

Safety Data Sheet



1. Identification of the Substance/Mixture and the Supplier

Supplier : National Institute of Advanced Industrial Science and Technology (AIST)
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Identity of Substance/Mixture : Certified Reference Material NMIJ CRM 7507-a
 Green onion powder (Pesticides in Green Onion)
 Recommended Use of the Chemical and Restriction on Use : The intended use for this CRM is confirming the validity of analytical methods or instruments during analysis of pesticides (diazinon, fenitrothion, permethrin, cypermethrin, and etofenprox) in green onion samples and similar materials. Do not use this reference material for other purposes than testing/research.

2. Hazards Identification

GHS classification : Not classifiable
 GHS label element : Not classifiable
 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 medical assistance if necessary.
 [Storage]
 Protect from light and at the temperature of about -30 °C
 [Disposal]
 Outsource to a professional industrial waste disposal contractor licensed by the prefectural governor.

Hazardous and toxic properties not specified in the above are neither the object of the classification nor classifiable

3. Composition/Information on Ingredients

Single substance or mixture : Mixture
 Chemical name : Green onion
 Synonym : -
 Chemical formula : -
 Molecular weight : -
 CAS number : -
 Content : >99 %
 Reference Number in : Act on the Evaluation of Chemical Substances and
 Gazetted List in Japan Regulation of Their Manufacture, etc. : -
 Industrial Safety and Health Act : -

This CRM contains ingredients shown below

Ingredient 1

Chemical name : Diazinon
 Synonym : (*O,O*-diethyl *O*-2-isopropyl-6-methylpyrimidin-4-yl phosphorothioate)
 Chemical formula : C₁₂H₂₁N₂O₃PS
 Molecular weight : 304.34
 CAS number : 333-41-5
 Content : 0.9 mg/kg
 Reference Number in : Act on the Evaluation of Chemical Substances and
 Gazetted List in Japan Regulation of Their Manufacture, etc. : 5-923
 Industrial Safety and Health Act : Published

Ingredient 2

Chemical name : Fenitrothion
 Synonym : (*O,O*-dimethyl-*O*-4-nitro-*m*-tolyl phosphorothioate)
 Chemical formula : C₉H₁₂NO₅PS
 Molecular weight : 277.23
 CAS number : 122-14-5
 Content : 4.41 mg/kg
 Reference Number in : Act on the Evaluation of Chemical Substances and
 Gazetted List in Japan Regulation of Their Manufacture, etc. : 3-2616
 Industrial Safety and Health Act : Published

Ingredient 3

Chemical name : Permethrin
 Synonym : (3-phenoxybenzyl(1*RS*,3*RS*;1*RS*,3*RS*)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate)
 Chemical formula : C₂₁H₂₀Cl₂O₃
 Molecular weight : 391.29

CAS number : 52645-53-1
 Content : 7.14 mg/kg
 Reference Number in : Act on the Evaluation of Chemical Substances and
 Gazetted List in Japan Regulation of Their Manufacture, etc. : 3-4010
 Industrial Safety and Health Act : Published

Ingredient 4

Chemical name : Cypermethrin
 Synonym : ((*RS*)- α -cyano-3-phenoxybenzyl(*1RS,3RS*)-(1*RS,3RS*)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate)
 Chemical formula : C₂₂H₁₉C₁₂NO₃
 Molecular weight : 416.3
 CAS number : 52315-07-8
 Content : 3.98 mg/kg
 Reference Number in : Act on the Evaluation of Chemical Substances and
 Gazetted List in Japan Regulation of Their Manufacture, etc. : -
 Industrial Safety and Health Act : -

Ingredient 5

Chemical name : Etofenprox
 Synonym : (2-(4-ethoxyphenyl)-2-methylpropyl 3-phenoxybenzyl ether)
 Chemical formula : C₂₅H₂₈O₃
 Molecular weight : 376.49
 CAS number : 80844-07-1
 Content : 13.93 mg/kg
 Reference Number in : Act on the Evaluation of Chemical Substances and
 Gazetted List in Japan Regulation of Their Manufacture, etc. : 3-3981
 Industrial Safety and Health Act : 4-14-178

4. First-aid Measures

If in eye : Rinse well with clean water. Get medical assistance
 If on skin : Rinse well with clean water. Take off the contaminated clothing and shoes, etc. Get medical assistance
 If inhaled : Move to a fresh air, rest and keep warm. Get medical assistance.
 If swallowed : Rinse well inside the mouth with water. Get medical assistance
 Anticipated acute and delayed symptoms : -
 Measures to protect the person applying emergency 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 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	: Extinguishing activities on windward side, avoid inhaling toxic gas. 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

Personal precautions	: Remove ignition sources nearby promptly. Keep extinguishing equipment close at hand in case of ignition.
Protective equipment and emergency procedure	: If in the indoor, ventilate well until the spill or leak is treated completely. Use appropriate protective equipment to prevent the skin from contact with airborne droplets or to protect from inhaling dust and gas.
Environmental precaution	: —
Recovery neutralization	: —
Measures to prevent secondary accident	: 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	: Protect from light, at the temperature of about $-30\text{ }^{\circ}\text{C}$.
Material for safe packing:	: Glass

8. Exposure Controls/Personal Protection

Administrative levels	Not established
Occupational exposure limit (Substance name)	
•ACGIH TLV-TWA (2000)	: Not established
•Japan Society for Occupational Health Recommended Reference (1998)	: Not established
•OSHA PEL TWA	: 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 : Green
- 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 : A part of the constituent 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

- | | |
|--|--|
| 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
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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,
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14. Transport Information

UN Number : Not applicable

UN : Not applicable

Classification

Material name : -

Container : -

grade

ICAO/IATA : -

Marine : -

pollutant

Precautions : Avoid direct sunlight. Prevent the container from dropping, falling, etc. and transport carefully.

15. Regulatory Information

- Not applicable
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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.
