Version number 3

Printing date 26.04.2018

Revision: 06.04.2018

1.1 Product identifier		
Trade name: Adenosine-5'-phos	nhate-Nasalt	SERVA
	511111-1412-5411	Electrophoresis
Article number: 10883 CAS Number:		<u>ــــــــــــــــــــــــــــــــــــ</u>
4578-31-8		
EC number:		
224-961-2		
1.2 Relevant identified uses of th No further relevant information a		aavisea againsi
Application of the substance / the		C^{λ}
1.3 Details of the supplier of the	safety data sheet	6
Manufacturer/Supplier:		. Ca
SERVA Electrophoresis GmbH Carl-Benz-Str. 7		
D-69115 Heidelberg		G
Tel.: +49 6221 13840-0	. (7,5
FAX: +49 6221 13840-10	2	<u></u>
msds.info@serva.de	\mathbf{O}	
	t Safety department Tel.: +49 622	1 13840-35
1.4 Emergency telephone numbe Medical Emergency Information		
Poison Information Center Mainz		
(advisory service in German or E		
SECTION 2: Hazards identifi	cation	
2.1 Classification of the substance Classification according to Regu		
The substance is not classified ac		
2.2 Label elements		
Labelling according to Regulation	on (EC) No 1272/2008 Void	
Hazard pictograms Void		
Signal word Void Hazard statements Void		
2.3 Other hazards		
Results of PBT and vPvB assess	nent	
PBT: Not applicable.		
vPvB: Not applicable.		
	· · · · · · · · · · · · · · · · · · ·	
SECTION 3: Composition/inf	ormation on ingredients	
3.1 Chemical characterisation: S	Substances	
CAS No. Description: 4578-31-8 Disodium adenosine 5	'-nhosnhate hydrate	
<i>Identification number(s):</i>		
<i>EC number:</i> 224-961-2		
Description:		
Empirical formula: $C_{10} H_{12} N_5 O$ MW: 517.2	$P_7 P Na_2 * 7 H_2 O$	
IVI VY; J17.2		
		(Contd. on page

Printing date 26.04.2018

Version number 3

Revision: 06.04.2018

Trade name: Adenosine-5'-phosphate-Naz-salt

(Contd. of page 1)

SECTION 4: First aid measures

- · 4.1 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 rinse with water.
- · After eye contact Rinse opened eye for several minutes under running water.
- · After swallowing
- Rinse out mouth and then drink plenty of water.
- If symptoms persist consult doctor.
- 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
- CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- · 5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be formed, but not limited to: Nitrogen oxides (NOx) Carbon monoxide (CO) In certain fire conditions, traces of other toxic gases cannot be excluded, e.g.: Phosphorous oxides • **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.
- 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.
- 6.4 Reference to other sections No dangerous substances are released.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling Prevent formation of dust.
- · Information about protection against explosions and fires: No special measures required.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage
- Requirements to be met by storerooms and receptacles: Store in a cool location.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Store in dry conditions.
- 7.3 Specific end use(s) No further relevant information available.

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.

(Contd. on page 3)

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Printing date 26.04.2018

Version number 3

Revision: 06.04.2018

Trade name: Adenosine-5'-phosphate-Naz-salt

(Contd. of page
8.2 Exposure controls
Personal protective equipment
General protective and hygienic measures
The usual precautionary measures should be adhered to when handling chemicals.
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 th
degradation
Material of gloves
The selection of the suitable gloves does not only depend on the material, but also on further marks o
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 b
observed.
For the permanent contact of a maximum of 15 minutes gloves made of the following materials ar
suitable:
Nitrile rubber, NBR
Natural rubber, NR
Eye protection: Safety glasses

· Body protection: Protective work clothing.

SECTION 9: Physical and chemical properties			
9.1 Information on basic physical and c	hemical properties		
General Information			
Appearance:			
Form:	Powder		
Colour:	White		
Odour:	Odourless		
<i>pH-value (100 g/l) at 20 •C:</i>	7.3		
Change in condition			
Melting point/freezing point:	undetermined		
Initial boiling point and boiling range	: undetermined		
Flash point:	Not applicable		
Flammability (solid, gaseous)	Product is not flammable.		
Explosive properties:	Product does not present an explosion hazard.		
Density:	Not determined		
Solubility in / Miscibility with			
Water at 20 °C:	100 g/l		
9.2 Other information	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 according to specifications.

· 10.3 Possibility of hazardous reactions No dangerous reactions known

• 10.4 Conditions to avoid No further relevant information available.

(Contd. on page 4)

Printing date 26.04.2018

Version number 3

Revision: 06.04.2018

Trade name: Adenosine-5'-phosphate-Naz-salt

• 10.5 Incompatible materials: No further relevant information available.

· 10.6 Hazardous decomposition products: No dangerous decomposition products known

SECTION 11: Toxicological information

· 11.1 Information on toxicological effects

- · Acute toxicity Based on available data, the classification criteria are not met.
- · 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 No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:
- Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.

Do not allow undiluted product or large quantities of it 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.

- · Uncleaned packagings:
- *Recommendation:* Disposal must be made according to official regulations.
- 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	

(Contd. of page 3)

Printing date 26.04.2018

Version number 3

Revision: 06.04.2018

Trade name: Adenosine-5'-phosphate-Naz-salt

	(Contd. of page	
· 14.3 Transport hazard class(es)		
· ADR, ADN, IMDG, IATA		
· Class	Void	
· 14.4 Packing group		
· ADR, IMDG, IATA	Void	
· 14.5 Environmental hazards:	Not applicable.	
\cdot 14.6 Special precautions for user	Not applicable.	
· 14.7 Transport in bulk according to Anne	ex II of	
Marpol and the IBC Code	Not applicable.	
· Transport/Additional information:	Not dangerous according to the above specifications.	
· UN ''Model Regulation'':	Void	

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 (Self-assessment): 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
 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
 EINECS: European Inventory of Existing Commercial Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative
- \cdot * Data compared to the previous version altered.