Printing date 04/23/2021 Reviewed on 04/23/2021

1 Identification

· Product identifier

· Trade name: SERVA Gel IEF 3-9 for PhastSystem



· Article number: 43366

· Application of the substance / the mixture ready-to-use gels for the horizontal isoelectric focusing (IEF) with the PhastSystemTM

· 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

· 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)

2 Hazard(s) identification

· Classification of the substance or mixture

The product is not classified, according to the Globally Harmonized System (GHS).

- · Label elements
- · GHS label elements Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 0 Fire = 0Reactivity = 0

· HMIS-ratings (scale 0 - 4)



0 Health = 00 Fire = 0

Reactivity = 0

- · Other hazards
- · Results of PBT and vPvB assessment
- · PBT: PBT assessment not available.
- · vPvB: vPvB assessment not available.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description:

SERVA Gels IEF 3-9 for PhastSystem are ready-to-use SDS-polyacrylamide-gels covalently bound to a plastic sheet and protected by a thin cover film.

(Contd. on page 2)

Printing date 04/23/2021 Reviewed on 04/23/2021

Trade name: SERVA Gel IEF 3-9 for PhastSystem

(Contd. of page 1)

- · Dangerous components: Void
- · Additional information:

SERVA Gels IEF 3-9 for PhastSystem are articles according to the Article 3, 3. of the REACH Regulation (Regulation (EC) No 1907/2006). We note that the SVHC substance Acrylamide (residual monomer) is included in this artcle in a concentration below 0,1 %.

4 First-aid measures

- · 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. Consult doctor if you feel unwell.

· After eye contact:

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

- · After swallowing: -
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents:

CO₂ extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· Special hazards arising from the substance or mixture

In case of fire, the following can be released:

Carbon monoxide and carbon dioxide

Nitrogen oxides (NOx)

- · Advice for firefighters
- · **Protective equipment:** Wear self-contained respiratory protective device.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Wear protective clothing.
- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to item 13.

Pick up mechanically.

· 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.

· Protective Action Criteria for Chemicals

· PAC-1:

None of the ingredients is listed.

· *PAC-2*:

None of the ingredients is listed.

(Contd. on page 3)

Printing date 04/23/2021 Reviewed on 04/23/2021

Trade name: SERVA Gel IEF 3-9 for PhastSystem

(Contd. of page 2)

· PAC-3:

None of the ingredients is listed.

7 Handling and storage

- · Handling:
- · Precautions for safe handling No special measures required.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- 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.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · 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.
- · 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.

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

(Contd. on page 4)

Printing date 04/23/2021 Reviewed on 04/23/2021

Trade name: SERVA Gel IEF 3-9 for PhastSystem

· Body protection: Protective work clothing

(Contd. of page 3)

Gel between two polyester films Colorless Odorless Odorless Not determined. no information available dition nt/Melting range: no information available product is not selfigniting. losion: Product does not present an explosion hazard. its: no information available	Information on basic physical and of	chemical properties
Colorless Odorless Odorless Not determined. no information available no information available no information available no information available no information available no information available no information available no information available product is not selfigniting. losion: Product does not present an explosion hazard. its: no information available no information available e: no information available no information available no information available ty no information available Miscibility with Insoluble. Ficient (n-octanol/water): no information available	General Information	
Colorless Odorless Odorless Not determined. no information available no information available no information available no information available no information available no information available no information available no information available Product is not selfigniting. losion: Product does not present an explosion hazard. its: no information available no information available e: no information available no information available no information available ty no information available Miscibility with Insoluble. Ficient (n-octanol/water): no information available	Appearance:	Cal hatuage two nahasatan films
d: Not determined. no information available Product is not selfigniting. Product does not present an explosion hazard. its: no information available no information available e: no information available no information available no information available ty no information available	Form: Color:	- · · · · · · · · · · · · · · · · · · ·
dition no information available Product is not selfigniting. losion: Product does not present an explosion hazard. its: no information available no information available e: no information available	Odor:	
nation nation (nation and information available (no information available (solid, gaseous): no information available no information available no information available no information available Product is not selfigniting. losion: Product does not present an explosion hazard. its: no information available no information available e: no information available Miscibility with Insoluble. ficient (n-octanol/water): no information available	Odor threshold:	• *******
no information available Product is not selfigniting. losion: Product does not present an explosion hazard. its: no information available no information available e: no information available no information available ty no information available	pH-value:	no information available
no information available no information available (solid, gaseous): no information available n temperature: no information available Product is not selfigniting. losion: Product does not present an explosion hazard. its: no information available no information available e: no information available no information available ty no information available Miscibility with Insoluble. ficient (n-octanol/water): no information available no information available	Change in condition	
no information available (solid, gaseous): no information available n temperature: no information available Product is not selfigniting. losion: Product does not present an explosion hazard. its: no information available no information available e: no information available ty no information available Miscibility with Insoluble. ficient (n-octanol/water): no information available no information available	Melting point/Melting range:	
(solid, gaseous): n temperature: no information available Product is not selfigniting. losion: Product does not present an explosion hazard. its: no information available no information available e: no information available its Insoluble. ficient (n-octanol/water): no information available	Boiling point/Boiling range:	no information available
respective to the product is not selfigniting. Product is not selfigniting. Product does not present an explosion hazard. its: no information available no information available e: no information available sty no information available no information available Miscibility with Insoluble. ficient (n-octanol/water): no information available	Flash point:	no information available
Product is not selfigniting. losion: Product does not present an explosion hazard. its: no information available no information available e: no information available no information available no information available no information available no information available ate no information available Miscibility with Insoluble. ficient (n-octanol/water): no information available no information available	Flammability (solid, gaseous):	no information available
losion: Product does not present an explosion hazard. its: no information available no information available no information available ty no information available no information available no information available no information available ficient (n-octanol/water): no information available no information available	Decomposition temperature:	no information available
no information available no information available e: no information available no information available ty no information available no information available no information available ate no information available Miscibility with Insoluble. ficient (n-octanol/water): no information available no information available	Auto igniting:	Product is not selfigniting.
no information available e: no information available no information available ty no information available no information available no information available ate no information available Miscibility with Insoluble. ficient (n-octanol/water): no information available no information available	Danger of explosion:	Product does not present an explosion hazard.
no information available Miscibility with Insoluble. ficient (n-octanol/water): no information available no information available	Explosion limits:	
no information available no information available ty no information available no information available no information available Miscibility with Insoluble. ficient (n-octanol/water): no information available no information available	Lower:	no information available
no information available ty no information available no information available ate no information available Miscibility with Insoluble. ficient (n-octanol/water): no information available no information available	Upper:	no information available
ty no information available no information available ate no information available Miscibility with Insoluble. ficient (n-octanol/water): no information available no information available	Vapor pressure:	no information available
no information available ate no information available Miscibility with Insoluble. ficient (n-octanol/water): no information available no information available	Density:	no information available
Miscibility with Insoluble. ficient (n-octanol/water): no information available no information available	Relative density	no information available
Miscibility with Insoluble. ficient (n-octanol/water): no information available no information available	Vapor density	no information available
Insoluble. ficient (n-octanol/water): no information available no information available	Evaporation rate	no information available
Insoluble. ficient (n-octanol/water): no information available no information available	Solubility in / Miscibility with	
no information available	Water:	Insoluble.
	Partition coefficient (n-octanol/wat	t er): no information available
	Viscosity:	
no information available		
	Kinematic:	no information available
ıt:	Viscosity: Dynamic: Kinematic: Solvent content:	
t: 0.00 %	Other information	No further relevant information available.

10 Stability and reactivity

- · Reactivity No further relevant informations available
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No further relevant informations available.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.

(Contd. on page 5)

Printing date 04/23/2021 Reviewed on 04/23/2021

Trade name: SERVA Gel IEF 3-9 for PhastSystem

(Contd. of page 4)

· Hazardous decomposition products: In case of fire: See Section 5

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: No irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · 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 (Self-assessment): slightly hazardous for water

- · Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · 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.

US

Printing date 04/23/2021 Reviewed on 04/23/2021

Trade name: SERVA Gel IEF 3-9 for PhastSystem

(Contd. of page 5)

4 Transport information	
· UN-Number · DOT, ADR, IMDG, IATA	Void
· UN proper shipping name · DOT, ADR, IMDG, IATA	Void
· Transport hazard class(es)	
· DOT, ADR, IMDG, IATA · Class · Label	Void
· Packing group · DOT, ADR, IMDG, IATA	Void
· Environmental hazards: · Marine pollutant:	No
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture No further relevant information available.
- · Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

None of the ingredients is listed.

· Hazardous Air Pollutants

None of the ingredients is listed.

· Proposition 65

None of the ingredients is listed.

· Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

- · Cancerogenity categories
- · EPA (Environmental Protection Agency)

 $None\ of\ the\ ingredients\ is\ listed.$

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

(Contd. on page 7)

Printing date 04/23/2021 Reviewed on 04/23/2021

Trade name: SERVA Gel IEF 3-9 for PhastSystem

(Contd. of page 6)

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

- · GHS label elements Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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
- · Date of preparation / last revision 04/23/2021 / -
- · 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

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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)

NFPA: National Fire Protection Association (USA)

 $HMIS: Hazardous\ Materials\ Identification\ System\ (USA)$

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

- HS