Printing date 07/01/2022 Reviewed on 07/01/2022

#### 1 Identification

· Product identifier

· Trade name: Pyruvic acid-Na-salt

· Article number: 15220

· CAS Number: 113-24-6 · EC number:

204-024-4

· 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



Eye Irrit. 2A H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

- · Label elements
- · GHS label elements

The substance is classified and labeled according to the Globally Harmonized System (GHS).

- · Hazard pictograms: GHS07
- · Signal word: Warning
- · Hazard statements:

Causes serious eye irritation.

May cause an allergic skin reaction.

· Precautionary statements

Avoid breathing dust.

Wear protective gloves/protective clothing/eye protection/face protection.

If on skin: Wash with plenty of soap and water.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If skin irritation or rash occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 2 Fire = 0Reactivity = 0

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# Safety Data Sheet acc. to OSHA HCS

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Trade name: Pyruvic acid-Na-salt

· HMIS-ratings (scale 0 - 4)

HEALTH 2 Health = 2FIRE 0 Fire = 0REACTIVITY 0 Reactivity = 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: Substances
- · CAS No. Description:

113-24-6 sodium pyruvate

- · Identification number(s):
- · EC number: 204-024-4
- · Description:
- · Empirical formula:  $C_3H_3O_3Na$
- · MW: 110.0

### 4 First-aid measures

- · Description of first aid measures
- · 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 In case of complaints.

- · After swallowing: Wash out mouth. Seek medical advice if discomfort occurs.
- · 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 dangerous gases or vapours is possible in case of fire.

*In case of fire, the following can be released:* 

Carbon monoxide and carbon dioxide

- · 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

Avoid formation of dust.

· Environmental precautions: Do not allow to enter sewers/ surface or ground water.

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#### · Methods and material for containment and cleaning up

Dispose contaminated material as waste according to item 13.

Pick up mechanically.

- · Protective Action Criteria for Chemicals
- · PAC-1: 30 mg/m3
- · PAC-2: 330 mg/m<sup>3</sup>
- · **PAC-3:** 2,000 mg/m<sup>3</sup>
- · 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: No special precautions are necessary if used correctly.
- · 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: 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: Not required.
- · 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:

Short term filter device:

Filter P2

#### · 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:

Natural rubber, NR

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Nitrile rubber, NBR

• Eye protection: Tightly sealed goggles • Body protection: Protective work clothing (Contd. of page 3)

## 9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information:

· Color: off- white · Odor: Characteristic

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

no information available

 not applicable (decomposition)
 Product is not flammable.

· Explosion limits:

Lower: Not determined.Upper: Not determined.

· Flash point: no information available

• Decomposition temperature: 236,8 °C (1013,25 hPa; OECD Test Guideline 102)

236.8 °C (458.2 °F)

• **pH-value:** 5.1-7

· Viscosity:

Kinematic viscosity: Not applicable.
Dynamic viscosity: Not applicable.

· Solubility in / Miscibility with:

Water: Soluble.

Partition coefficient (n-octanol/water): Not determined.
Vapor pressure: Not applicable.
Density: Not determined.
Relative density at 20 °C (68 °F): 1.781 (EU A.3)

· Other information · Appearance:

· Form: Powder

· Important information on protection of health and

environment, and on safety:

Danger of explosion: Product is not explosive. However, formation of

explosive dust-/air mixtures are possible.

## 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:

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: high ttemperatures
- · Incompatible materials:

Avoid contact with strong oxidizers.

Polymerisation in alkaline solution.

· Hazardous decomposition products: In case of fire: See Section 5

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### 11 Toxicological information

- · Information on toxicological effects
- · on the eye: Causes serious eye irritation.
- · Sensitization: May cause an allergic skin reaction.
- · Additional toxicological information:
- · Carcinogenic categories
- · IARC (International Agency for Research on Cancer) Substance is not listed.
- · NTP (National Toxicology Program) Substance is not listed.
- · OSHA-Ca (Occupational Safety & Health Administration) Substance is not listed.

### 12 Ecological information

- · Toxicity:
- · Aquatic toxicity:

Toxicity to algae: chronic NOEC (72h, Pseudokirchneriella subcapitata, OECD Test Guideline No. 201): 3,52 mg/l

- · Persistence and degradability: Biological degradability: 81,6 % in 28d (OECD-Test Guideline No. 301D)
- · Bioaccumulative potential:

No relevant bioaccumulation is expected because of log Pow = -3,83 (20 $^{\circ}$ C, OECD-Test-Richtlinien-Nr. 107).

- · 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.

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- · 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.

· UN-Number · DOT, ADR, ADN, IMDG, IATA	Void	
· UN proper shipping name	, 0100	
· ON proper suppling name · DOT, ADR, ADN, IMDG, IATA	Void	
· Transport hazard class(es)		
· DOT, ADR, ADN, IMDG, IATA		
· Class	Void	

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· Packing group · DOT, ADR, IMDG, 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.	
· 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 No further relevant information available.
- · Section 355 (extremely hazardous substances): Substance is not listed.
- · Section 313 (Specific toxic chemical listings): Substance is not listed.
- · TSCA (Toxic Substances Control Act): ACTIVE
- · Hazardous Air Pollutants Substance is not 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) Substance is not listed.
- · NIOSH-Ca (National Institute for Occupational Safety and Health) Substance is not listed.
- · GHS label elements

The substance is classified and labeled according to the Globally Harmonized System (GHS).

- · Hazard pictograms GHS07
- · Signal word Warning
- · Hazard statements

Causes serious eye irritation.

May cause an allergic skin reaction.

· Precautionary statements

Avoid breathing dust.

Wear protective gloves/protective clothing/eye protection/face protection.

If on skin: Wash with plenty of soap and water.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If skin irritation or rash occurs: Get medical advice/attention.

If eye irritation persists: Get medical advice/attention.

· 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 07/01/2022 / 2

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#### · 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 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

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

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

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 Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

Skin Sens. 1: Skin sensitisation - Category 1