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SECTION 1: Identification og	f the substance/mixture and of the com	pany/undertaking
· 1.1 Product identifier		CFD1/A
• Trade name: Polyvinylpyrrolido	ne 25	SERVA serving scientists
 Article number: 33420 CAS Number: 9003-39-8 1.2 Relevant identified uses of the No further relevant information of Application of the substance / the 		gainst
 1.3 Details of the supplier of the Manufacturer/Supplier: SERVA Electrophoresis GmbH Carl-Benz-Str. 7 D-69115 Heidelberg Tel.: +49 6221 13840-0 FAX: +49 6221 13840-10 	e safety data sheet	GN
msds.info@serva.de • Information department: Produc • 1.4 Emergency telephone numbe Medical Emergency Information Poison Information Center Mains (advisory service in German or E	in case of poisoning: z - Phone: +49 (0) 6131 19240	35
SECTION 2: Hazards identif	<i>fication</i>	
 2.1 Classification of the substant. Classification according to Regulation the substance is not classified, and the substance is not classified, and the substance is not classified, and the substance is not classified. 2.2 Label elements Labelling according to Regulation the substance is not classified. Labelling according to Regulation the substance is not classified. Labelling according to Regulation the substance is not classified. Labelling according to Regulation the substance is not classified. Labelling according to Regulation the substance is not classified. Hazard pictograms Void Signal word Void Hazard statements Void 2.3 Other hazards Results of PBT and vPvB assess PBT: PBT - assessment not avail vPvB: vPvB - assessment not avail 	ace or mixture valation (EC) No 1272/2008 according to the CLP regulation. Fon (EC) No 1272/2008 Void Sement lable.	
· vi vb , vi vb - assessment not ava		
SECTION 3: Composition/inj	formation on ingredients	
• 3.1 Chemical characterisation: S • CAS No. Description: 9003-39-8 Polyvinylpyrrolidone	,	

- 4.1 Description of first aid measures
 General information No special measures required.
 After inhalation Supply fresh air; consult doctor in case of complaints.

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- $\cdot \textit{After skin contact Immediately wash with water and so ap and rinse thoroughly}.$
- 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.
- · 4.2 Most important symptoms and effects, both acute and delayed
- No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- Suitable extinguishing agents Water spray
- Foam
- Fire-extinguishing powder
- For safety reasons unsuitable extinguishing agents Carbon dioxide
- \cdot 5.2 Special hazards arising from the substance or mixture
- In case of fire, the following can be formed, but not limited to: Carbon monoxide and carbon dioxide cyanides
- Nitrogen oxides (NOx)
- · 5.3 Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures Wear protective clothing. Ensure adequate ventilation
- · 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- 6.3 Methods and material for containment and cleaning up: Pick up mechanically.
 Dispose contaminated material as waste according to item 13.
- **6.4 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.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling
 Ensure good ventilation/exhaustion at the workplace.
 Prevent formation of dust.

 Information about protection against explosions and fires: Keep ignition sources away Do not smoke.
- · 7.2 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.

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• 7.3 Specific end use(s) No further relevant information available.

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SECTION 8: Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · 8.1 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.
- · 8.2 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.

· 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.

• 9.1 Information on basic physical an • General Information	nd chemical properties	
· Appearance: Form:	Powder	
Colour:	White	
Odour:	Weak, characteristic	
• pH-value (50 g/l) at 20 •C:	3.0 - 5.0	
· Change in condition Melting point/freezing point: Initial boiling point and boiling ra	(Dec) > 130 °C Inge: undetermined	
· Flash point:	Not applicable	
· Flammability (solid, gaseous)	Product is not flammable.	

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· Explosive properties:	Product is not explosive. However, formation of explosive dust-/ air mixtures are possible.	
· Density:	no information available	
• Bulk density at 20 •C:	400 - 490 kg/m ³	
 Solubility in / Miscibility with Water: 9.2 Other information 	Soluble No further relevant information available.	

SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability
- *Thermal decomposition / conditions to be avoided: No decomposition if used and stored according to specifications.*
- · 10.3 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
- · 10.4 Conditions to avoid Avoid high temperatures, flames, sparks
- 10.5 Incompatible materials: Avoid contact with: strong bases
- 10.6 Hazardous decomposition products: In case of fire: See Section 5

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- Acute toxicity Based on available data, the classification criteria are not met.

· LD/LC50 values that are relevant for classification:

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:

- Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation Based on available data, the classification criteria are not met.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · 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.
- · STOT-single exposure Based on available data, the classification criteria are not met.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

· 12.1 Toxicity

- · Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability heavily eliminable from water.
- Other information: OECD Guideline 302B (aerobic, activated sludge) DOC-removal: < 10 % (15 d) < 10 % in 15 d

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· 12.3 Bioaccumulative potential

Due to the polymer structure of the product a bioavailability and an accumulation in organisms is not expected.

- 12.4 Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

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

- · 12.5 Results of PBT and vPvB assessment
- · **PBT:** PBT assessment not available.
- · **vPvB**: vPvB assessment not available.
- · 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

· 13.1 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.

14.1 UN-Number ADR, ADN, IMDG, IATA	Void
14.2 UN proper shipping name ADR, ADN, IMDG, IATA	Void
14.3 Transport hazard class(es)	
ADR, IMDG, IATA	
Class	Void
Label	-
ADN/R Class:	Void
14.4 Packing group	
ADR, IMDĞ, İATA	Void
14.5 Environmental hazards:	Not applicable.
14.6 Special precautions for user	Not applicable.
14.7 Transport in bulk according to Anne	x II of
Marpol and the IBC Code	Not applicable.
Transport/Additional information:	Not dangerous according to the above specifications.
ADR	
Transport category	-

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SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

· National regulations

• Water hazard class: Water hazard class 1 (Assessment by list): slightly hazardous for water.

• 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 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

• 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

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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

• * Data compared to the previous version altered.