

# Safety Data Sheet



## 1. Identification of the Substance/Mixture and the Supplier

Supplier : National Institute of Advanced Industrial Science and Technology (AIST)  
 Address : 1-3-1, Kasumigaseki, Chiyoda, Tokyo, Japan  
 Office in Charge : Reference Materials Office, Center for Quality Management of Metrology, National Metrology Institute of Japan (NMIJ)  
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 Emergency Contact : Same as above

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ID Number : 6901002

Identification of the Material : Certified Reference Material NMIJ CRM 6901-b  
 C-peptide

Recommended Use of the Chemical and Restriction on Use : This reference material can be used, for calibration of analysis equipment in C-peptide analysis, quality control and validation/calibration of standard solution. This reference material can be used calibration of analysis equipment and validation of analysis method/equipment of amino acid analysis. In case of use in immunological analysis, confirm the commutability of this reference material. Do not use this reference material for other purposes than testing/research.

## 2. Hazards Identification

GHS classification : Not applicable

GHS label element : -

Signal work : -

Hazards Statement : -

Precautionary Statement :

[Safety Precaution]

Low hazardous nature in normal handling

[First-Aid Measure]

If in eyes: Rinse away immediately with plenty of water for 15 minutes or more. Get medical advice/attention if there is any problem.

If on skin: Rinse away with plenty of water. Get medical advice/attention as required if symptoms are observed.

If inhaled: Remove victim to fresh air and keep at rest. Rinse mouth and nose thoroughly with plenty of water. Get medical

advice/attention.

If ingested: Rinse the mouse with plenty of water and get medical advice/attention if there is any problem.

[Storage]

Store in a freezer (less than  $-20\text{ }^{\circ}\text{C}$ ).

[Disposal]

Dispose of this reference material in accordance with applicable legislation and local government ordinance.

Entrust disposal of this reference material to a professional waste disposal company licensed by prefectural governor.

The other hazards than the above do not result in classification or are not covered by the GHS.

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### 3. Composition/Information on Ingredients

Substance/Mixture : Mixture

#### Ingredient 1

Chemical name : C-peptide

Synonym : -

Chemical or structural formula :  $\text{C}_{129}\text{H}_{211}\text{N}_{35}\text{O}_{48}$

Molecular weight : 3020.3

Amount : About 100  $\mu\text{g}$  (in a vial)

Reference Number in Gazetted List in Japan : Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. : -  
Industrial Safety and Health Act : -

CAS No. : 33017-11-7

#### Ingredient 2

Chemical name : Sodium phosphate monobasic

Synonym : Monosodium phosphate, Sodium dihydrogen phosphate

Chemical or structural formula :  $\text{NaH}_2\text{PO}_4$

Molecular weight : 119.98

Amount : About 7.5 mg (in a vial)

Reference Number in Gazetted List in Japan : Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. : (1)-497  
Industrial Safety and Health Act : Published

CAS No. : 13472-35-0 (anhydride: 7558-80-7)

#### Ingredient 3

Chemical name : Sodium phosphate dibasic

Synonym : Disodium phosphate, Sodium hydrogen phosphate

Chemical or structural formula :  $\text{Na}_2\text{HPO}_4$

formula

- Molecular weight : 141.96  
 Amount : 5.3 mg (in a vial)  
 Reference Number in Gazetted List in Japan : Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. : 1-497  
 Industrial Safety and Health Act : Published  
 CAS No. : 10039-32-4 (anhydride: 7558-79-4)

#### 4. First-aid Measures

- If in eyes : Rinse with clean water for more than 15 minutes. Keep the eyelids apart and rinse inside the eyes  
 Seek medical advice immediately.  
 If on skin : Rinse with a large amount of water and soap.  
 If developing some symptoms, seek medical advice as needed.  
 If inhaled : Remove victim to fresh air and keep at rest.  
 Rinse mouth and nose thoroughly with plenty of water. Get medical advice/attention.  
 If ingested : Make victim drink plenty of water to induce vomiting. Get medical advice/attention if there is any problem.  
 Predicted immediate and delayed symptoms : -  
 Most important symptom/effect : -  
 Protecting Personnel in emergency measures : -

#### 5. Fire-Fighting Measures

- Extinguishing media : Use powder, carbon-dioxide extinguisher at an early stage.  
 carbon-dioxide, powder extinguisher, sand and water.  
 Hydrosoluble foam extinguisher (alcohol resistance foam), carbon-dioxide, powder extinguisher, sand and water. Apply the fire-extinguishing method in case of the usual fire.  
 Specific Hazards : May form irritating or toxic fume (or gas) at the time of fire.  
 Specific extinguishing measure : Remove any combustible sources from the seat of fire and extinguish using appropriate extinguishing agent. Transfer the movable container to a safe place promptly. If impossible to transfer, use water spray to cool the periphery.  
 Protecting fire-fighting personnel : Extinguish from windward, avoid inhaling toxic gases. Use personal protective equipment such as fire-resistant clothing, self-contained compressed air breathing apparatus, closed circuit breathing apparatus, rubber gloves, rubber boots, etc.

#### 6. Accidental Release Measures

- Personal Precaution : Remove ignition source in the vicinity immediately. Prepare

- Personal Protective Equipment and Emergency Procedures : fire-fighting equipment for the possibility of fires.  
 : Ventilate the affected areas thoroughly, if it is in an indoor environment, until the clean-up operation is completed.  
 Use appropriate personal protective equipment during the operation to avoid skin contact of splash etc. and inhalation of dust and gas.
- Environmental Precautions : Take precautions to prevent spillage from draining into rivers etc. to adversely impact the environment. Make it sure to appropriately treat contaminated wastewater in order to prevent untreated wastewater from being released into the surrounding environment.
- Recovery and Neutralization : Adsorb spillage with waste clothes or wiping clothes, and collect in empty containers. Rinse away the remains with plenty of water.
- Prevention of Secondary Disaster : Mark the restricted area with rope etc. to keep out unauthorized people. Carry out the clean-up operation from the windward and make people on the leeward side evacuate.

## 7. Handling and Storage

- Handling
  - Engineering : Avoid direct contact with human body.
- Precautions
  - Precautions for Safe Handling : Avoid rough handling such as turning over, dropping, giving a shock to or dragging containers.  
 Prevent spill, overflow and scattering, and avoid vapor generation.  
 Keep container tightly closed after using this reference material.  
 Wash hands, face etc. thoroughly and gargle after handling this reference material.  
 Restrict drinking, eating and smoking to a designated area.  
 Use appropriate personal protective equipment to avoid inhalation and contact with eyes, skin and clothing.  
 Do not bring gloves and other contaminated personal protective equipment into staff room.  
 Make a place handling this reference material a restricted area to keep out unauthorized people.  
 Use local ventilation system in indoor handling areas.
- Storage
  - Appropriate Storage Conditions : Avoid direct sun-light and store in a freezer (less than  $-20\text{ }^{\circ}\text{C}$ ).
- Safe Container : Glass
- Packaging Material

## 8. Exposure Controls/Personal Protection

- Threshold Limit Value : Not specified
- Permissible Concentration
  - ACGIH TLV-TWA : Not specified

- Values recommended by Japan Society for Occupational Health : Not specified
- OSHA PEL TWA : Not specified
- Engineering Precautions : Nothing special
- Personal Protective Equipment (PPE)
  - Respiratory System : Protective gas mask for organic vapors, Self-contained compressed air breathing apparatus
  - Hands : Protective gloves
  - Eyes : Eye protector (Goggle type as necessary)
  - Skin and Body : Protective clothing, Protective mask
- Hygiene measure
  - Treat in accordance with rules on Industrial hygiene and Industrial safety.

## 9. Physical and Chemical Properties

- Appearance, etc. : Powder
- Color : White
- Odor : No data
- pH : No data
- Melting point : No data
- Boiling point : No data
- Flashing point : No data
- Explosive range : No data
- Vapor pressure : No data
- Relative vapor density(Air=1) : No data
- Specific gravity or bulk specific gravity : No data
- Solubility : No data
- *n*-Octanol/water partition coefficient (Log Po/w) : No data
- Auto-ignition temperature : No data

## 10. Stability and Reactivity

### Stability

- No data available

### Reactivity

- No data available

### Conditions to Avoid

- No data available

### Hazardous Decomposition Products

- No data available

## 11. Toxicological Information

- No data available

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## 12. Ecological Information

### Persistence and Degradability

- No data available

### Bioaccumulative Potential

- No data available

### Ecotoxicity

- No data available

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## 13. Disposal Considerations

Dispose of this reference material in accordance with applicable legislation and local government ordinance.

Entrust disposal of this reference material to a professional waste disposal company licensed by prefectural governor.

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## 14. Transport Information

UN Number : Not applicable

UN : -

Classification

Shipping Name : -

Packing Group : -

ICAO/IATA : Not applicable

Marine : Not applicable

Pollutant

Precautions : Transport this reference material carefully while keeping it away from direct sunlight and fire and preventing accidental release due to falling, overturning, etc.

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## 15. Regulatory Information

- No applicable laws and regulations

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## 16. Other Information

The information in this document is not intended to be exhaustive and is based on currently available information and data. The measures given in this document are applicable only to normal handling conditions. When handling this reference material under special conditions etc., it is recommended to take safety measures appropriate to each specific application and context of use. This document is intended to provide information and not intended to guarantee anything in handling this reference material.