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)
Person in Charge : Certified Reference Material Staff
Telephone No. : +81-29-861-4059
Fax No. : +81-29-861-4009

Identity of Substance/Mixture : Certified Reference Material NMIJ CRM 7521-a
Recommended Use : Diarrhetic Shellfish Toxins in Scallop Edible Parts
Use : This reference material can be used for analysis accuracy control and validation of analysis methods and equipment in the quantification of okadaic acids in scallop edible parts and similar specimens. Do not use this reference material for other purposes than testing/research.

2. Hazards Identification

GHS classification : Not classifiable
GHS label element :
Signal word :
Hazard Statement :
Precautionary statement : [Safety Precaution]

Low risks in normal handling.
Wear personal protective equipment when handling this reference material.

[First-Aid Measures]
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
If on skin: Wash with plenty of water.
If swallowed: Rinse mouth with water. Call a doctor/physician.

[Storage]
Protect container from sunlight. Store in a clean place at temperatures of −30 °C to −20 °C.

[Disposal]
Abide by applicable legislation and ordinances set by local governments. 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 classifiable.

### 3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Substance or mixture</th>
<th>Single substance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical name</td>
<td>Scallop edible parts</td>
</tr>
<tr>
<td>Synonym</td>
<td>-</td>
</tr>
<tr>
<td>Chemical formula</td>
<td>-</td>
</tr>
<tr>
<td>Molecular weight</td>
<td>-</td>
</tr>
<tr>
<td>CAS number</td>
<td>-</td>
</tr>
<tr>
<td>Content</td>
<td>99 % or more</td>
</tr>
</tbody>
</table>

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

Containing the following compounds:
- Okadaic acid (CAS No.78111-17-8): About 0.056 mg/kg
- Dinophysitoxin (DTX1)(CAS No.81720-10-7): About 0.057 mg/kg

### 4. First-aid Measures

**If inhaled**
Remove victim to fresh air and keep at rest and warm. Get medical advice/attention.

**If on skin**
Wash with clean water thoroughly. Remove/Take off all contaminated clothing, shoes, etc.
If skin irritation or rash occurs: Get medical advice/attention.

**If in eyes**
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.

**If swallowed**
Rinse mouth with water thoroughly. Call a doctor/physician.

Protection of First-Aid Responder: Wear personal protective equipment.

### 5. Fire-fighting Measures

**Extinguishing Media**: Extinguishing media appropriate for surrounding fire

**Fire-Specific Hazards**: Nothing special

**Specific Fire-Fighting Method**: Eliminate combustion sources at the origin of fire and put out fire by using extinguishing media. Move movable containers promptly to a safe place. If containers are immovable, cool their surroundings with water fog.

**Protection of Fire-Fighters**: Fight fire upwind to avoid breathing hazardous gas. Use personal protective equipment such as fire protection clothing.
heat-resistant clothing, protective clothing, compressed air open-circuit self-contained breathing apparatus, circulating oxygen respirator, rubber gloves, and rubber boots.

6. Accidental Release Measures

<table>
<thead>
<tr>
<th>Personal Precaution</th>
<th>Use appropriate personal protective equipment to avoid contact with skin and eyes and contamination of personal clothes.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Protective Equipment and Emergency Procedures</td>
<td>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.</td>
</tr>
<tr>
<td>Environmental Precautions</td>
<td>Take precautions to prevent spillage from draining into rivers etc. to adversely impact the environment. Make it sure to appropriately treat contaminated wastewater to prevent untreated wastewater from being released into the surrounding environment.</td>
</tr>
<tr>
<td>Recovery and Neutralization</td>
<td>Collect leaked liquid in empty containers by making it adsorbed to waste cloth, soil, sand etc. Rinse away the remains with plenty of water.</td>
</tr>
<tr>
<td>Prevention of Secondary Disaster</td>
<td>Mark the restricted area with rope etc. to keep out unauthorized people. Carry out the clean-up operation from the upwind side and make people on the downwind side evacuate.</td>
</tr>
</tbody>
</table>

7. Handling and Storage

<table>
<thead>
<tr>
<th>Handling Engineering Precautions</th>
<th>Avoid contact with eyes. Wear appropriate personal protective equipment when handling this reference material. Do not use this reference material for other purposes than testing/research.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local and General Ventilation Precautions for Safe Handling</td>
<td>If vapor/mist is emitted: Seal the emission source and install local ventilation system. Avoid rough handling such as knocking over, dropping, giving a shock to and dragging container. Prevent this reference material from leaking, overflowing and splashing. Do not allow vapor to be emitted. Keep container tightly closed after using this reference material. Wash hands, face, etc. thoroughly and gargle after handling. Restrict drinking, eating and smoking to a designated area. 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.</td>
</tr>
</tbody>
</table>
Wear appropriate personal protective equipment to avoid inhalation and contact with eyes, skin and clothing. Use local ventilation equipment in indoor handling areas.

Storage

Appropriate Storage: Protect container from sunlight. Store in a clean place at temperatures of −30 °C and −20 °C.
Safe Container: Plastic
Packaging Material

※ See the Certificate for the details on appropriate storage conditions and instructions for use as a reference material.

8. Exposure Controls/Personal Protection

Threshold Limit Value
Not specified

Occupational exposure limit
- ACGIH TLV-TWA: Not specified
- Values recommended by Japan Society for Occupational Health: Not specified
- OSHA PEL TWA: Not specified

Engineering Controls
Ventilation/Exhaust: Local ventilation system or General ventilation system
Safety Control/Gas Detection: Measuring equipment, Detecting tube
Storage Precaution: Keep container tightly closed.

Personal Protective Equipment (PPE)
- Respiratory System: Protective mask
- Hands: Protective gloves
- Eyes: Eye protection
- Skin and Body: Protective clothing

Hygiene Controls
Handle this reference material in accordance with industrial health and safety codes.

9. Physical and Chemical Properties

- Appearance, etc.: Paste
- Color: Ocher color
- Odor: No data available
- pH: No data available
- Melting point: No data available
- Boiling point: No data available
- Flashing point: No data available
- Explosive range: No data available
- Vapor pressure: No data available
- Relative vapor density (Air=1): No data available
10. Stability and Reactivity
◇ Stability
   ・ Stable in normal storage conditions

◇ Reactivity
   ・ No data

◇ Possibility of hazardous reactions
   ・ No data available

◇ Conditions to Avoid
   ・ Sunlight, Heat

◇ Incompatible material
◇ Incompatible material
   ・ No data

◇ Hazardous Decomposition Products
   ・ No data

11. Toxicological Information
Serious Eye Damage/ Eye Irritation
   May irritate eyes

12. Ecological Information
Ecotoxicity
   ・ No data available

Persistence and Degradability
   ・ No data available

Bioaccumulate Potential
   ・ No data available

Mobility in soil
   ・ No data available

Ozone depletion potential
   ・ No data available

13. Disposal Considerations
Residual Waste : Incineration method
   Incinerate in an incinerator equipped with scrubber.
Dispose of this reference material in accordance with applicable legislation and local government ordinance.
When the above-mentioned treatments are not possible, entrust disposal of residual waste to a professional waste disposal company licensed by prefectural governor.

Contaminated Container and Package: Dispose of containers after thoroughly removing their contents.

14. Transport Information

UN number: Not applicable
UN classification: -
Material name: -
Container grade: -
ICAO/IATA: Not applicable
Marine pollutant: Not applicable
Precaution: Transport this reference material carefully while keeping it away from direct sunlight and fire and preventing accidental release due to falling, being knocked over, etc.

15. Regulatory Information

- No applicable legislation

This SDS is originally prepared for the use of the material in Japan, thus the stated laws and regulations are stipulated and carried out in Japan. The use of the material in other countries should be referred to and by application of the relevant laws and regulations of the country in which the material will be used.

16. Other Information

Others
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.