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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Prepared on: July 25, 2019
Revised on: 
ID Number: 7405002

Identity of Substance/Mixture: Certified Reference Material NMIJ CRM 7405-b
Arsenic Compounds and Trace Elements in Hijiki Seaweed

Recommended Use of the Chemical and Restriction on Use: This certified reference material (CRM) is intended for use in the analytical accuracy control, and validation of analytical methods and instruments used for the quantification of arsenic compounds and trace elements in hijiki and other seaweeds. 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 and toxicity: -
Other hazard information: Inhalation of large amount of the dust may cause respiratory inflammation due to the dust accumulation.

Precautionary Statement:
[Safety Measures]
Low in harm at normal handling
[Emergency Measures]
Get medical assistance when absorbed large amount of dust. If in eye, wash with plenty of water, get medical assistance as needed.
[Storage]
Protect from light, at room temperature in a clean place.
[Disposal]
Disposal by a commissioned professional waste disposal contractor licensed by the prefectural governor.

Hazardous and toxic properties not specified in the above are neither subject to the classification nor classifiable.

3. Composition/Information on Ingredients

Single or compound: Single product

NMIJ CRM 7405-b
Chemical name : Hijiki seaweed powder  
Synonym : -  
Content : 99.9 %  
Chemical or structural formula : -  
Molecular weight : -  
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 : -  
Except, contains the following elements  
Na, K, Mg, Ca, Sr, P, Al, As, Ba, Cd, Co, Cr, Cu, Fe, Mn, Ni, Pb, Zn

4. First-aid Measures
If in eyes : Rinse carefully with plenty of clean water. Get medical assistance  
If on skin : Rinse with plenty of clean water  
If inhaled : Move to get some fresh air, keep warm and rest. Get medical assistance  
If swallowed : Wash mouth thoroughly with water.  
Possible acute symptom and delayed symptoms : No data available  
Most important characteristics and symptoms : No data available  
Measures to be taken to protect the person applying first aid : Use personal protective equipment.

5. Fire-fighting Measures
Extinguishing media : Use a media compatible with a fire in the surrounding area  
Specific hazards at the time of fire : -  
Specific extinguishing measures : Remove fire sources, extinguish with the extinguishing agent. Transfer the movable containers to a safe place promptly. If impossible to move, cool the periphery by water-spray.  
Protecting fire-fighting personnel. : Fire-safe, heat-resistant protective clothing, air-breathing apparatus, self-contained compressed air breathing apparatus, rubber gloves, rubber boots

6. Accidental Release Measures
- Suppress the dust dispersion and collect as much as possible in an empty container, then wash away with water.

7. Handling and Storage
Handling : Prevent contact with eye  
Avoid inhaling the dust  
Should not be used for purposes other than the original research intent.
Storage : Protect from light, in an airtight container at room temperature.

◇ An appropriate storage condition as a reference material and the precautionary statement of the use should be referred to the certificate.

8. Exposure Controls/Personal Protection
Safety Management : Not established
Precautions
Administrative levels : Not established
Occupational exposure limit
ACGIH TLV-TWA : Not established
Japan Society for Occupational Health Recommended Reference Value
Facility engineering control : In case of generating the dust, seal the source and use local ventilation system
Protective equipment : Dust protective mask, protective gloves, safety eyeglasses, goggles

9. Physical and Chemical Properties
- Appearance, etc. : Powder
- Color : Brown
- 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 : Stable under normal condition
Conditions to avoid : Sunlight, humidity
Hazardous decomposition products : No data available

11. Toxicological information
Skin corrosivity : None
and irritancy
Severe damage to eye/eye irritancy: Possibly irritating
Respiratory sensitization: May be irritating. If inhaled in large amount, accumulation in respiratory tract can be harmful and may cause damages

12. Ecological Information
Degradability, concentration: No data available
Bioaccumulation: No data available
Ecotoxicity: No data available

13. Disposal Considerations
• Disposal shall be in compliance with the ordinances and regulations of local authorities
• Disposal of an empty container shall be after removing/decontaminating the content completely.

14. Transport Information
UN Number: Not applicable
UN Classification: Not applicable
Material name: -
Container grade: -
ICAO/IATA: -
Marine pollutant: -
Precautions: Avoid sunlight, transfer with care. Avoid falling. Do not drop

15. Regulatory Information
• Not applicable

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.