

Sumitomo Sumithion[®] ULV Premium Grade Insecticide**SECTION 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER**

Product Name: Sumitomo Sumithion[®] ULV Premium Grade Insecticide
Other Names: Sumithion TG
Recommended Use: Sumithion ULV is an insecticide for the control of locusts and grasshoppers.
Company: Sumitomo Chemical Australia Pty Ltd
A.B.N. 21 081 096 255
Address: 501 Victoria Avenue Chatswood NSW 2067
Telephone Number: (02) 9904-6499 (Mon–Fri 8am–5pm EST)
Emergency Telephone Number: 1800 024 973 (24 hours) (EMERGENCIES ONLY)
Website: www.sumitomo-chem.com.au

SECTION 2: HAZARDS IDENTIFICATION

Hazard Classification: Hazardous according to the criteria of the Australian Safety and Compensation Council (ASCC).
Risk Phrases: Xn:
R20/21/22 – Harmful by inhalation, in contact with skin and if swallowed.
N:
R50/53 – Very toxic to aquatic organisms; may cause long-term adverse effects in the aquatic environment.
R56 – Toxic to soil organisms.
R57 – Toxic to bees.
Safety Phrases: S23 – Do not breathe fumes or vapour.
S24 – Avoid contact with skin.
S25 – Avoid contact with eyes.
SUSDP Classification (Poison Scheduling): S6
ADG Classification: Classified as a Dangerous Good (under the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code).
Correct Shipping Name:
ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC (Fenitrothion).
Dangerous Goods Class: 6.1 Hazchem Code: 2X
UN Number: 3018 Packaging Group: III

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Identity	CAS number	Proportion
Fenitrothion	122-14-5	min 93%
Other ingredients determined as non hazardous	-	to 100%

SECTION 4: FIRST AID MEASURES

If poisoning occurs, immediately contact a doctor or Poisons Information Centre (Phone Australia 131126; New Zealand 0800 764 766), and follow the advice given. Show this Material Safety Data Sheet to a doctor.

General: In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).

Swallowed:	<u>If swallowed</u> , contact a Poisons Information Centre or a doctor at once. If swallowed, activated charcoal may be advised. Give atropine if instructed.
Skin contact:	<u>If splashed on skin</u> , contact a Poisons Information Centre or a doctor at once. Remove contaminated clothing and wash skin thoroughly with soap and water. Launder contaminated clothing before re-use.
Eye contact:	<u>If in eyes</u> , hold eyes open and flood with water for at least 15 minutes and contact a Poisons Information Centre or a doctor at once.
Inhalation:	<u>If inhaled</u> , remove from contaminated area to fresh air. Contact a Poisons Information Centre or a doctor at once.
Note to physician:	Apply basic aid and decontamination procedures. Treat symptomatically. Fenitrothion is an organophosphate pesticide and is an anticholinesterase (see Section 11).

SECTION 5: FIRE FIGHTING MEASURES

Flashpoint:	157°C (Pensky-Martens closed test) (Active Ingredient)
Flammable limits:	NDA
Auto-ignition temperature:	315°C (Active Ingredient)
Suitable Extinguishing Media:	Small fire: Use dry chemical, carbon dioxide or water spray. Large fire: Use water spray, fog or foam – Do not use water jets.
Hazards from Combustion Products:	This product is combustible. Normal combustion forms carbon dioxide and water vapour, and may produce oxides of sulphur, nitrogen and phosphorus. Incomplete combustion can produce carbon monoxide. Prevent electrostatic discharge and no smoking. Above the flashpoint an explosive mixture can be formed.
Precautions for Fire Fighting and Special Protective Equipment:	In case of fire, the evolution of dangerous gases is possible. Ensure respiratory equipment is available. Evacuate immediate area. Advise Fire Brigade of nature of hazard. Wear full protective equipment, including breathing apparatus. Remove drums from site of fire, if possible, as overheating may cause drums to explode. Surrounding containers should be cooled using a fine water spray. All run-off must be contained.
Hazchem Code:	2X

SECTION 6: ACCIDENTAL RELEASE MEASURES

Emergency Telephone Number: 1800 024 973 (24 hours) (EMERGENCIES ONLY)

METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN UP PROCEDURES

SPILLS

Stop the source of the spill if it is safe to do so. Contain the spill to prevent further contamination of the soil, surface water, or ground water. Wear personal protective equipment as specified in Section 8. Do not allow material to enter sewers or bodies of water.

Small Spills: (Liquid spill)	Apply absorbent inert material such as soil, dry sand or vermiculite to the spill area. Sweep up material when absorption is complete and contain in a refuse vessel for disposal. If necessary, wash the spill area with an alkali detergent and water and absorb and contain as above. On completion of clean up remove and wash all contaminated clothing and equipment with detergent and water. Any heavily contaminated clothing should be placed in a plastic garbage bag and placed in a sealable drum. Do not smoke, eat or drink during the clean-up operation.
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**Large Spills:
(Liquid Spill)** Place leaking containers into salvage drums. Apply absorbent inert material such as soil, dry sand or vermiculite to the spill area. Form a barricade around spill and in front of drains or waterways in spill vicinity, using soil or other non reactive material. Sweep up material and contain in a refuse vessel for disposal. **Contact emergency services as required.**

On completion of clean up remove and wash all contaminated clothing and equipment with detergent and water. Any heavily contaminated clothing should be placed in a plastic garbage bag and placed in a sealable drum. Do not smoke, eat or drink during the clean-up operation.

Disposal: Contaminated material must be disposed of in accordance with all State and/or Local regulations.

SECTION 7: HANDLING AND STORAGE

**Precautions for
Safe Handling:** DO NOT USE OR STORE near flame, sparks or hot surfaces. Use only in well ventilated area. Keep container closed. Keep out of reach of children, unauthorised persons and animals. After handling and before eating, drinking or smoking, wash hands, arms and face with soap and water. For personal protection, see Section 8.

**Conditions for
Safe Storage:** Keep out of reach of children, unauthorised persons and animals. Store in the closed, original container in a dry, cool, well ventilated area, out of direct sunlight. Keep away from heat. Do not store near food, feedstuffs, fertiliser or seed. Store at ambient temperatures.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

NATIONAL EXPOSURE STANDARDS

Australian Safety and Compensation Council (ASCC) exposure standards have not been assigned for the active ingredient.

BIOLOGICAL LIMIT VALUES

Production workers handling this product regularly should be monitored for the effects of organophosphate pesticides. A baseline level should be established prior to any potential exposure. See Guidelines for Health Surveillance [NOHSC: 7039 (1995)].

ENGINEERING CONTROLS

No engineering control measures are allocated to the use of this product, however always use in a well ventilated area. Do not inhale fumes / vapour / spray.

PERSONAL PROTECTIVE EQUIPMENT

Product is poisonous if absorbed by skin contact, inhaled or swallowed. Repeated minor exposure may have a cumulative poisoning effect.

Respiratory Protection: Use only in well ventilated areas. Respiratory protection is recommended.

Hand Protection: Wear chemical resistant gloves.

Eye Protection: Avoid contact with eyes. Eye contact can be avoided by wearing protective eyewear.

Skin and Body Protection: Avoid contact with skin or clothing. Skin contact should be minimised by wearing protective clothing including gloves, hat, long sleeved shirt, long pants and chemical resistant boots.

Other Information: Wash hands after use. Launder clothes, gloves and face shield or goggles before reuse.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Deep yellow/ red or reddish yellow oily liquid.
Odour:	Characteristic odour.
pH:	3.4 – 4.0
Vapour Pressure:	1.37×10^{-4} mm Hg at 20°C
Vapour Density:	NDA
Boiling Point:	140 – 145°C at 0.1mm Hg with decomposition
Melting Point:	0.3°C
Viscosity:	37.6 cP at 22°C
Solubility in water:	14 ppm at 30°C
Specific Gravity:	1.30 – 1.35 g/mL at 20°C
Flashpoint:	157°C (Pensky-Martens closed test)
Explosive Limits:	NDA
Ignition Temperature:	315°C

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability:	Stable under recommended storage and handling conditions (See Section 7).
Conditions to Avoid:	Avoid high temperatures and direct sunlight. Isolate from sources of heat, naked flames or sparks.
Incompatible Materials:	Alkaline materials and oxidizing agents.
Hazardous Decomposition Products:	Emits toxic and irritating fumes under fire conditions (See also Section 5).
Hazardous Reactions:	NDA

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE HEALTH EFFECTS (Active Ingredient)

Toxicology

Swallowed:	MODERATELY TOXIC. (LD ₅₀ (male rat) = 1700 mg/kg and LD ₅₀ (female rat) = 1720 mg/kg) Accidental ingestion of small amounts may be harmful.
Skin:	MODERATELY TOXIC. (LD ₅₀ (male rat) = 810 mg/kg and LD ₅₀ (female rat) = 840 mg/kg) Contact with skin may be harmful.
Inhalation:	MODERATELY TOXIC. (LC ₅₀ rat (4 hour) > 2.21 mg/L of air) Inhalation of vapour may be harmful.

Irritation

Skin:	NON-IRRITANT.
Eye:	NON-IRRITANT.

Sensitisation

Skin:	NOT A SKIN SENSITISER.
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CHRONIC/CARCINOGENIC HEALTH EFFECTS (Active Ingredient)

Not carcinogenic.

OTHER TOXICOLOGICAL INFORMATION (Active Ingredient)

Mutagenicity Information

Not mutagenic.

Teratology (Birth Defects) Information

Not teratogenic.

Reproduction Information

Not genotoxic.

Like other organophosphate pesticides, fenitrothion acts by inhibiting the activity of the enzyme acetylcholinesterase, which is important in the conduction of impulses to nerves and muscles. Fenitrothion is oxidized in animals, insects and plants to derivatives that are more potent inhibitors of cholinesterase than the parent compound. In mammals, both the parent compound and its derivatives are predominantly metabolised in the liver and then mostly excreted within a 24-hour period. However, in some cases, suppression of metabolism of the compound during its repeated administration can lead to an extended persistence in the body.

SECTION 12: ECOLOGICAL INFORMATION

DO NOT contaminate streams, rivers or waterways with the chemical or used containers.

ECOTOXICITY (Active Ingredient)

Toxic to fish:	LC ₅₀ Rainbow trout (96 hour) = 1.3 mg/L LC ₅₀ Bluegill sunfish (96 hour) = 2.5 mg/L
Highly toxic to aquatic invertebrates:	EC ₅₀ <i>Daphnia magna</i> (48 hour) = 8.6 µg/L
Toxic to algae:	EC ₅₀ <i>Selenastrum capricornutum</i> (96 hour) = 1.3 mg/L
Low toxicity to toxic to birds:	Acute Oral LD ₅₀ Quail = 23.6 mg/kg. Acute Oral LD ₅₀ Ringneck pheasant = 34.5 mg/kg. Acute Oral LD ₅₀ Mallard duck = 1190 mg/kg.

Highly toxic to bees.

Highly toxic to earthworms.

ENVIRONMENTAL FATE (Active Ingredient)

Fenitrothion and metabolites adsorb moderately strongly to soils and do not leach significantly. Fenitrothion does not persist on vegetation or soil surfaces. Fenitrothion degrades through microbial metabolism with typical half-lives of a few weeks under aerobic conditions. Residues entering water dissipate through photolysis and microbial metabolism with half-lives typically less than a day, as well as through uptake into biota to moderate levels, accompanied by metabolism.

SECTION 13: DISPOSAL CONSIDERATIONS

This material must be disposed of as a hazardous waste. Disposal should be in accordance with local, national or state regulations.

Contaminated Packaging: Triple or preferably pressure rinse containers before disposal. Dispose of rinsings in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500mm in a disposal pit. Empty containers and product should not be burnt.

SECTION 14: TRANSPORT INFORMATION

Road/Rail/Sea/Air	Classified as dangerous in the meaning of Road/Rail (ADG), Sea (IMDG) and Air (ICAO/IATA) transport regulations.
Proper Shipping Name:	ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC (Fenitrothion)
Class:	6.1
Sub Risk Class:	Not applicable
UN Number:	3018
Hazchem Code:	2X
Packing Group:	III

SECTION 15: REGULATORY INFORMATION

Registration Status: This product is currently registered under the Australian Pesticides and Veterinary Medicines Authority (APVMA), approval number 50774.

SECTION 16: OTHER INFORMATION

Abbreviations:

NA	Not Applicable
NDA	No Data Available
Revision Date:	22 June 2009
Revision Number:	5

THE INFORMATION GIVEN IN THIS MSDS IS BASED ON DATA AVAILABLE AS OF THE REVISION DATE GIVEN HEREIN, AND BELIEVED TO BE CORRECT. EACH USER SHOULD READ THIS MSDS AND CONSIDER THE INFORMATION IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE INCLUDING IN CONJUNCTION WITH OTHER PRODUCTS. IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY.