

## Sumitomo Sumi-Alpha<sup>®</sup> Flex Insecticide

### SECTION 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Product Name:** Sumitomo Sumi-Alpha<sup>®</sup> Flex Insecticide  
**Other Names:** Esfenvalerate  
**Recommended Use:** Synthetic pyrethroid insecticide.  
**Company:** Sumitomo Chemical Australia Pty Ltd  
A.B.N. 21 081 096 255  
**Address:** 242 Beecroft Road, Epping NSW 2121  
**Telephone Number:** (02) 8752 9000 (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:  
R20/22 – Harmful by inhalation and if swallowed.  
R43 – May cause sensitization by skin contact.  
R65 – Harmful: May cause lung damage if swallowed.  
Xi:  
R36/38 – Irritating to eyes and skin.  
N:  
R50/53 – Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R57 – Toxic to bees.

**SUSDP Classification (Poison Scheduling):** S6 – POISON

**ADG Classification:** Not classified as a Dangerous Good for transport via road and rail (ADG Code).

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Identity	CAS number	Proportion
Esfenvalerate	66230-04-4	Min 5%
Hydrocarbon solvent	64742-94-5	75%
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:** If swallowed, rinse mouth with water. Seek medical advice. Do not induce vomiting.

**Skin contact:** If on skin, remove contaminated clothing and wash skin thoroughly with soap and water. Launder contaminated clothing before re-use. Seek medical advice if irritation develops.

<b>Eye contact:</b>	<u>If in eyes</u> , hold eyes open and flood with water for at least 15 minutes. Seek medical advice.
<b>Inhalation:</b>	If affected, remove from contaminated area to fresh air. If any signs or symptoms occur or persist, seek medical advice.
<b>Note to physician:</b>	Apply basic aid and decontamination procedures. Symptomatic treatment is advised.

**Synthetic pyrethroids can produce paraesthesia.**

## SECTION 5: FIRE FIGHTING MEASURES

<b>Flashpoint:</b>	69°C (Pensky-Martens Closed Cup)
<b>Flammable limits:</b>	LEL:0.6 UEL: 7.0 (Approximate volume % in air)
<b>Auto-ignition temperature:</b>	> 450°C
<b>Suitable Extinguishing Media:</b>	Small fire: Use dry chemical, carbon dioxide or water spray. Large fire: Use water spray, fog or foam – Do not use water jets.
<b>Hazards from Combustion Products:</b>	Explosive air-vapour mixture may form. Decomposition may give rise to toxic and noxious fumes.
<b>Precautions for Fire Fighting and Special Protective Equipment:</b>	Ensure respiratory equipment is available. Evacuate immediate area. Advise Fire Brigade of nature of hazard. Wear full protective equipment, including protective clothing, eye/face protection and self contained 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.  Avoid contact of water as toxic run-off will form. Contain run-off.

## 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.**

Clear area of all unprotected personnel. Wear full protective equipment including breathing apparatus. Stop leak if safe to do so by manoeuvring the container. Decant leaking container into a clean empty drum remote from the storage area and label. If the leaking container can be repacked, contact Sumitomo Chemical Australia Pty Ltd so that an overdrum and transport for return to a nominated Sumitomo location can be arranged.

Do not flush to drains or sewers. Do not contaminate streams, rivers or watercourses.

Absorb spill with suitable absorbent, such as sawdust, sand, earth or non-combustible absorbent material. Sweep up and put into a container for disposal according to local regulations.

**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. Do not store for prolonged periods in direct sunlight. Do not store near food, feedstuffs, fertiliser or seed. Store at ambient temperatures.

Eye-wash and washing facilities must be readily available. For decontaminating clothing and equipment have soda ash (sodium carbonate) on hand and for decontaminating the disposing spills have lime, soda ash, absorbent material and open head drums on hand.

## SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

### NATIONAL EXPOSURE STANDARDS

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

### 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 spray mist.

### PERSONAL PROTECTIVE EQUIPMENT

**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 (Product Specific)

<b>Appearance:</b>	Clear to slightly hazy yellow liquid.
<b>Odour:</b>	Mild aromatic odour.
<b>pH:</b>	NDA
<b>Vapour Pressure:</b>	0.5 – 0.7 kPa at 15°C
<b>Vapour Density:</b>	4.49 kgm <sup>-3</sup> at 15°C
<b>Boiling Point:</b>	140°C approx.
<b>Melting Point:</b>	NA
<b>Solubility:</b>	Emulsifiable in water at 20°C
<b>Density:</b>	ca. 0.907 at 20°C
<b>Flashpoint:</b>	69°C (Pensky-Martens Closed Cup)
<b>Explosive Limits:</b>	LEL:0.6 UEL: 7.0 (approximate volume % in air)
<b>Ignition Temperature:</b>	>450°C

## SECTION 10: STABILITY AND REACTIVITY

**Chemical Stability:** Stable under recommended storage and handling conditions (See Section 7).

**Conditions to Avoid:** Do not store for prolonged periods in direct sunlight. Isolate from sources of heat, naked flames or sparks.

**Incompatible Materials:** NDA

### Hazardous

**Decomposition Products:** Emits toxic fumes under fire conditions (See also Section 5).

**Hazardous Reactions:** NDA

## SECTION 11: TOXICOLOGICAL INFORMATION

### ACUTE HEALTH EFFECTS (Formulated Product)

#### Toxicology

##### Swallowed:

**TOXIC.**  
(LD<sub>50</sub> (rat) = 399 mg/kg bw)  
Accidental ingestion of small amounts is likely to be harmful.

##### Skin:

**LOW TOXICITY.**  
(LD<sub>50</sub> (rat) >2000 mg/kg bw)  
Contact with skin is not expected to be harmful.

##### Inhalation:

**LOW TOXICITY.**  
(LC<sub>50</sub> rat (4 hour) > 2.6 mg/L, the highest obtainable concentration)  
Inhalation of vapour may be harmful.

#### Irritation

##### Skin:

**IRRITANT.**

##### Eye:

**MODERATE TO SEVERE IRRITANT.**

#### Sensitisation

##### Skin:

**MODERATE SENSITISER.**

### 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.

## SECTION 12: ECOLOGICAL INFORMATION

**DO NOT contaminate ponds, waterways and drains with product or used containers.**

### ECOTOXICITY (Active Ingredient)

Highly toxic to algae: IC<sub>50</sub> *Scenedesmus subspicatus* (96 hour) = 6.5 µg/L

Low toxicity to birds: LD<sub>50</sub> Mallard duck > 2250 mg a.s./kg bw  
LD<sub>50</sub> Bobwhite quail = 1312 mg a.s./kg bw

Highly toxic to bees: LD<sub>50</sub> Bees (contact) = 0.017 µg/bee

### ECOTOXICITY (Formulated Product)

Highly toxic to fish: LC<sub>50</sub> Rainbow trout (96 hour) = 4.5 µg/L (equivalent to 0.302 µg a.s./L)

Highly toxic to aquatic invertebrates: LC<sub>50</sub> *Daphnia magna* (48 hour) = 3.4 µg/L (equivalent to 0.228 µg a.s./L)

### ENVIRONMENTAL FATE (Active Ingredient)

Under field conditions, Esfenvalerate is moderately persistent with a half-life ranging from about 15 days to three months depending on soil type. Esfenvalerate and its breakdown products are relatively immobile in soil and thus pose little risk to groundwater.

## 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. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, 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 specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

For refillable containers: Empty contents fully into application equipment. Close all valves and return to point of supply for refill or storage.

#### SECTION 14: TRANSPORT INFORMATION

**Road/Rail/** Not classified as a Dangerous Good for transport via road and rail (ADG Code)

**Sea/Air** Classified as a dangerous good by Sea (IMDG) and Air (ICAO/IATA) transport regulations.

**Proper Shipping Name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (esfenvalerate)

**Class:** 9

**Sub Risk Class:** None

**UN Number:** 3082

**Hazchem Code:** 3Z

**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 53047.

#### SECTION 16: OTHER INFORMATION

**Abbreviations:**

**NA** Not Applicable

**NDA** No Data Available

**Revision Date:** 25 May 2010

**Revision Number:** 6

**Reason for Revision:** Correct classification

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.