

# **SUMITHION®**

## **INSECTICIDE**

RESTRICTED  
FOR USE IN FORESTS, WOOD LOTS, TREE NURSERIES, AND CHRISTMAS TREE PLANTATIONS  
FOLLOWING CONSULTATION WITH FEDERAL AND PROVINCIAL FORESTRY REGULATORY  
OFFICIALS AND IN ACCORDANCE WITH THEIR DIRECTIONS

**READ THE LABEL BEFORE USING**

**KEEP OUT OF REACH OF CHILDREN**  
(See side panel for first aid and additional precautions)



### **DANGER POISON**

GUARANTEE: Fenitrothion 1.25Kg/L

REGISTRATION NUMBER: 11137 PEST CONTROL PRODUCTS ACT

NET CONTENTS: 188 LITRES

Registrant:

**Sumitomo Chemical Company, Limited**  
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Osaka 541-8550, JAPAN

® Trademark of Sumitomo Chemical Co., Ltd.

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IF PROLONGED STORAGE IS ANTICIPATED, CONTAINER SHOULD BE PROTECTED FROM RAIN AND SNOW. HOWEVER, THE PRODUCT DOES NOT NEED TO BE PROTECTED FROM FREEZING TEMPERATURES.

**NOTICE TO USER:** This control product is to be used only in accordance with the directions on this label. It is an offence under the PEST CONTROL PRODUCTS ACT to use a control product under unsafe conditions.

**NATURE OF RESTRICTION:** This product is to be used only in the manner authorized; contact local pesticide regulatory authorities regarding appropriate use permits that may be required.

**NOTE:** Consult federal and provincial forestry regulatory officials for specific recommendations regarding:

1. timing of application with regard to the development of the insect pest.
2. mixing an application of this product in your spray equipment.

Federal or provincial forestry or regulatory officials may recommend inclusion of water-soluble dye for purposes of monitoring spray deposits.

### **DIRECTIONS FOR USE**

**FOREST MANAGEMENT:** Ground Application for sites greater than 500 hectares

- I. Ground Application for control of eastern hemlock looper, spruce budworm, and western hemlock looper.

Acceptable application rates are 140-280 g a.i./ha emulsifiable concentrate. Apply as a low-volume or ultra-low volume spray or as an emulsion in sufficient water for good coverage. Make a single application of 280 g a.i./ha or two applications 4 to 6 days apart of 140-210 g a.i./ha. For hemlock looper, apply before the fourth instar. For spruce budworm apply as soon as insects are noted and repeat about one week later, just before the peak of the fourth instar. When used as described for spruce budworm, spruce budmoth may also be controlled.

**Limitations:** Use no more than 280 g a.i./ha for any one application or a total of 420 g a.i./ha applied in two treatments.

- II. Ground application for control of fall cankerworm, jack pine budworm, and sawflies.

Acceptable application rates are 140-280 g a.i./ha emulsifiable concentrate. Apply as a low-volume or ultra-low volume spray or as an emulsion in sufficient water for good coverage. Make a single application of 280 g a.i./ha or two applications 4 to 6 days apart of 140-210 g a.i./ha. For jack pine budworm, apply between the third and sixth instars. For sawflies or fall cankerworm, apply as soon as the larvae appear. For Swaine jack pine sawfly, apply at the peak of emergence of the second instar.

**Limitations:**

- i) Use no more than 280 g a.i./ha for any one application or a total of 420 g a.i./ha applied in two treatments.
- ii) Buffer zones are required around all specified aquatic systems. No direct applications of fenitrothion are to take place within 400 m upwind or 100 m downwind of these specified aquatic systems as defined under Environmental Precautions.

Do not mix with products other than those specified on the registered label.

WOODLANDS MANAGEMENT: Aerial applications for sites less than 500 hectares.

I. Aerial application for control of fall cankerworm, jack pine budworm, sawflies and minor uses such as in seed orchards

Acceptable application rates are 140-280 g a.i./ha emulsifiable concentrate. Apply as a low-volume or ultra-low volume spray or as an emulsion in sufficient water for good coverage. Make a single application of 280 g a.i./ha or two applications 4 to 6 days apart of 140-210 g a.i./ha. For jack pine budworm, apply between the third and sixth instars. For sawflies or fall cankerworm, apply as soon as the larvae appear. For Swaine jack pine sawfly, apply at the peak of emergence of the second instar.

**Limitations:**

- i) Use no more than 280 g a.i./ha for any one application or a total of 420 g a.i./ha applied in two treatments.
- ii) All aerial applications of fenitrothion must be conducted using light (up to 12,500 lb) fixed-winged aircraft or rotary-wing aircraft, or aircraft must be equipped with electronic guidance systems (e.g., Global Positioning System).
- iii) Buffer zones are required around all specified aquatic systems. No direct applications of fenitrothion are to take place within 400 m upwind or 100 m downwind of these specified aquatic systems as defined under Environmental Precautions.

WOODLANDS MANAGEMENT - Ground application for sites 500 hectares or less

For control of Eastern hemlock looper, fall cankerworm, jack pine budworm, sawflies, spruce budworm, western hemlock looper. Acceptable application rates are 140-280 g a.i./ha emulsifiable concentrate.

Apply as a low-volume or ultra-low-volume spray or apply as an emulsion in sufficient water for good coverage. Make a single application of 280 g a.i./ha or two applications 4 to 6 days apart of 150-210 g a.i./ha. For hemlock looper, apply before the fourth instar. For jack pine budworm, apply between the third and sixth instars. For sawflies or fall cankerworm, apply as soon as the larvae appear. For Swaine jack pine sawfly, apply at the peak emergence of the second instar. For spruce budworm, apply as soon as insects are noted, and repeat about one week later, just before the peak of the fourth instar. When used as described for spruce budworm, spruce budmoths may also be controlled.

**MIXING DIRECTIONS:**

Do not mix this product with materials other than those listed below.

Final spray mixtures should be thoroughly agitated before use, and should not be allowed to stand for extended periods without adequate agitation to insure homogeneous mixture.

ULTRA ULTRA LOW VOLUME APPLICATION: Mix 40% SUMITHION with 60% Dowanol TPM and apply at the rate of 0.4 L/ha.

WITH OIL: Dowanol TPM or Cyclosol 63 may be used alone as solvents or with suitable oil such as Insecticide Diluent 585 (Contact “Company Name” for specifications). Proportions of these components in the tank mix for applying 210 g or 280 g of a.i. in specified volume per hectare are as follows:

	210 g a.i./ha					280 g a.i./ha			
	per 1.5 L/ha		per 0.75 L/ha			per 1.5 L/ha		per 0.75 L/ha	
	Percent by Volume					Percent by Volume			
Sumithion Tech.	11	11	22	22		15	15	30	30
Cyclosol 63	40	–	78	–		45	–	70	--
Dowanol TPM	–	45	–	78		–	50	–	70
Diluent 585	49	44	–	–		40	35	–	--

The amount of solvent or diluent used may vary depending on aircraft/applicator speed, atomization equipment and total spray volume per hectare and temperature.

ULTRA LOW APPLICATION WITH WATER:

Dowanol TPM or Cyclosol 63 may be used as solvents and Atlox 3409F or Triton X114 as emulsifiers when preparing water mixes. Proportions of these components in the tank mix for applying 210 g of active ingredient in 1.5 L/ha are as follows:

	210 g a.i./ha					280 g a.i./ha			
	Percent by Volume					Percent by Volume			
Sumithion Tech	11	11	11	11	15	15	15	15	15
Dowanol TPM	1.5-40	–	–	–	1.5-5.0	–	–	–	--
Cyclosol 63	-	15-24	–	4.0	–	15-24	–	5.0	--
Atlox 3409F	1.5	–	–	1.5	1.5	–	–	1.5	3
Triton X 114	–	3	5-7*	–	–	3	5-7	–	--
Water	86.0-83.5	71-62	84-82	83.5	82-78.5	67-58	80-78	78.5	82

\* The higher rate (7% ) should be used when the water temperatures are below 10° C or above 18° C

**NOTE:** The amount of solvent, emulsifier and water used may vary depending on aircraft/applicator speed, atomization equipment, total spray volume per hectare, and temperature.

“Gel” formation can occur if Triton X114 comes into direct contact with water. Therefore, it is essential that fenitrothion technical, Cyclosol 63 if used and Triton X114 ARE THOROUGHLY MIXED IN THE ORDER LISTED BEFORE THE MIXTURE IS ADDED TO WATER. If tracer dye is used, this should be added after all other components have been thoroughly mixed.

## **PRECAUTIONARY STATEMENTS**

### **SAFETY PRECAUTIONS**

It is necessary to distinguish between the higher order of operator exposure to the concentrated insecticide prior to dilution and spraying, and the much lower exposure of third party or bystanders to the dilute spray resulting from drift spraying operations. Precautionary measures relevant to the concentrated product and operational personnel who are likely to be exposed to it during handling and loading are outlined under the heading PRODUCT PRECAUTIONS.

Bystanders should be encouraged to avoid direct exposure to the dilute spray mist.

Triton X114 is an eye irritant. Wear suitable goggles when working with this material.

### **PRODUCT PRECAUTIONS**

**KEEP OUT OF REACH OF CHILDREN.** This product is harmful if swallowed, inhaled, or absorbed through the skin. Avoid contact with eyes, skin or clothing. Do not breathe vapors or spray mist. Persons involved in pumping insecticide concentrate from drums and the mixing-loading process are cautioned to wear proper protective clothing such as rubber boots, rubber suit or aprons, rubber gloves, a respirator, goggles, and a cap or a hat. If spilled on skin, wash immediately with soap and water. If clothing becomes contaminated, remove it and wash clothing before re-use. Persons in contact with product are cautioned to wash hands, arms, and face frequently with soap and water throughout the operation, after handling and certainly before eating or smoking. Do not allow children or pets to come in contact with treated areas until sprays have dried.

Combustible. Keep away from heat, sparks, or open flame. Keep container closed when not in use. Keep product out of reach of children. Do not contaminate food or feed. Keep unauthorized and unprotected persons out of loading, mixing and application zones.

### **ENVIRONMENTAL PRECAUTIONS**

Undiluted product is toxic to wildlife. Exercise caution in handling the contents of the container, and in disposing of the container to prevent exposure of wildlife to the undiluted product. Do not contaminate water by cleaning of equipment or disposal of wastes. Consult the provincial regulatory agency for information on the cleanup of spills. Do not apply when weather conditions favour drift or run-off from areas treated.

Do not apply directly to aquatic systems, or to areas where surface water is present or to intertidal areas below the mean high water mark. Appropriate buffer zones as listed under Limitations must be established between treatment blocks and aquatic systems. As a minimum, specified aquatic systems include all rivers designated as double-sided and all lentic (standing) water bodies, including impoundments, beaver ponds and bog ponds, that appear on the most recent 1:50,000 topographic map of the area to be treated, or as identified by more up-to-date data (e.g., GIS systems) in the particular jurisdiction and approved by provincial regulatory authorities. Lentic (standing) water bodies that do not appear on a 1:50,000 topographic map of the treatment area, or a more up-to-date data system, but are visible from the air during pretreatment reconnaissance flights should also be included, where possible.

This pesticide is toxic to birds. Applications may adversely affect birds in rangeland areas. This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

#### **PERSONAL PROTECTIVE EQUIPMENT (PPE)**

**Applicators and other handlers must wear:** long-sleeved shirt and long pants, shoes plus socks and chemical-resistant headgear for overhead exposure.

**Mixers and Loaders must wear:** long-sleeved shirt and long pants, waterproof gloves, shoes plus socks and chemical-resistant headgear.

Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### **USER SAFETY RECOMMENDATIONS:**

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

## **FIRST AID**

In case of poisoning, call a physician or poison control center immediately. Have patient lie down and keep quiet.

**If swallowed:** If possible contact a physician, Poison Control Center, or emergency center before inducing vomiting. If not possible, administer water freely and induce vomiting by giving one dose (15mL) of syrup of ipecac. If vomiting does not occur within 10 to 20 minutes, administer second dose. If syrup of ipecac is not available, induce vomiting by touching the back of the throat with a finger. Repeat until vomit fluid is clear. The patient should be lying down with the head below the foot level and facing down or to one side. Professional medical assistance should be secured immediately. **DO NOT INDUCE VOMITING TO AN UNCONSCIOUS PERSON OR TO PERSONS IN A CONVULSIVE STATE.** Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

**If on skin:** Remove contaminated clothing and wash skin immediately with plenty of soap and warm water.

**If in eyes:** Wash eyes with fresh water for 15 minutes. If irritation continues see a doctor.

**If inhaled:** Remove person from exposure area.

## **TOXICOLOGICAL INFORMATION**

Sumithion is an organophosphate cholinesterase inhibitor. Signs and symptoms of cholinesterase inhibition include headache, dizziness, a sense of "tightness" in the chest, sweating, contracted pupils, stomach pains, vomiting and diarrhea. If signs and symptoms of toxicity occur administer atropine sulfate in large therapeutic doses repeated as necessary to the point of tolerance. 2-PAM (pralidoxime) is also antidotal but should only be administered in conjunction with atropine. Do not give morphine. Observe for pulmonary edema, which may develop in serious cases of poisoning even after 12 hours. At first signs of pulmonary edema, the patient should be placed on supplemental oxygen and treated symptomatically. Note to Physicians: For emergency information call (612) 851-8179, ext. 137 or, in the U.S.A., 1-800-892-0099.

## **DISPOSAL**

Empty containers may still contain a small quantity of product on both interior and exterior surfaces. The procedures outlined below should be followed to decontaminate empty containers:

1. Rinse the empty drum thoroughly three consecutive times with 25 L of operational spray diluent oil. Incorporate all the retained rinsings in batches of dilute spray for aerial application.
2. If any area of the exterior drum is wet with insecticide concentrate, decontaminate it as

described above in 1.

3. Follow provincial instructions for any required additional cleaning of th container prior to its disposal.

4. Make the empty container unsuitable for further use.

5. Dispose of the container in accordance with provincial requirements.

6. For information on disposal of unused, unwanted product, contact the manufacturer or the provincial

regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill, and for clean-up of spills.

**NOTICE TO BUYER**

Seller's guarantee shall be limited to the terms set out on the label and, subject thereto, the buyer assumes the risk to persons or property arising from the use or handling of this product and accepts the product on that condition.



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