

acc. to OSHA HCS

Printing date 10/21/2017 Version 4 Reviewed on 11/27/2012

## 1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Sodium pyruvate Product name:

Product number: 297561 113-24-6 CAS-No.:

Synonyms: α-Ketopropionic acid sodium salt, 2-Oxopropanoic acid sodium salt

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: J&K Scientific LLC

601 Interchange Blvd, Newark, DE 19711

Telephone/Fax: +1 952 942 3333 / +1 952 942 3322

E-mail address: jkus@jk-scientific.com

J&K Scientific Ltd.

AEF 18/F Bldg-D Majesty Garden 6 Bei-Si-Huan-Zhong Rd. Beijing

Telephone/Fax: +86 10 8284 8833 / +86 10 8284 9933

E-mail address: jkinfo@jkchemical.com

**Preparation Information:** Product safety department

**Emergency telephone number:** +1 800 424 9300 (for USA & Canada)

### 2 Hazards identification

#### 2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)



Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

#### 2.2 Label elements

**GHS label elements** The substance is classified and labeled according to the Globally

Harmonized System (GHS).

Hazard pictograms



Signal word Warning

**Hazard statements** Causes skin irritation.

Causes serious eye irritation.

Wear protective gloves/protective clothing/eye protection/face protection. **Precautionary statements** 

IF ON SKIN: Wash with plenty of water.

If in eyes: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

Classification system NFPA ratings (scale 0 - 4)



Health = 1 Fire = 0Reactivity = 0

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Product name: Sodium pyruvate

HMIS-ratings (scale 0 - 4)

HEALTH 1
FIRE 0
REACTIVITY 0

Health = 1 Fire = 0 Reactivity = 0

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable. vPvB: Not applicable.

### 3 Composition/information on ingredients

Chemical characterization: Substances
MF: C3H3NaO3
MW: 110.04 g/mol

CAS-No. Description 113-24-6 Sodium pyruvate

Identification number(s)

EC number: 204-024-4

#### 4 First-aid measures

#### 4.1 Description of first aid measures

General information: Consult a physician. Show this safety data sheet to the doctor in

attendance.

After inhalation: If breathed in, move person into fresh air. If not breathing, give artificial

respiration. Consult a physician.

**After skin contact:** Wash off with soap and plenty of water. Consult a physician.

After eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a

physician.

After swallowing: Never give anything by mouth to an unconscious person. Rinse mouth with

water. Consult a physician.

4.2 Information for doctor

Most important symptoms and

effects, both acute and delayed To the best of our knowledge, the chemical, physical, and toxicological

properties have not been thoroughly investigated.

Indication of any immediate medical attention and special treatment

needed No data available

## 5 Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing agents: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising

from the substance or

mixture Carbon oxides, Sodium oxides

**5.3 Advice for firefighters** Wear self contained breathing apparatus for fire fighting if necessary.

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### 6 Accidental release measures

6.1 Personal precautions, protective equipment and

vapors, mist or gas. Ensure adequate ventilation. Avoid breathing

dust.Remove persons from danger area.

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

6.2 Methods and material for

containment and cleaning up Soak up with inert absorbent material and dispose of as hazardous waste.

Keep in suitable, closed containers for disposal.

6.3 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.

**Protective Action Criteria for Chemicals** 

 PAC-1:
 30 mg/m3

 PAC-2:
 330 mg/m3

 PAC-3:
 2,000 mg/m3

## 7 Handling and storage

#### 7.1 Handling

Precautions for safe handling Information about protection against explosions and fires Provide appropriate exhaust ventilation at places where dust is formed.

No special measures required.

7.2 Storage

Conditions for safe storage,

including any incompatibilities Store in a cool place. Keep container tightly closed in a dry and well-

ventilated place. Containers which are opened must be carefully resealed

and kept upright to prevent leakage.

Store at 2-8°C

Storage Class (TRGS510): Non-combustible solids that cannot be assigned to any of the above

storage classes.

## 8 Exposure controls/personal protection

#### 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.

**Exposure controls** 

#### 8.2 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.

Avoid contact with the eyes and skin.

Breathing equipment: Not required.

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Protection of hands:

Material of gloves:



Protective gloves

Selection of the glove material on consideration of the

penetration times, rates of diffusion and the degradation

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 through time has to be found out by the manufacturer of

the protective gloves and has to be observed.

Eye protection:



Tightly sealed goggles

Body protection: Complete suit protecting against chemicals, The type of protective

equipment must be selected according to the concentration and amount of

the dangerous substance at the specific workplace.

## 9 Physical and chemical properties

Information on basic physical and chemical properties

**General Information** 

**Appearance** 

Form: Powder Color: White

Odor: No data available
Odor threshold: Not determined.

pH-value:

Change in condition

Melting point/Melting range: 300 °C (572 °F)
Boiling point/Boiling range: Undetermined.

Flash point: Not applicable.

Flammability (solid, gaseous): Product is not flammable.

Ignition temperature:

Decomposition temperature: Not determined.

Auto igniting: Not determined.

**Danger of explosion:** Product does not present an explosion hazard.

**Explosion limits** 

Lower: Not determined. Not determined. Upper: Vapor pressure: Not applicable. Density: Not determined. **Bulk density:** Not determined Not determined. Relative density Vapor density Not applicable. **Evaporation rate** Not applicable.

Solubility in / Miscibility with

Water: Not determined.

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**Product name:** Sodium pyruvate

Partition coefficient (n-octanol/water): Not determined.

Viscosity:

Dynamic:Not applicable.Kinematic:Not applicable.Other informationno data available

### 10 Stability and reactivity

**10.1 Reactivity** No data available

**10.2 Chemical stability** Stable under recommended storage conditions.

10.3 Possibility of hazardous

**reactions** No dangerous reactions known.

**10.4 Conditions to avoid** No data available

**10.5 Incompatible materials** Strong oxidizing agents

10.6 Hazardous

decomposition products Carbon oxides, Sodium oxides

## 11 Toxicological information

#### 11.1 Information on toxicological effects

Primary irritant effect

on the skin: Irritant to skin and mucous membranes.

on the eye: Irritating effect.

Sensitization: No sensitizing effects known.

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.

11.2 Additional information

RTECS: no data available

## 12 Ecological information

12.1 Toxicity

Aquatic toxicity No data available

12.2 Persistence and

**degradability** No data available

12.3 Behavior in environmental systems

**Bioaccumulative potential :** No data available **Mobility in soil :** No data available

12.4 Additional ecological information

General notes: Water hazard class 3 (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage

system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the

ground.

### 12.5 Results of PBT and vPvB assessment

PBT: Not applicable. vPvB: Not applicable.

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12.6 Other adverse effects: No data available

### 13 Disposal considerations

13.1 Product Offer surplus and non-recyclable solutions to a licensed disposal company.

> Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn

in a chemical incinerator equipped with an afterburner and scrubber.

13.2 Contaminated packaging Dispose of as unused product.

13.3 Recommendation Disposal must be made according to official regulations.

## 14 Transport information

14.1 UN-Number

DOT, ADR, ADN, IMDG, IATA Not regulated

14.2 UN proper shipping name

DOT, ADR, ADN, IMDG, IATA Not regulated

14.3 Transport hazard class(es)

DOT, ADR, ADN, IMDG, IATA

Class Not regulated

14.4 Packing group

DOT, ADR, IMDG, IATA Not regulated

14.5 Environmental hazards:

Marine pollutant: No

Special precautions for user Not applicable.

Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code Not applicable.

14.6 Transport/Additional information: Not dangerous according to the above specifications.

**UN "Model Regulation":** Not regulated

## 15 Regulatory information

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

Sara

Section 355 (extremely hazardous

Substance is not listed. substances):

Section 313 (Specific toxic chemical

Substance is not listed. listings):

**TSCA (Toxic Substances** 

Control Act): Substance is listed.

**Proposition 65** 

Chemicals known to cause cancer: Substance is not listed.

Chemicals known to cause

Substance is not listed. reproductive toxicity for females:

Chemicals known to cause

Substance is not listed. reproductive toxicity for males:

Chemicals known to cause

Substance is not listed. developmental toxicity:

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Carcinogenic 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)

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



Signal word Warning

Hazard statements Causes skin irritation.

Causes serious eye irritation.

**Precautionary statements** Wear protective gloves/protective clothing/eye protection/face protection.

IF ON SKIN: Wash with plenty of water.

If in eyes: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

15.2 Chemical safety

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

### 16 Other information

The above information is believed to be correct but does not represent any guarantee of the properties of the product, Some new information or amendments may be added afterwards. Prior to use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used, which shall be given the first priority. The products are supposed to be used promptly after purchase in consideration of safety. All chemical products should be treated with the recognition of "having unknown hazards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the conditions and duration of storage. The products must be handled only by those who are familiar with specialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set up on each user's own responsibility. Any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Abbreviations and acronyms:

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 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

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REL: Recommended Exposure Limit
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A