information on basic physical an General Information Appearance: Form: Colour: Odour: Odour: Odour threshold: pH-value at 20 °C: Change in condition Melting point/freezing point: Initial boiling point and boiling rat	aximum of 15 minutes gloves made of the following materials ar thing. cal properties ad chemical properties Solution Blue Recognisable Not determined. 7.9-8.1 undetermined
The exact break trough time has to be observed. For the permanent contact of a mag- suitable: Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work cloud 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)	cal properties ad chemical properties Solution Blue Recognisable Not determined. 7.9-8.1 undetermined nge: undetermined Not applicable
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 clou SECTION 9: Physical and chemic 9.1 Information on basic physical an General Information Appearance: Form: Colour: Odour: Odour: Odour threshold: pH-value at 20 °C: Change in condition Melting point/freezing point: Initial boiling point and boiling rat	aximum of 15 minutes gloves made of the following materials are thing. cal properties ad chemical properties Solution Blue Recognisable Not determined. 7.9-8.1 undetermined nge: undetermined Not applicable Not applicable.

Printing date 23.05.2019

Version number 3

Revision: 23.05.2019

Trade name: SDS Anode buffer (blue)

	(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:	
<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.

(Contd. on page 5)

GB

Printing date 23.05.2019

Version number 3

Revision: 23.05.2019

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:

- 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
	Voiu
· 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.

(Contd. on page 6)

Printing date 23.05.2019

Version number 3

Revision: 23.05.2019

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.

(Contd. of page 5)

Version number 4

Printing date 23.05.2019

*

*

*

Revision: 22.05.2019

SECTION 1: Identification of	f the substance/mixture and of the c	company/undertaking
· 1.1 Product identifier		
• Trade name: SDS Cathode buffe	er (white)	SERVA
• Article number: 43802	he substance or mixture and uses advisors advisors advisors advisors advisors advisors advisors advisors advisor	ed 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 Mainz (advisory service in German or E) 	in case of poisoning: z - Phone: +49 (0) 6131 19240	840-35
	10 Ja	
SECTION 2: Hazards identifi	ication	
 2.1 Classification of the substance Classification according to Regulation The product is not classified, according to Regulation 2.2 Label elements Labelling according to Regulation Hazard pictograms Void Signal word Void Hazard statements Void 2.3 Other hazards Results of PBT and vPvB assession 	ulation (EC) No 1272/2008 Fording to the CLP regulation. on (EC) No 1272/2008 Void ment	
 PBT: PBT - assessment not avail vPvB: vPvB - assessment not ava 		
VIVE , VIVE assessment not ava		
SECTION 3: Composition/inf	formation on incredients	
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
• 3.2 Chemical characterisation: M • Description: Mixture of the subst	<b>Mixtures</b> tances listed below with harmless additi	ons.
• Dangerous components: Contains < 1 % CAS 151-21-3 De Contains < 0,01 % CAS 26628-22	odecylsulfate-Na-salt	
,	n detergents / Labelling for contents	
anionic surfactants		<5%
SECTION 4: First aid measur	<i>res</i>	
• 4.1 Description of first aid measured	ures	
• General information No special		

Printing date 23.05.2019

Version number 4

Revision: 22.05.2019

## 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.
- $\cdot \textit{After swallowing}$  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.

(Contd. on page 3)

Printing date 23.05.2019

*

Version number 4

Revision: 22.05.2019

## Trade name: SDS Cathode buffer (white)

	at were valid during the creation were used as basis.
8.2 Exposure controls	
Personal protective equipment	
General protective and hygienic me	asures
Keep away from foodstuffs, beverage	
Store protective clothing separately.	
Immediately remove all soiled and co	
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.	anon to the give material can be given for the product, the preparato
	n consideration of the penetration times, rates of diffusion and t
degradation	i consideration of the penetration times, rates of all aston and h
Material of gloves	
	s does not only depend on the material, but also on further marks
quality and varies from manufacture	
· · ·	s does not only depend on the material, but also on further marks
	turer to manufacturer. As the product is a preparation of sever
	ove material can not be calculated in advance and has therefore to
checked prior to the application.	ove material can not be calculated in advance and has interejore to
Penetration time of glove material	
The exact break trough time has to i	he tound out by the manufacturer of the protective aloves and bas to
	oc journe our by the manufacturer of the protective gibres and has to
observed.	
observed. For the permanent contact of a m	
observed. For the permanent contact of a m suitable:	
observed. For the permanent contact of a m suitable: Natural rubber, NR	
observed. For the permanent contact of a m suitable: Natural rubber, NR Eye protection: Safety glasses	naximum of 15 minutes gloves made of the following materials a
observed. For the permanent contact of a m suitable: Natural rubber, NR	naximum of 15 minutes gloves made of the following materials a
observed. For the permanent contact of a m suitable: Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work clo	naximum of 15 minutes gloves made of the following materials a othing.
observed. For the permanent contact of a m suitable: Natural rubber, NR Eye protection: Safety glasses	naximum of 15 minutes gloves made of the following materials a othing.
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	naximum of 15 minutes gloves made of the following materials a othing. <mark>ical properties</mark>
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	naximum of 15 minutes gloves made of the following materials a othing. <mark>ical properties</mark>
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 and General Information	naximum of 15 minutes gloves made of the following materials a othing. <mark>ical properties</mark>
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	naximum of 15 minutes gloves made of the following materials a othing. <mark>ical properties</mark>
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 and General Information Appearance: Form:	naximum of 15 minutes gloves made of the following materials a othing. ical properties nd chemical properties Solution
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 and General Information Appearance: Form: Colour:	naximum of 15 minutes gloves made of the following materials a othing. ical properties ind chemical properties Solution Colourless
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 and General Information Appearance: Form: Colour: Odour:	naximum of 15 minutes gloves made of the following materials a 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 closed SECTION 9: Physical and cheme 9.1 Information on basic physical and General Information Appearance: Form: Colour: Odour: Odour threshold:	naximum of 15 minutes gloves made of the following materials a othing. ical properties ind 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 clo 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:	naximum of 15 minutes gloves made of the following materials a 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 clo 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	naximum of 15 minutes gloves made of the following materials a othing. ical properties nd chemical properties Solution Colourless Odourless Not determined. 7.5
observed. For the permanent contact of a masuitable: Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work closed 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:	naximum of 15 minutes gloves made of the following materials a othing. ical properties ind 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 clo 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	naximum of 15 minutes gloves made of the following materials a othing. ical properties ind 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 closed 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:	naximum of 15 minutes gloves made of the following materials a othing. ical properties ind 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 closed 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	naximum of 15 minutes gloves made of the following materials a 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 classic SECTION 9: Physical and chema 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 ration Flash point:	naximum of 15 minutes gloves made of the following materials a othing. ical properties ical properties id chemical properties Solution Colourless Odourless Not determined. 7.5 undetermined ange: undetermined no information available
observed. For the permanent contact of a masuitable: Natural rubber, NR Eye protection: Safety glasses Body protection: Protective work closs SECTION 9: Physical and chema 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 Colourless Odourless Not determined. 7.5 undetermined ange: undetermined no information available Not applicable.

Printing date 23.05.2019

Version number 4

Revision: 22.05.2019

### 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:	
<b>VOC %:</b>	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.

(Contd. on page 5)

GB

Printing date 23.05.2019

Version number 4

Revision: 22.05.2019

Trade name: SDS Cathode buffer (white)

(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:

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	<b>ex II of</b> 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.

(Contd. on page 6)

GB

Printing date 23.05.2019

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.

(Contd. of page 5)