

Esbiothrin Technical Grade

SECTION 1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: Esbiothrin Technical Grade
Other Names: S-Bioallethrin; RU 27436
Recommended Use: A raw synthetic material used for the manufacture and preparation of insecticidal products for use by professionals and householders/domestic.
Company: Sumitomo Chemical Australia Pty Ltd
A.B.N. 21 081 096 255
Address: 51 Rawson Street, 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.
N:
R50/53 – Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
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 – POISON
ADG Classification: Classified as a Non-Dangerous Good (under the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code).

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Identity	CAS number	Proportion
Esbiothrin	84030-86-4	>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: If swallowed, do not induce vomiting. Wash mouth with water. Give water to drink. Seek medical advice.

Skin contact:	<u>If on skin</u> , remove contaminated clothing and wash skin thoroughly with soap and water. Launder contaminated clothing before re-use. Seek medical advice if irritation develops.
Eye contact:	<u>If in eyes</u> , hold eyes open and flood with water for at least 15 minutes and seek medical advice.
Inhalation:	If affected, remove from contaminated area to fresh air. If any signs or symptoms occur or persist, seek medical advice.
Note to physician:	Apply basic aid and decontamination procedures. Treat symptomatically. Synthetic pyrethroids can produce parasthesias.

SECTION 5: FIRE FIGHTING MEASURES

Flashpoint:	111°C
Flammable limits:	NDA
Auto-ignition temperature:	NDA
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. May emit toxic and irritating fumes under fire conditions (carbon monoxide and carbon dioxide).
Precautions for Fire Fighting and Special Protective Equipment:	Ensure respiratory equipment is available. Evacuate immediate area. Advise Fire Brigade of nature of hazard. Wear full protective equipment, including breathing apparatus. 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.
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.
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.
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**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. 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 been assigned for the active ingredient.

Exposure Standards for the active, esbiothrin:

Esbiothrin Exposure Limit: 3.8 mg/m³ TWA

ENGINEERING CONTROLS

Provide adequate ventilation. Keep container tightly closed.

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, 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:	Yellow/brown viscous liquid.
Odour:	Faint characteristic odour.
pH:	NDA
Vapour Pressure:	NDA
Vapour Density:	NDA
Boiling Point:	NDA
Solubility in water:	Insoluble
Solubility in other solvents:	Soluble (in most organic solvents)
Density:	1.00 – 1.02 g/mL (20°C)
Flashpoint:	111°C
Explosive Limits:	NDA
Ignition Temperature:	NDA
Octanol/Water Partition Coefficient:	Log Pow = 4.70

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability: Stable under recommended storage and handling conditions (See Section 7). Unstable in light, particularly UV light.

Conditions to Avoid: Avoid direct sunlight. Isolate from sources of heat, naked flames or sparks.

Incompatible Materials: None known.

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

Hazardous Reactions: NDA

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE HEALTH EFFECTS

Toxicology

Swallowed:

TOXIC.

(LD₅₀ (rat) = 378 - 432 mg/kg)

Accidental ingestion of small amounts is likely to be harmful.

Skin:

LOW TOXICITY.

(LD₅₀ (rat) > 2000 mg/kg)

Contact with skin is not expected to be harmful.

Inhalation:

MODERATELY TOXIC.

(LC₅₀ rat (4 hour) = 2.63 mg/L of air)

Inhalation may be harmful.

Irritation

Skin:

SLIGHT IRRITANT.

Eye:

SLIGHT IRRITANT.

Sensitisation

Skin:

NOT A SKIN SENSITISER.

CHRONIC/CARCINOGENIC HEALTH EFFECTS

Not carcinogenic.

OTHER TOXICOLOGICAL INFORMATION

Mutagenicity Information

Not mutagenic.

Teratology (Birth Defects) Information

Not teratogenic.

SECTION 12: ECOLOGICAL INFORMATION

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

ECOTOXICITY

Highly toxic to fish:

LC₅₀ Rainbow Trout (96 hour) = 13 µg/L

Highly toxic to aquatic invertebrates:

EC₅₀ *Daphnia magna* (48 hour) = 8.9 µg/L

Toxic to bees.

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:

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.

SECTION 14: TRANSPORT INFORMATION

Road/Rail	Classified as Non-dangerous in the meaning of Road/Rail (ADG)
Sea/Air	Classified as dangerous in the meaning of Sea (IMDG) and Air (ICAO/IATA) transport regulations.
Proper Shipping Name:	Environmentally Hazardous Substance, Liquid, N.O.S. (Esbiothrin)
Class:	9
Sub Risk Class:	Not applicable
UN Number:	3082
Hazchem Code:	2X
Packing Group:	III

SECTION 15: REGULATORY INFORMATION

Registration Status:	The active ingredient is registered with the Australian Pesticides and Veterinary Medicines Authority (APVMA) and is also a known substance in New Zealand (HSNO Act).
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SECTION 16: OTHER INFORMATION

Abbreviations:

NA	Not Applicable
NDA	No Data Available
Revision Date:	2 September 2014
Revision Number:	6

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.