Printing date 01/31/2019

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Trade name: Polyvinylpyrr	olidone 25	
Article number: 33420 CAS Number: 9003-39-8 Application of the substance	c <b>e / the mixture</b> Laboratory chemicals	
Details of the supplier of the Manufacturer/Supplier: SERVA Electrophoresis Gm Carl-Benz-Str. 7 D-69115 Heidelberg Tel.: +49 6221 13840-0 FAX: +49 6221 13840-10 msds.info@serva.de		dis Grano.
<b>Emergency telephone num</b> Medical Emergency Inform	ation in case of poisoning: Mainz - Phone: +49 (0) 6131 19240	21 13840-35
Hazard(s) identification		
<b>Classification of the substa</b> The substance is not classif	nce or mixture ied, according to the Globally Harmon	ized System (GHS).
The substance is not classif Label elements GHS label elements Void Hazard pictograms Void Signal word Void Hazard statements Void Classification system:	nce or mixture fied, according to the Globally Harmon	ized System (GHS).
The substance is not classif Label elements GHS label elements Void Hazard pictograms Void Signal word Void Hazard statements Void	ied, according to the Globally Harmon	ized System (GHS).
The substance is not classif 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 = 1	ied, according to the Globally Harmon	ized System (GHS).
The substance is not classification of the substance is not classification system: <b>Label elements</b> <b>GHS label elements</b> Void <b>Hazard pictograms</b> Void <b>Signal word</b> Void <b>Hazard statements</b> Void <b>Classification system:</b> <b>NFPA ratings</b> (scale $0 - 4$ ) <b>Health</b> = 0 Fire = 1 Reactivity = 0	ied, according to the Globally Harmon	ized System (GHS).

- · Chemical characterization: Substances
- CAS No. Description 9003-39-8 Polyvinylpyrrolidone
- · Identification number(s) -

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# Safety Data Sheet acc. to OSHA HCS

Printing date 01/31/2019

Reviewed on 01/31/2019

Trade name: Polyvinylpyrrolidone 25

- · Description:
- **MW:** ca. 29000

#### 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.
- 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: Wash out mouth. Seek medical advice if discomfort occurs.
- 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: Water spray
- Foam
- Fire-extinguishing powder
- · For safety reasons unsuitable extinguishing agents: Carbon dioxide
- Special hazards arising from the substance or mixture In case of fire, the following can be released: Carbon monoxide and carbon dioxide cyanides 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.
- Ensure adequate ventilation
- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- *Methods and material for containment and cleaning up: Pick up mechanically.*
- Dispose contaminated material as waste according to item 13.
- · 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

- · Handling:
- · Precautions for safe handling
- *Ensure good ventilation/exhaustion at the workplace. Prevent formation of dust.*

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# Safety Data Sheet acc. to OSHA HCS

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Trade name: Polyvinylpyrrolidone 25

· 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: No special requirements.
- · Information about storage in one common storage facility: Not required.
- Further information about storage conditions: Store in dry conditions.
- Protect from heat and direct sunlight.
- · 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: Not required.
- 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. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Store protective clothing separately. Avoid contact with the eyes and skin.
- 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.

- · 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:

Nitrile rubber, NBR Natural rubber, NR

- Eye protection: Safety glasses
- **Body protection:** Protective work clothing

## 9 Physical and chemical properties

· Information on basic physical and chemical proper	ties
· General Information	

· Appearance: Form:

Color:

· Odor:

Powder White Weak, characteristic

• pH-value (50 g/l) at 20 •C (68 •F): 3.0 - 5.0

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Trade name: Polyvinylpyrrolidone 25

	(Contd. of page 3)
• Change in condition Melting point/Melting range: Boiling point/Boiling range:	(Dec) > 130 °C (266 °F) Undetermined.
· Flash point:	Not applicable.
· Flammability (solid, gaseous):	Product is not flammable.
· Danger of explosion:	Product is not explosive. However, formation of explosive dust-/air mixtures are possible.
· Density:	no information available
• Bulk density at 20 • C (68 • F):	400 - 490 kg/m <sup>3</sup>
<ul> <li>Solubility in / Miscibility with Water:</li> <li>Other information</li> </ul>	Soluble. No further relevant information available.

#### 10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- · Thermal decomposition / conditions to be avoided:
- No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions** As the product is supplied it is not capable of dust explosion; however enrichment with fine dust causes risk of dust explosion.
- · Conditions to avoid Avoid high temperatures, flames, sparks
- Incompatible materials: Avoid contact with: strong bases
- Hazardous decomposition products: In case of fire: See Section 5

## **11 Toxicological information**

· Information on toxicological effects

• Acute toxicity:

· LD/LC50 values that a	re relevant for	classification:
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Oral	LD50	100 000 mg/kg (rat)
Oral	LD50	100 000 mg/kg (rat)

Inhalative LC50/4h > 5.2 mg/l (rat) LC50/96h > 10 000 mg/l (Forelle)

#### · Primary irritant effect:

• on the skin: No irritant effect.

• on the eye: No irritating effect.

- Sensitization: No sensitizing effects known.
- Additional toxicological information:

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. The substance is not subject to classification.

· Carcinogenic categories

· IARC (International Agency for	r Research on	Cancer)
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9003-39-8 Polyvinylpyrrolidone

· NTP (National Toxicology Program) Substance is not listed.

· OSHA-Ca (Occupational Safety & Health Administration) Substance is not listed.

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Trade name: Polyvinylpyrrolidone 25

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## **12 Ecological information**

- · Toxicity
- Aquatic toxicity: No further relevant information available.
- Persistence and degradability heavily eliminable from water.
- Other information: OECD Guideline 302B (aerobic, activated sludge) DOC-removal: < 10 % (15 d) < 10 % in 15 d
- · Behavior in environmental systems:
- · Bioaccumulative potential
- Due to the polymer structure of the product a bioavailability and an accumulation in organisms is not expected.
- *Mobility in soil* No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (Assessment by list): slightly hazardous for water Do not allow product to reach ground water, water course or sewage system.

- · 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:

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 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, ADN, IMDG, IATA	Void	
	, on	
· UN proper shipping name · DOT, ADR, ADN, IMDG, IATA	Void	
· Transport hazard class(es)		
· DOT, ADN · Class	Void	
· ADR, IMDG, IATA · Class · Label	Void -	
· Packing group · DOT, ADR, IMDG, IATA	Void	
· Environmental hazards:	Not applicable.	

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Trade name: Polyvinylpyrrolidone 25

	(Contd. of page 5)
· Special precautions for user	Not applicable.
• Transport in bulk according to Annex MARPOL73/78 and the IBC Code	<b>II of</b> Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· UN "Model Regulation":	Void

## **15 Regulatory information**

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Section 355 (extremely hazardous substances): Substance is not listed.
- Section 313 (Specific toxic chemical listings): Substance is not listed.
- · TSCA (Toxic Substances Control Act): Substance is listed.
- · Proposition 65 Substance is not listed.
- · Chemicals known to cause cancer: Substance is not listed.
- · Chemicals known to cause reproductive toxicity for females: Substance is not listed.
- · Chemicals known to cause reproductive toxicity for males: Substance is not listed.
- · Chemicals known to cause developmental toxicity: Substance is not listed.
- · Cancerogenity categories
- · EPA (Environmental Protection Agency) Substance is not listed.
- TLV (Threshold Limit Value established by ACGIH) Substance is not listed.
- · NIOSH-Ca (National Institute for Occupational Safety and Health) Substance is not 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 01/31/2019 / 3
- Abbreviations and acronyms:

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
- CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA)
- HMIS: Hazardous Materials Identification System (USA)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

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RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

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OSHA: Occupational Safety & Health TLV: Threshold Limit Value PEL: Permissible Exposure Limit REL: Recommended Exposure Limit

 $\cdot$  \* Data compared to the previous version altered.

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