

Material Safety Data Sheet

Esbiothrin Technical Grade

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IENTIFICATION

Chemical product name: Esbiothrin Technical Grade
Common chemical name: S-Bioallethrin; RU 27436
Company information: Choice Chemicals Ltd.

Centre of City, No.249 Wuyi Road, Furong District,

Changsha, Hunan 410011, P.R. China

Tel: 0086 731 89856736 Fax: 0086 73189878447 E-mail: info@choice-chem.com

24 hr Emergency number: 0086 13298652316

SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS

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 - HAZARDS IDENTIFICATION

Chemical Identity	CAS number	Proportion
Esbiothrin	84030-86-4	>93%
Other ingredients determined as non hazardous	-	to 100%



SECTION 4 - HAZARDS IDENTIFICATION

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: 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.

Eye contact: If in eyes, 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: Thermal decomposition will produce CO.

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. 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.

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 - HANDING 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 tightly 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.

Keep out of reach of children, unauthorised persons and animals.

Conditions for Safe Storage:

Store in the closed, original container in a dry, cool, well ventilated area, out of direct sunlight. Keep the container tightly closed. The floor of the storage room must be impermeable to prevent the escape of liquids. Do not store near food, feedstuffs, fertiliser or seed. Store at ambient temperatures.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL, PROTECTION

NATIONAL EXPOSURE STANDARDS

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

ENGINEERING CONTROLS

Provide adequate ventilation. Keep container tightly closed. The floor of the storage room must be impermeable to prevent the escape of liquids.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Use only in well ventilated areas. Respiratory protection isrecommended.

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 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 = 1.70

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: Strong oxidising agents. Bases.

Hazardous Decomposition Products: In combustion emits toxic fumes (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: NON-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.

Reproduction Information

Not genotoxic.

SECTION 12 - ECOLOGICAL INFORMATION

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

ECOTOXICITY

Highly toxic to fish: LC50 Bluegill sunfish (96 hour) > 13 μ g/L

LC50 Rainbow trout (96 hour) = $8.9 \mu g/L$

Highly toxic to aquatic



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 landfill. If no landfill is available, bury the disposal pit specifically marked and set waterways, desirable vegetation and tree

product should not be burnt.

containers in a local authority containers below 500mm in a up for this purpose clear of roots. Empty containers and

SECTION 14 - TRANSPORT INFORMATION

Road/Rail/Sea/Air Classified as Non-dangerous in the meaning of Road/Rail (ADG) **Proper Shipping Name:** Classified as dangerous in the meaning of Sea (IMDG) and Air (ICAO/IATA) transport regulations.

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).

SECTION 16 - OTHER INFORMATION

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