



Safety Data Sheet

SDS No.:
SDS-P/G-S/03

Siputox

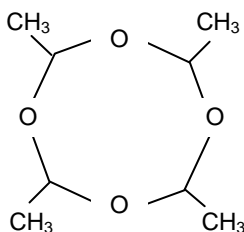
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Section 1: Identification of the Hazardous Chemical and of the Supplier

1.1 Product Identifier

Product Name: Metaldehyde 5% Extruded Granule
Trade Name: Siputox
Active Ingredient: 2,4,6,8-tetramethyl-1,3,5,7-tetroxocane
CAS No.(AI): 108-62-3
Structural Formula:



Recommended Usage: Molluscicide

1.2 Supplier's Information

Address: Agricultural Chemicals (M) Sdn. Bhd.
962, Lorong Perusahaan 8
Taman Perindustrian Perai
13600 Perai , Pulau Pinang
Malaysia
Tel.: +6-04-3907988
Fax: +6-04-3905703
Web: www.agrichem.com.my
Emergency Phone: +6-04-3907988

Section 2: Hazard Identification

Classification: Specific Target Organ Toxicity-Repeated Exposure, category 2

Pictogram:



Signal Word: Warning

Hazard Statement:
H373 May cause damage to organs through prolonged or repeat exposure



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Precautionary Statement:

P260

Do not breathe dust

P314

Get medical advice/attention if you feel unwell

Section 3: Composition and Information of the Ingredients of the Hazardous Chemical

| Component | CAS No. | Weight, % | Hazard Code |
|-----------------------|----------|-----------|------------------------|
| Metaldehyde Technical | 108-62-3 | 5 | H228, H301 |
| Colouring agent | - | <5 | H315, H318, H335, H372 |
| Preservative | - | <5 | H319 |
| Carrier | - | <50 | H319 |

Section 4: First-aid Measures

| | |
|---------------------|--|
| Inhalation: | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention. |
| Skin Contact: | Remove all contaminated clothing. Wash with plenty of soap and water. Get medical advice/attention. |
| Eye Contact: | 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. |
| Ingestion: | Rinse mouth. Get immediate medical advice/attention. |
| Symptoms: | No data available. |
| Notes to Physician: | No data available. |

Section 5: Fire-fighting Measures

| | |
|-------------------------------|--|
| Suitable Extinguishing Media: | Carbon dioxide (CO ₂), chemical foam, dry chemical. |
| Specific Hazard During Fire: | No data available. |
| Special Protective Equipment: | Fire fighters should wear full-faced self contained breathing apparatus and protective clothing. |

Section 6: Accidental Release Measures

| | |
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| Personal Precautions: | Wear protective gloves/protective clothing/eye protection/face protection. |
| Environmental Precautions: | Avoid release to the environment. |



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Method for Cleaning Up: Evacuate non essential personnel. Ventilate area. Collect the spill into waste container for disposal. Wash the contaminated area with a little water and detergent. Absorb with inert material such as clay or earth. Collect into the same container for disposal.

Section 7: Handling and Storage

Precautions for Safe Handling: Wear protective gloves, protective clothing and face protection. Wash skin thoroughly after handling. Avoid breathing dust. Use only outdoors or in a well-ventilated area. Avoid release to the environment.

Conditions for Safe Storage: Store in a well-ventilated place. Keep container tightly closed.

Incompatibles: Acids and heating cause depolymerisation to acetaldehyde and paraldehyde.

Section 8: Exposure Control and Personal Protection

Exposure Limit:

| Source | Component | CAS No. | Limit | |
|---------------------------------------|-----------------|---------|---------|--|
| ACGIH | Colouring agent | - | TLV-TWA | 5 mg/m ³ |
| OSHA Permissible Exposure Limit (PEL) | Carrier | - | TWA | 15 mg/m ³ Total Particulate |
| OSHA Permissible Exposure Limit (PEL) | Carrier | - | TWA | 5 mg/m ³ Respirable Fraction |
| ACGIH (TLV) | Carrier | - | TWA | 2 mg/m ³ for respirable dust |
| NIOSH (REL) | Carrier | - | TWA | 10 mg/m ³ Total Particulate |
| NIOSH (REL) | Carrier | - | TWA | 5 mg/m ³ Respirable Fraction |

Engineering Control: General ventilation or local exhaust ventilation.

Individual Protection Measure: Wash hands thoroughly after handling. Avoid breathing dust. Use personal protective equipment as required. Use only outdoors or in a well-ventilated area.

Personal Protective Equipment:

Eye Protection: Wear eye protection if needed.

Skin Protection: Wear protective gloves and protective clothing.

Respiratory Protection: Wear face protection, pesticide respiratory masks.



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Section 9: Physical and Chemical Properties

| | |
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| Appearance: | Light reddish-brown extruded granule |
| Odour: | Characteristic odour |
| Odour Threshold: | No data available |
| pH: | No data available |
| Melting/Freezing Point: | 191°C (Technical) |
| Initial Boiling Point: | Not applicable |
| Boiling Range: | Not applicable |
| Flash Point: | 50 - 55°C, closed cup (Technical) |
| Evaporation Rate: | No data available |
| Auto-Flammability: | >400°C (Technical) (Method:self-ignition temperature for solids) |
| Upper Flammability Limit: | No data available |
| Lower Flammability Limit: | No data available |
| Vapour Pressure: | 6.6 Pa (25°C) (Technical) |
| Vapour Density: | No data available |
| Relative Density: | No data available |
| Solubility in Water: | Practically insoluble in water and common organic solvent |
| Partition Coefficient P _{o/w} : | 0.12 (20°C) (Technical) |
| Auto-ignition Temperature: | >365°C (Technical) |
| Decomposition Temperature: | No data available |
| Burning Number: | Very rapid combustion with flame propagation (20°C), Method: Source of ignition: glowing platinum wire, approx. 1000°C (Technical) |
| Dust Explosion Class: | Strong dust explosion, indicator 2 -Method:Modified Hartmann Tube (Technical) |

Section 10: Stability and Reactivity

| | |
|-------------------------------------|--|
| Reactivity: | Stable under recommended storage conditions. |
| Chemical Stability: | Stable under normal conditions. |
| Hazardous Reaction: | No data available. |
| Condition to Avoid: | Direct sunlight, heat and extreme temperature. |
| Incompatible Material: | Acids and heating cause depolymerisation to acetaldehyde and paraldehyde. |
| Hazardous Decomposition Product: | Acetaldehyde and paraldehyde. |



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Section 11: Toxicological Information

11.1 Acute Toxicity

| | | |
|--|---------------------|---|
| Oral LD ₅₀ : | | |
| | Rat (female) | 5000 mg/kg |
| Dermal LD ₅₀ : | | |
| | Rat (male & female) | >2000 mg/kg |
| Inhalation, LC ₅₀ : | | More than maximum attainable concentration (MAC) of 3.03 mg/l |
| (Rat, male & female) | | |
| *Could not be classified in a GHS category since it could not be determined whether the LC ₅₀ lies between the MAC (3.03mg/l) & 5.00mg/l or is more than 5.00mg/l | | |

11.2 Chronic Effect from Short and Long Term Exposure

| | |
|--|---|
| Skin Contact: | Not irritant (Rabbit, male) Not sensitizer (Guinea pig, male & female) |
| Eye Contact: | Not irritant (Rabbit, female) |
| Germ Cell Mutagenicity: | No data available. |
| Carcinogenicity: | No data available. |
| Reproductive Toxicity: | No data available. |
| Specific Target Organ Toxicity - Repeated Exposure: | May cause damage to organs through prolonged or repeated exposure. |

11.3 Symptoms

No data available.

Section 12: Ecological Information

Ecotoxicity:

Component: Metaldehyde Technical

| | | |
|--------------------------------------|---|------------|
| Fish Toxicity, LC ₅₀ : | | |
| | Rainbow trout, <i>Oncorhynchus mykiss</i> (96h) | 75 mg/l |
| Fish Toxicity, NOEC: | | |
| | Fathead minnow, <i>Pimephales promelas</i> (33d, early-life stage) | 8.9 mg/l |
| Aquatic Toxicity, EC ₅₀ : | | |
| | Water flea, <i>Daphnia magna</i> (48h) | >90 mg/l |
| | Algae, <i>Desmodesmus subspicatus</i> (72h, growth inhibition) | >200 mg/l |
| | Bacteria, <i>Activated sludge</i> (3h, respiration inhibition) | >1000 mg/l |
| Aquatic Toxicity, NOEC: | | |
| | Water flea, <i>Daphnia magna</i> (21d, reproduction test) | 90 mg/l |



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|--|----------|--|
| Component: Colouring agent | | |
| Fish Toxicity, LC ₅₀ : | | |
| Fathead minnow, <i>Pimephales promelas</i> (96h) | 484 mg/l | |

Persistence and Degradability: 2.8%, respirometer test, 28 – not readily biodegradable (Technical)
6%, Zahn-Wellens test (Technical)

Bioaccumulative Potential: BCF 11 – does not bioaccumulate(Technical)
(28d, Bluegill sunfish, *Lepomis macrochirus*)

Mobility in Soil: No data available.


Other Adverse Effect: No data available.

Section 13: Disposal Information

Dispose of contents/container to Kualiti Alam or in accordance to local regulation.

Section 14: Transportation Information

| | |
|-------------------------|---------------------------------|
| Land (ADR/RID) | |
| Proper Shipping Name | Pesticide, Solid, Toxic, N.O.S. |
| Hazard Class | 6.1 |
| Hazchem Code | - |
| UN number | 2588 |
| Packing Group | III |
| Label / Mark | 6 |
| Sea (IMDG) | |
| Proper Shipping Name | Pesticide, Solid, Toxic, N.O.S. |
| Hazard Class | 6.1 |
| UN Number | 2588 |
| Packing Group | III |
| Marine Pollutant | - |
| Label | 6 |
| Transport Document Name | - |
| Air (IATA) | |
| Proper Shipping Name | Pesticide, Solid, Toxic, N.O.S. |
| Hazard Class | 6.1 |
| UN number | 2588 |
| Packing Group | III |
| Label / Mark | 6 |
| Transport Document Name | - |

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Section 15: Regulatory Information

Classification: Specific Target Organ Toxicity-Repeated Exposure, category 2

Signal Word: Warning

Pictogram:



Pesticides Act: Class IV

Classification: -

Section 16: Other Information

Date of Preparation: 25 November 2015

Date of Revision: -

Reference Document: ICOP on Chemicals Classification and Hazard Communication 2014
GHS Purple Book

Disclaimer: To the best of our knowledge, the information contained herein is accurate. However, we cannot assume any liability whatsoever for the accuracy or completeness of the information contained herein.