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1 Identification

· Product identifier

· Trade name: SERVA Purple Protein Quantification Assay

· Article number: 39235

· 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: 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 = 2Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 0 Fire = 2Reactivity = 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: fluorescence dye in dimethyl sulfoxide
- · Empirical formula:

67-68-5 dimethyl sulfoxide C_2H_6OS

· Dangerous components: Void

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· Additional information:

the product contains no further substances which shall be indicated according to REACH-Regulation (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:

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 immediately.

- · After swallowing: Wash out the mouth and call 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 toxic vapours and gases is possible.

In case of fire, the following can be released:

Carbon monoxide and carbon dioxide

Sulphur oxides (SOx)

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

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

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.

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

· Protective Action Criteria for Chemicals

1.000000	e Henon Criteria for Circinicalis			
· PAC-1:				
67-68-5	dimethyl sulfoxide	150 ppm		
· PAC-2:				
67-68-5	dimethyl sulfoxide	290 ppm		
· PAC-3:				
67-68-5	dimethyl sulfoxide	1,800 ppm		

· 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: Keep ignition sources away Do not smoke.
- · 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:

This product is hygroscopic.

Keep receptacle tightly sealed and store in dry conditions.

· 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:

67-68-5 dimethyl sulfoxide (80-100%)

WEEL Long-term value: 250 ppm

- · 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 item 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:** Filter A/P2
- · 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.

- · Eye protection: Face protection
- · **Body protection:** Protective work clothing

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9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information:

Color: Yellow
Odor: Odorless
Odor threshold: Not determined.
Melting point/Melting range: 18.5 °C (65.3 °F)
Boiling point/Boiling range: 189 °C (372.2 °F)
Flammability (solid, gaseous): Not applicable.

· Explosion limits:

Lower: Not determined.
 Upper: Not determined.
 Flash point: 87 °C (188.6 °F)

• **Ignition temperature:** 300-302 °C (572-575.6 °F)

• **Decomposition temperature:** Not determined.

• pH-value: Mixture is non-polar/aprotic.

· Viscosity:

• Kinematic viscosity: Not determined. • Dynamic viscosity at 20 °C (68 °F): 2.14 mPas

· Solubility in / Miscibility with:

Water at 20 °C (68 °F):
 Partition coefficient (n-octanol/water):
 Vapor pressure at 20 °C (68 °F):
 Density at 20 °C (68 °F):
 1.104 g/cm³ (9.21288 lbs/gal)

• Relative density: Not determined.

 $\cdot \ Other \ information$

· Appearance:

· Form: Liquid

· Important information on protection of health and

environment, and on safety:

• Danger of explosion: no information available

· Solvent content:

· Organic solvents: 95.0 %

· **VOC** %:

• VOC content: 95.00 %
 • Molecular weight 78.1 g/mol

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 informations available.
- · Conditions to avoid: Avoid high temperatures, flames, sparks
- · Incompatible materials:

Avoid contact with:

Strong acids

Strong acids
Strong oxidizers

· 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.

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- · 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: 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: 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.

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- · UN-Number
- · DOT, ADR, IMDG, IATA Void
- · UN proper shipping name
- · DOT, ADR, IMDG, IATA Void

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

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):
- 67-68-5 dimethyl sulfoxide

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.

· 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

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- · 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 03/30/2023
- · 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

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)

 ${\it HMIS: Hazardous\ Materials\ Identification\ System\ (USA)}$

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

US