

# Safety Data Sheet



1. Identification o	ft	he Substance/Mixture and the	Supplier		
Supplier	:	National Institute of Advanced In (AIST)	ndustrial Sc	ien	ce and Technology
Address	:	1-3-1, Kasumigaseki, Chiyoda, To	okyo, Japan		
Office in Charge	:	Reference Materials Office, Cent	er for Qualit	ty I	Management of
		Metrology, National Metrology In	nstitute of Ja	apa	ın (NMIJ)
Person in Charge	:	Person in Charge of Certified Ret	ference Mat	eri	als
Telephone No.	:	+81-29-861-4059	Fax No.	:	+81-29-861-4009
<b>Emergency</b> Contact	:	Same as above			
		P	repared on	:	August 18, 2009
		]	Revised on	:	March 31, 2017
		Ref	ference No.	:	7403001
Identity of	:	Certified Reference Material N	MIJ CRM 74	403	8-a
Substance/Mixture		Trace Elements, Arsenobetaine a	nd Methylm	ner	cury in Swordfish
		Tissue			
Recommended Use	:	This reference material can be us	sed for evalu	at	ing or validating
of the Chemical and		analytical methods and instrume	ents used for	• th	e determination of
Restriction on Use		the elements listed below, arseno	betaine and	m	ethylmercury in fish
		tissue or similar matrices.			
		Do not use this reference materia	al for other p	our	poses than
		testing/research.			

# 2. Hazards Identification

		NT. 4 . 1
GHS Classification :	Not classifiable	Not classifiable
GHS Label Element:	-	
Signal Word :	-	
Hazards Statement:	-	
Other Hazards :	-	the dust may cause respiratory
Statement	inflammation due to the dust	accumulation
Precautionary :	[Preventive Measures]	
Statement	Low in harm at normal hand	ling
	[Response]	
	Get medical assistance as wh	en absorbed large amount of dust
	If in eye, wash with plenty of	water, get medical assistance as needed
	[Storage]	
	Protect from light, at room t	emperature in a clean place.
	Store in an airtight containe	er after opening
	[Disposal]	
	Disposal by a commissione	d professional waste disposal contractor
	licensed by the prefectural go	overnor.



Hazardous and toxic properties not specified in the above are not subject to the classification nor classifiable.

#### 3. Composition/Information on Ingredients

Substance or mixture	:	Mixture
Chemical name	:	Swordfish powder
Synonym	:	-
Chemical formula	:	-
Molecular weight	:	-
CAS number	:	-
Content	:	100 %
Reference Number in	:	Act on the Evaluation of Chemical Substances and Regulation of
Gazetted List in Japan		Their Manufacture, etc. :-
		Industrial Safety and Health Act :-

This CRM contains minor elements shown below;

Mn, Fe, Cu, Zn, As, Se, Sr, Cd, Hg, Na, Mg, P, K, Ca.

The concentrations of these ingredients are shown in the tables below;

Elements	Mass fraction (mg/kg)	_	Elements	Mass fraction (mg/kg)
Mn	0.2	-	Na	3.6
${\bf Fe}$	13.1		${ m Mg}$	1.6
Cu	1.3		Р	14.5
Zn	33.6		Κ	26.3
As	6.6		Ca	0.19
Se	2.1	_		
$\mathbf{Sr}$	1.1			
Cd	0.16			
Hg	5.3			

#### 4. First-aid Measures

If in eyes	:	Rinse carefully with plenty of clean water. Get medical assistance
If on skin	•	Flush the skin with plenty of clean water
If inhaled	:	Move to get fresh air, keep warm and rest
		Get medical assistance
If swallowed	:	Wash mouth thoroughly with water.
Anticipated acute and	:	-
delayed symptoms		
The most important	:	-
characteristics and		
symptoms		
Measures to be taken to	:	-
protect the person		
applying first aid		



#### 5. Fire-fighting Measures

Extinguishing media Specific hazards at the time of fire	:	Use a media compatible with a fire in the surrounding area $\ensuremath{\overset{-}{}}$
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

1. Suppress the dust dispersion and collect as much as possible in an empty container, then wash away with water.

### 7. Handling and Storage

#### Handling

- Avoid 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.
- Store in an airtight container after opening
- $\diamond$  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

Points of concern pertaining safety management	gement
Not established	
Administrative levels	
Not established	
Occupational exposure limit	
• ACGIH TLV-TWA :	Not established
<ul> <li>Japan Society for Occupational</li> </ul>	: Not established
Health Recommended Reference	
Value	
Facility engineering control	
• In case of generating the dust, seal th	e source and use local ventilation system
Protective equipment	
• Dust protective mask,, protective glov	res, safety eyeglasses, goggles
9. Physical and Chemical Properties	-

•Odor	:	No data
• Color	:	Yellowish white
•Appearance, etc.	:	Powder

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•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	:	No data
specific gravity		
•Solubility	:	May dissolve in water
• <i>n</i> -Octanol/water partition	:	No data
coefficient (Log Po/w)		
•Auto-ignition temperature	:	No data

### 10. Stability and Reactivity

$\bigcirc$ Stability	
Stable under normal condition	
$\Diamond$ Reactivity	
No data available	
$\Diamond$ Conditions to avoid	
Sunlight, humidity	
◇Hazardous decomposition products	
No data available	
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## 11. Toxicological information

Skin corrosivity and irritancy :	None
Severe damage to eye/eye irritancy :	Possibly irritating
Respiratory sensitization :	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	:	Transfer with care. Avoid falling. Do not drop

#### 15. Regulatory Information

•No applicable laws and regulations

 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.