03.05.2018	Kit Components	
Product code	Description	
43393	CSF Analysis Kit for PhastSystem	
Components:		
43350	CleanGel IEF for PhastSystem TM	
43888	IEF Mix for CSF Analysis	

Printing date 03.05.2018 Version number 2 Revision: 03.05.2018

SECTION 1: Identification of the substance/mixture and of the company/undertaking

· 1.1 Product identifier

· Trade name: CleanGel IEF for PhastSystemTM

SERVA

serving scientists

· Article number: 43350

• 1.2 Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

· Application of the substance / the mixture

Gels for electrophoresis Laboratory 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 FAX: +49 6221 13840-10 msds.info@serva.de

· Information department: Product Safety department Tel.: +49 6221 13840-35

· 1.4 Emergency telephone number:

Medical Emergency Information in case of poisoning:

Poison Information Center Mainz - Phone: +49 (0) 6131 19240

(advisory service in German or English language)

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 CLP regulation.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008 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.

SECTION 3: Composition/information on ingredients

- · 3.2 Chemical characterisation: Mixtures
- · Description:

Polyacrylamidegel, crosslinked with methylenebisacrylamide, prepared between 2 sheets of preactivated polyesterfilm. Contains < 0.05 % free acrylamide.

· 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.
- · After skin contact Immediately rinse with water.

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Printing date 03.05.2018 Version number 2 Revision: 03.05.2018

Trade name: CleanGel IEF for PhastSystemTM

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· After eye contact

Rinse opened eye for several minutes under running water. Remove present contact lenses, if easy to do, and continue rinsing. Consult ophthalmologist In case of complaints.

- · After swallowing Seek medical treatment.
- · 4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

· 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents

 CO_2 extinguishing powder or water spray. Fight larger 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
- Requirements to be met by storerooms and receptacles: Store at -15 to -25 °C
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Store in dry conditions.
- · 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · 8.1 Control parameters
- · Components with limit values that require monitoring at the workplace:

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

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

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Printing date 03.05.2018 Version number 2 Revision: 03.05.2018

Trade name: CleanGel IEF for PhastSystemTM

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- · 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 eyes and skin.

Wash hands before breaks and at the end of work.

· Breathing equipment: Suitable respiratory protective device recommended.

· 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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:

Natural rubber, NR Nitrile rubber, NBR

· Eye protection: Safety glasses

· **Body protection:** Protective work clothing.

SECTION 9: Physical and chemical properties

· General Information	
· Appearance:	
Form:	gel between two plastic films

· 9.1 Information on basic physical and chemical properties

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.

Zaprostre properates.

Density: Not determined

· Solubility in / Miscibility with

Water: Insoluble

· Solvent content:

 Organic solvents:
 0.0 %

 VOC %:
 0.00 %

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Printing date 03.05.2018 Version number 2 Revision: 03.05.2018

Trade name: CleanGel IEF for PhastSystemTM

(Contd. of page 3)

· 9.2 Other information

No further relevant information available.

SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · 10.3 Possibility of hazardous reactions No further relevant informations available.
- · 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products: In case of fire: See Section 5

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.
- · Primary irritant effect:
- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation Based on available data, the classification criteria are not met.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure Based on available data, the classification criteria are not met.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- · 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · 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 must be made according to official regulations.

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Printing date 03.05.2018 Version number 2 Revision: 03.05.2018

Trade name: CleanGel IEF for PhastSystemTM

(Contd. of page 4)

· 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 · ADN/R Class:	Void - 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.
· 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
- · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 60
- · 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

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

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

Version number 2 Revision: 03.05.2018 Printing date 03.05.2018

Trade name: CleanGel IEF for PhastSystemTM

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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 2 Revision: 03.05.2018 Printing date 03.05.2018

SECTION 1: Identification of the substance/mixture and of the company/undertaking

· 1.1 Product identifier

No further relevant information available.

· Trade name: SERVALYT(TM) Carrier Ampholyt · 1.2 Relevant identified uses of the substance or mixture and uses advised against

- · Application of the substance / the mixture Laboratory 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 FAX: +49 6221 13840-10 msds.info@serva.de

- · Information department: Product Safety department Tel.: +49 6221 13840-3
- · 1.4 Emergency telephone number:

Medical Emergency Information in case of poisoning:

Poison Information Center Mainz - Phone: +49 (0) 6131 19240

(advisory service in German or English language)

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 CLP regulation.
- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008 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.

SECTION 3: Composition/information on ingredients

- · 3.2 Chemical characterisation: Mixtures
- · Description:

40 % (w/v) aqueous solution of amphotheric species comprising sulfonate, carboxylic and amino functions

· 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.
- · After skin contact Immediately rinse with water.
- · After eye contact

Rinse opened eye for several minutes under running water. Remove present contact lenses, if easy to do, and continue rinsing. Consult ophthalmologist In case of complaints.

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Printing date 03.05.2018 Version number 2 Revision: 03.05.2018

Trade name: SERVALYT(TM) Carrier Ampholyt

(Contd. of page 1)

· 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

Formation of dangerous gases or vapours is possible in case of fire.

- · 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:

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:

Store at dry places in tightly closed receptacles.

Store at -15 to -25 $^{\circ}C$

- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.
- \cdot 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.
- · 8.2 Exposure controls
- · Personal protective equipment
- · General protective and hygienic measures

The usual precautionary measures should be adhered to when handling chemicals.

(Contd. on page 3)

Printing date 03.05.2018 Version number 2 Revision: 03.05.2018

Trade name: SERVALYT(TM) Carrier Ampholyt

(Contd. of page 2)

- · Breathing equipment: Suitable respiratory protective device recommended.
- · Protection of hands:

Protective gloves.

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:

Nitrile rubber, NBR Natural rubber, NR

· Vapour pressure:

Density:Relative density

- · 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: Fluid Colour: Light yellow · Odour: **Odourless** · Odour threshold: Not determined. 7 · pH-value at 20 °C: · Change in condition Melting point/freezing point: undetermined Initial boiling point and boiling range: undetermined · Flash point: Not applicable Not determined. · Flammability (solid, gaseous) · Ignition temperature: Decomposition temperature: Not determined. · Self igniting: Product is not selfigniting. · Explosive properties: Product does not present an explosion hazard. · Explosion limits: Not determined. Lower: Not determined. Upper:

Not applicable.

Not determined

Not determined.

(Contd. on page 4)

Printing date 03.05.2018 Version number 2 Revision: 03.05.2018

Trade name: SERVALYT(TM) Carrier Ampholyt

		(Contd. of page 3
· Vapour density	Not applicable.	
· Evaporation rate	Not applicable.	
· Solubility in / Miscibility with		
Water:	Fully miscible	
· Partition coefficient: n-octanol/water:	Not determined.	
· Viscosity:		
dynamic:	Not applicable.	
kinematic:	Not applicable.	
· Solvent content:		
Organic solvents:	0.0 %	
· VOC %:	0.00 %	
· 9.2 Other information	No further relevant information available.	

SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant 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.
- · 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.

GB

Printing date 03.05.2018 Version number 2 Revision: 03.05.2018

Trade name: SERVALYT(TM) Carrier Ampholyt

(Contd. of page 4)

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.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

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

SECTION 15: Regulatory information

· 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

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

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

Version number 2 Revision: 03.05.2018 Printing date 03.05.2018

Trade name: SERVALYT(TM) Carrier Ampholyt

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.

(Contd. of page 5)