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1 Identification

· Product identifier

· Trade name: SERVAColor TMB Blot Solution

· Article number: 37071

· 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-69115 Heidelberg Tel.: +49 6221 13840-0 FAX: +49 6221 13840-10 msds.info@serva.de

· Information department: Security Department Phone: +49 6221 13840-35

· Emergency telephone number:

Emergency medical information in case of poisoning Poison Information Center Mainz-Tel: +49 (0) 6131 19240

(Advice in German and English)

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)



Health = 0 Fire = 0Reactivity = 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: aqueous buffer solution

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 • Dangerous components:
 872-50-4 N-methyl-2-pyrrolidone

 0.1-<0.3%</th>

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 mouth immediately. Drink plenty of water and fresh air. Call a doctor immediately.
- · 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

Formation of hazardous vapors and gases possible during heating or in case of fire.

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 breathing apparatus.
- · Additional information

Collect contaminated fire fighting water separately. It must not enter the sewage system.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective clothing.

Particular danger of slipping on leaked/spilled product.

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

1 Tolective A	cuon Crueria for Chemicais	
· PAC-1:		
25322-68-3	Polyethylene glycol	30 mg/m
872-50-4	N-methyl-2-pyrrolidone	30 ppm
· PAC-2:		
25322-68-3	Polyethylene glycol	1,300 mg/m
872-50-4	N-methyl-2-pyrrolidone	32 ppm
		(Contd. on page

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· PAC-3:		
25322-68-3	Polyethylene glycol	$7,700 \text{ mg/m}^3$
872-50-4	N-methyl-2-pyrrolidone	190 ррт

· 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.

7 Handling and storage

· Precautions for safe handling:

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Avoid contact with eyes and skin.

- · Information about protection against explosions and fires: Keep ignition sources away Do not smoke.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Store only in the original receptacle.

Storage at +2 to +8 °C

- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Store container tightly closed and dry.
- \cdot *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:			
25322-68-3 Polyethylene glycol (5-15%)			
	Long-term value: 10 mg/m³ (H); MW>200		
872-50	-4 N-methyl-2-pyrrolidone (0.1-<0.3%)		
TLV	BEI		
WEEL	Long-term value: 10 ppm Skin		

· Ingredients with biological limit values:

872-50-4 N-methyl-2-pyrrolidone (0.1-<0.3%)

BEI 100 mg/L Medium: urine Time: end of shift

Parameter: 5-Hydroxy-N-methyl-2-pyrrolidone

- · 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.

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· 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.

· 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

9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information:

· Colorless to pale yellow

· Odor: Odorless

Melting point/Melting range:
 Boiling point/Boiling range:
 Flammability (solid, gaseous):

No information available
The product is not flammable

· Explosion limits:

Lower: No information available
 Upper: No information available
 Flash point: No information available
 Auto igniting: no information available
 Decomposition temperature: No information available

• pH-value at 20 °C (68 °F): 4.9-5.3

· Viscosity:

Kinematic viscosity:
 Dynamic viscosity:
 No information available
 No information available

· Solubility in / Miscibility with:

· Water: Fully miscible.

Partition coefficient (n-octanol/water):
 Vapor pressure:
 No information available
 No information available

· Vapor pressure:

• Density at 20 °C (68 °F): 1.013 g/cm³ (8.45349 lbs/gal) • Relative density: No information available

· Other information

· Appearance:

· Form: Liquid

· Important information on protection of health and environment, and on safety:

• Danger of explosion: Product does not present an explosion hazard.

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· Solvent content:

• Organic solvents: 0.1-<0.3 %

· VOC %:

• **VOC** content: 0.1-<0.3 %

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

Exposure to light

- · Incompatible materials: Avoid contact with strong oxidizing agents.
- · 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.
- · on the skin: Based on available data, the classification criteria are not met.
- · on the eye: Based on available data, the classification criteria are not met.
- · 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: The single components are biodegradable
- · 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.

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- · 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.

UN-Number ADR, IMDG, IATA	Void
UN proper shipping name DOT, ADR, IMDG, IATA	Void
Transport hazard class(es)	
DOT, ADR, IMDG, IATA	
Class	Void
Label	-
Packing group	
DOT, ADR, IMDG, IATA	Void
Environmental hazards	Not applicable.
Special precautions for user	Not applicable.

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):

872-50-4 N-methyl-2-pyrrolidone

· TSCA (Toxic Substances Control Act):

All components have the value ACTIVE.

· 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.

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· 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:

872-50-4 N-methyl-2-pyrrolidone

· 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
- · 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 04/14/2025 / -
- · Abbreviations and acronyms:

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

UFI: Unique Formula Identifier

ADR: Accord relatif au transport international 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

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

BEI: Biological Exposure Limit

LIC