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)
Person in Charge : Person in Charge of Certified Reference Materials
Prepared on : July 13, 2009
Revised on : March 31, 2017
Reference No : 7504001
Identity of Substance/Mixture : Certified Reference Material NMIJ CRM 7504-a
Recommended Use : Pesticides in Unpolished Rice
Recommended Use of the Chemical and Restriction on Use :

This reference material can be used for controlling the precision of analysis or for confirming the validity of analytical methods or instruments during analysis of pesticides (Fenitrothion and Etofenprox) in unpolished rice samples and similar materials. Do not use this reference material for other purposes than testing/research.

2. Hazards Identification
GHS classification : Unclassifiable
GHS label element : -
Signal word : -
Hazard and toxicity : -
Other hazard and toxicity : If inhaled in a large amount, the accumulation in respiratory organ causes impairment.
Precautionary statement : [Preventive measures] Low in hazard when handled normally.
[Response] If inhaled the dust in a large amount, get assistance of respiratory specialist.
If in eyes, rinse with a large amount of water and get medial assistance if necessary.
[Storage] Store in a clean place protected from light at the temperature of about –30 °C.
[Disposal] Outsource to a professional industrial waste disposal contractor. 
Hazardous and toxic properties not specified in the above are neither the object of the classification nor classifiable.

3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Single or compound</th>
<th>Compound product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical name</td>
<td>Unpolished rice powder</td>
</tr>
<tr>
<td>Synonym</td>
<td></td>
</tr>
<tr>
<td>Content</td>
<td>Over 99 %</td>
</tr>
<tr>
<td>Chemical or structural formula</td>
<td></td>
</tr>
<tr>
<td>Molecular weight</td>
<td></td>
</tr>
<tr>
<td>Reference Number in Gazetted List in Japan</td>
<td>Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. :</td>
</tr>
<tr>
<td></td>
<td>Industrial Safety and Health Act :</td>
</tr>
</tbody>
</table>

Ingredient 1

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Fenitrothion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synonym</td>
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</tr>
<tr>
<td>Chemical formula</td>
<td>C₉H₁₂NO₅PS</td>
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<tr>
<td>Molecular weight</td>
<td>277.23</td>
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<tr>
<td>CAS number</td>
<td>122-14-5</td>
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<tr>
<td>Content</td>
<td>Approximately 0.1 mg/kg</td>
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<tr>
<td>Reference Number in Gazetted List in Japan</td>
<td>Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. : 3-2616</td>
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<tr>
<td></td>
<td>Industrial Safety and Health Act : Published</td>
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</tbody>
</table>

Ingredient 2

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Ethofenprox</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synonym</td>
<td></td>
</tr>
<tr>
<td>Chemical formula</td>
<td>C₂₅H₂₈O₃</td>
</tr>
<tr>
<td>Molecular weight</td>
<td>376.49</td>
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<tr>
<td>CAS number</td>
<td>80844-07-1</td>
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<tr>
<td>Content</td>
<td>Approximately 0.2 mg/kg</td>
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<tr>
<td>Reference Number in Gazetted List in Japan</td>
<td>Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc. : 3-3981</td>
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<tr>
<td></td>
<td>Industrial Safety and Health Act : 4-14-178</td>
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</tbody>
</table>

Ingredient 3

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Fthalide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synonym</td>
<td></td>
</tr>
<tr>
<td>Chemical formula</td>
<td>C₈H₂Cl₄O₂</td>
</tr>
<tr>
<td>Molecular weight</td>
<td>271.91</td>
</tr>
</tbody>
</table>
CAS number : 27355-22-2
Content : Approximately 0.1 mg/kg
Reference Number in Gazetted List in Japan : Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.

Ingredient 4
Chemical name : Isoprothiolane
Synonym : -
Chemical formula : C_{12}H_{18}O_{4}S_{2}
Molecular weight : 290.39
CAS number : 50512-35-1
Content : Approximately 1.3 mg/kg
Reference Number in Gazetted List in Japan : Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc.

4. First-aid Measures
◇ If in eye
  1. Rinse well with clean water
  2. Get medical assistance
◇ If on skin
  1. Rinse well with clean water
◇ If inhaled
  1. Move to a fresh air, rest and keep warm.
  2. Get medical assistance
◇ If swallowed
  1. Wash the mouth well with water
◇ Measures to be taken to protect the person applying first aid
  Use personal protective equipment.

5. Fire-fighting Measures
Extinguishing media : Fire extinguishing media corresponding to the fire in the surrounding area.
Specific hazards at the time of fire : None
Specific extinguishing measures : Remove combustion sources away from the seat of the fire and extinguish with fire extinguishing agent. If possible, promptly transfer the container to safe area. If unable to transfer, cool down the periphery with water spray.
Protecting fire-fighting personnel : Use protective equipment such as fire-resistant clothing, heat-resistant protective clothing, protective clothing, air-breathing apparatus, closed-circuit self-contained oxygen breathing apparatus, rubber gloves, rubber boots, etc.
6. Accidental Release Measures

- Collect as much as possible in an empty container by a method that can prevent the dust to scatter

7. Handling and Storage

Handling
- Avoid contacting with eyes
- Avoid inhaling the dust
- This material should be used only for study purposes

Storage
- Store in a clean place protected from light at the temperature of about −30 °C.

8. Exposure Controls/Personal Protection

Considerations for safety management
- Not established

Administrative level
- Not established

Occupational exposure limit
- ACGIH TLV-TWA: Not established
- Japan Society for Occupational Health Recommended Reference: Not established

Facility engineering
- In case of exuding dust, seal the source and install local ventilation system.

Protective equipment
- Dust protecting mask, protective gloves, safety eyeglasses

9. Physical and Chemical Properties

- Appearance, etc.: Powder
- Color: Milky 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: May dissolve in water.
- n-Octanol/water partition coefficient (Log Po/w): No data
- Auto-ignition temperature: No data
10. Stability and Reactivity
◇Stability
  ・Stable under normal condition
◇Reactivity
  ・No data available
◇Conditions to avoid
  ・Sunlight, humidity
◇Hazardous decomposition products
  ・No data available

11. Toxicological Information
Skin corrosivity/irritation            : None
Severe damage to eyes/ eye irritation: Irritation possible
Respiration organ sensitivity        : If inhaled in a large amount, the accumulation in respiratory organ causes impairment.

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

13. Disposal Considerations
  ・Disposal should be according to the related laws and regulations as well as to the ordinances of the local government.
  ・Before disposing the empty container, the content should be completely discarded,

14. Transport Information
UN Number                             : Not applicable
UN Classification                     : Not applicable
Material name                         : —
Container grade                        : —
ICAO/IATA                             : —
Marine pollutant                      : —
Precautions                           : Prevent the container from dropping, falling, etc. and transport carefully.
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.