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Trade name: SERVA Marker Mix for Blue/Clear Native PAGE Article number: 39213 Application of the substance / the mixture: Laboratory chemicals Details of the supplier of the safety data sheet Manufacturer/Supplier: SERVA Electrophoresis GmbH Carl-Benz-Str. 7 D-09115 Heidelberg Tel.: +49 6221 13840-0 FAX: +49 6221 13840-0 msds.info@serva.de Information department: Product Safety department Tel: +49 6221 13840-35 Emergency telephone number: Emergency telephone number: Emergency telephone number: Emergency medical information in case of poisoning Poison Information Center Mainz-Tel: +49 (0) 6131 19240 (Advice in German and English) 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 Signal word: Void Hazard pictograms: Void Classification system: NFPA ratings (scale 0 - 4) Fire = 0 Reactivity = 0 HMIS-ratings (scale 0 - 4) Fire = 0 Reactivity = 0 Coher hazards Results of PBT and vPvB assessment: PBT: PBT - Assessment not available. vPvB: vPvB - Assessment not available.	Identification	
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· Dangerous components:

The product does not contain any substances classified according to the CLP Regulation, which have to be indicated according to Regulation (EC) No 1907/2006.

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:
- Wash off immediately with soap and water and rinse thoroughly. In case of complaints, consult a doctor. *After eye contact:*

Rinse opened eye for several minutes with running water. Remove existing contact lenses, if possible, and continue rinsing. In case of complaints, consult an ophthalmologist.

- After swallowing: Rinse out mouth. In case of complaints, consult a 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: CO_2 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, formation of hazardous fire gases or vapors possible. In case of fire, the following can be released: Carbon monoxide and carbon dioxide
- · Advice for firefighters
- · Protective equipment: Wear self-contained breathing apparatus.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures	
Wear protective clothing.	
Ensure adequate ventilation	

Avoid contact with eyes and skin.

• *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 section 13. Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

· Protective Action Criteria for Chemicals

• PAC-1:	
56-81-5 glycerol	45 mg/m ³
· PAC-2:	
56-81-5 glycerol	180 mg/m ³
· PAC-3:	
56-81-5 glycerol	1,100 mg/m ³
· Reference to other sections	
See Section 7 for information on safe handling.	
See Section 8 for information on personal protection equipment.	
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See Section 13 for disposal information.

7 Handling and storage

- · 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 -15 to -25 °C
- Store only in the original receptacle.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Store container tightly closed and dry.
- *Specific end use(s):* No further relevant information available.

8 Exposure controls/personal protection

· Control parameters

· Components with limit values that require monitoring at the workplace:

56-81-5 glycerol (15-30%)

PEL Long-term value: 15* 5** mg/m³

mist; *total dust **respirable fraction

TLV TLV withdrawn-insufficient data human occup. exp.

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

· Exposure controls

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

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.*
- \cdot For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:

Natural rubber, NR Nitrile rubber, NBR

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· Eye protection: Safety glasses

· Body protection: Protective work clothing

nformation on basic physical and chemical	properties
General Information:	properties
Color:	Blue
Odor:	Odorless
Odor threshold:	Not determined.
Melting point/Melting range:	No information available
Boiling point/Boiling range:	No information available
Flammability (solid, gaseous):	No information available
Explosion limits:	·
Lower:	No information available
Upper:	No information available
Flash point:	No information available
Decomposition temperature:	No information available
oH-value:	No information available
Viscosity:	·
Kinematic viscosity:	No information available
Dynamic viscosity:	No information available
Solubility in / Miscibility with:	·
Water:	Fully miscible.
Partition coefficient (n-octanol/water):	No information available
Vapor pressure:	No information available
Vapor pressure:	
Density:	No information available
Relative density:	No information available
Other information	
Appearance:	
Form:	Solution
Important information on protection of healt	th and
environment, and on safety:	
Danger of explosion:	Product does not present an explosion hazard.
<i>VOC %:</i>	
VOC content:	0.00 %

10 Stability and reactivity

• *Reactivity:* No further relevant information available.

· Chemical stability:

- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- Possibility of hazardous reactions: No further relevant information available.

· Conditions to avoid: High temperatures

· Incompatible materials: No further relevant information available.

· Hazardous decomposition products: In case of fire: see section 5

11 Toxicological information

- · Information on toxicological effects
- Acute toxicity: Based on available data, the classification criteria are not met.
- \cdot on the skin: Based on available data, the classification criteria are not met.
- \cdot on the eye: Based on available data, the classification criteria are not met.

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- Sensitization: Based on available data, the classification criteria are not met.
- · 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.
- Specific target organ toxicity single exposure: Based on available data, the classification criteria are not met.
- Specific target organ toxicity repeated exposure:
- Based on available data, the classification criteria are not met.
- Aspiration hazard: Based on available data, the classification criteria are not met.
- Additional toxicological information:

· 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.
- · Bioaccumulative potential: No further relevant information available.
- Mobility in soil: No further relevant information available.
- · Results of PBT and vPvB assessment:
- **PBT:** Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects:
- Additional ecological information:
- · General notes: Water hazard class 1 (Self-assessment): slightly hazardous for water

13 Disposal considerations

- · Waste treatment methods
- *Recommendation:* Dispose of in accordance with official regulations.
- · Uncleaned packagings:
- · Recommendation:

Uncleaned packaging must be disposed of in the same way as the product in accordance with official regulations.

• Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information · UN-Number · DOT, ADR, IMDG, IATA · UN proper shipping name · DOT, ADR, IMDG, IATA Void (Contd. on page 6)

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		(Contd. of page 5)
· Transport hazard class(es)		
· DOT, ADR, ADN, IMDG, IATA · Class	Void	
· Packing group · DOT, ADR, IMDG, IATA	Void	
· Environmental hazards	Not applicable.	
· Special precautions for user	Not applicable.	
• Transport in bulk according to Annex I MARPOL73/78 and the IBC Code	I of Not applicable.	
· UN ''Model Regulation'':	Void	

15 Regulatory information

*

• Safety, health and environmental regulations/legislation specific for the substant 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):	
56-81-5 glycerol	ACTIV
· 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)	
None of the ingredients is listed.	
· 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	
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· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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Oth	er information
	information is based on our present knowledge. However, this shall not constitute a guarantee for fic product features and shall not establish a legally valid contractual relationship.
Depe	urtment issuing SDS: Product Safety Department
	act: +49 6221 13840-35
Date	of preparation / last revision 09/06/2023
	eviations and acronyms:
	persistent, bioaccumulative, toxic substance (REACH)
	very persistent, very bioaccumulative substance (REACH)
	I: Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
	Regulation on classification, labelling and packaging of substances and mixtures
bw: b	ody weight
	Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning
	ational Carriage of Dangerous Goods by Road)
	: International Maritime Code for Dangerous Goods
	US Department of Transportation
	International Air Transport Association CS: European Inventory of Existing Commercial Chemical Substances
	CS: European List of Notified Chemical Substances
	Chemical Abstracts Service (division of the American Chemical Society)
	National Fire Protection Association (USA)
	Hazardous Materials Identification System (USA)
	Volatile Organic Compounds (USA, EU)
PBT:	Persistent, Bioaccumulative and Toxic
	very Persistent and very Bioaccumulative
	H: National Institute for Occupational Safety
	: Occupational Safety & Health
	Chreshold Limit Value
	Permissible Exposure Limit Recommended Exposure Limit