

Cyphenothrin Technical Grade

SECTION 1: IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND COMPANY INFORMATION

Product Name	Cyphenothrin Technical Grade
Company	Sumitomo Chemical Australia Pty Ltd. A.B.N. 21 081 096 255
Address	501 Victoria Avenue Chatswood NSW 2067
Website	www.sumitomo-chem.com.au
Telephone Number	(02) 9904-6499 (Mon–Fri 8am–5pm EST)
Emergency Telephone Number	1800 024 973 (24 hours) (EMERGENCIES ONLY)
Intended Use	Cyphenothrin TG is used for preparing insecticidal products for use by professionals and householders.

SECTION 2: HAZARDS IDENTIFICATION

Approved Criteria Classification	Not Hazardous according to the criteria of the National Occupational Health and Safety Commission (NOHSC).
SUSDP Classification	Schedule 6.
ADG Classification	Classified as a Dangerous Good.
Active Constituent	NOHSC exposure standards have not been assigned for the active ingredient.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Product Name	Cyphenothrin
Other Names and Codes	Gokilaht TG
Manufacturer's Product Code	S-2703 Forte
IUPAC Name	(<i>RS</i>)- α -cyano-3-phenoxybenzyl (<i>1RS,3RS;1RS,3SR</i>)-2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropanecarboxylate <i>Roth</i> : (<i>RS</i>)- α -cyano-3-phenoxybenzyl (<i>1R</i>)- <i>cis-trans</i> -2,2-dimethyl-3-(2-methylprop-1-enyl)cyclopropanecarboxylate
Chemical Abstracts Name	cyano(3-phenoxyphenyl)methyl 2,2-dimethyl-3-(2-methyl-1-propenyl)cyclopropanecarboxylate

Chemical Entity	CAS Number	Proportion
Cyphenothrin	39515-40-7	≥ 92 %
Other ingredients determined as non-hazardous	-	to 100 %

SECTION 4: FIRST AID MEASURES

First Aid	If poisoning occurs, immediately contact a doctor or Poisons Information Centre (telephone: 13 11 26), 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 the label where possible).
Inhalation	<u>If inhaled</u> remove from contaminated area to fresh air. If any signs or symptoms occur or persist, seek medical advice.
Skin	<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	<u>If in eyes</u> hold eyes open and flood with water for at least 15 minutes and seek medical advice.
Ingestion	<u>If swallowed</u> , do not induce vomiting. Wash mouth with water. Give water to drink. Seek medical advice.

Symptoms of exposure
(based on animal studies)
Note to physician

Symptoms include hypersensitivity, muscle fibrillation, tremor, ataxia, rapid/irregular respiration, excess salivation, and urinary incontinence.
Apply basic aid and decontamination procedures.
Treat symptomatically.
Antidote: Unknown

SECTION 5: FIRE FIGHTING MEASURES

Fire and Explosion Hazards	Flash point: 130°C Ignition temperature: 340°C
Extinguishing Media	Dry chemical powder, carbon dioxide. Large fires: waterspray or foam.
Unsuitable Extinguishing Media	Water with full waterjet.
Special Exposure Hazard	None known.
Hazardous Decomposition / Combustion Products	May emit toxic and irritating fumes under fire conditions, including hydrogen cyanide.
Protective Equipment	Ensure respiratory equipment is available. Evacuate immediate area. Wear full protective equipment, including breathing apparatus. See also Section 8.
Fire Fighting	Advise Fire Brigade of nature of hazard. Surrounding containers should be cooled using a fine water spray. All run-off must be contained.

SECTION 6: ACCIDENTAL RELEASE MEASURES

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

Handling	Keep out of reach of children, unauthorised persons and animals. After handling and before eating, drinking or smoking wash hands, arms and face thoroughly with soap and water. For personal protection see Section 8.
Storage Requirements	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

Engineering Controls	No engineering control measures are allocated to the use of this product, however always use in a well ventilated area.
Exposure Limits	No exposure limits have been established for this material.
Personal Protection	
Respiratory	Use only in well ventilated areas.
Hand	Wear protective gloves.
Eye	Avoid contact with eyes. Eye contact can be avoided by wearing protective eyewear.
Skin and Body	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	Launder clothes before reuse.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Viscous liquid
Colour	Yellow
Odour	Faint characteristic
Boiling point / range	154°C at 0.1 mmHg
Melting point / range	NA
Flammability	NA
Explosive Properties	NA
Explosion Limits	NA
Oxidising Properties	NA
Vapour Pressure	0.12 mPa (20°C), 0.4 mPa (30 °C)
Specific gravity	1.08 (25 °C)
Solubility in water	9.01 ± 0.8 µg/L (25°C)
Solubility in other solvents	In hexane 4.84, methanol 9.27 (both in g/100g, 20°C)
pH value	5.4
Partition coefficient n-octanol / water	Log P _{ow} = 6.29
Relative vapour density (air=1)	NA
Viscosity	3400 CP at 20°C

SECTION 10: STABILITY AND REACTIVITY

Stability	Stable under recommended storage and handling conditions. (See Section 7).
Conditions to avoid	Avoid direct sunlight.
Materials to avoid	Alkaline materials and highly acidic media.
Hazardous Decomposition Products	Emits toxic fumes under fire conditions (See also Section 5).

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE HEALTH EFFECTS**Toxicology**

Oral	TOXIC: LD ₅₀ : 318 mg/kg (male rats); 419 mg/kg (female rats). Accidental ingestion of small amounts is likely to be harmful.
Dermal	NOT HARMFUL: LD ₅₀ : > 5000 mg/kg (Rat)
Inhalation	LOW TOXICITY: LC ₅₀ (3 hours): > 1850 mg/m ³ (rat) Inhalation of vapour is not expected to be harmful.

Irritation

Skin	NON-IRRITANT (rabbit)
Eye	SLIGHT IRRITANT (rabbit)

<u>Sensitisation</u>	NOT A SKIN SENSITISER
-----------------------------	-----------------------

<u>Other Toxicological Information</u>	No mutagenic, carcinogenic or teratogenic effects.
---	--

CHRONIC HEALTH EFFECTS	No observable effects have been noted.
-------------------------------	--

SECTION 12: ECOLOGICAL INFORMATION

Do not contaminate streams, rivers or waterways with the chemical or used containers.

Ecotoxicity

Fish	Highly toxic to fish. LC ₅₀ (96 hours) for rainbow trout: 0.34 µg/L
Daphnia	Highly toxic to aquatic invertebrates. LC ₅₀ (96 hours) for <i>Daphnia magna</i> : 0.43 µg/L
Birds	Dietary LC ₅₀ in bobwhite quail is > 5620 ppm

Environmental Fate

Soil / Environment Degradation involves ester hydrolysis and oxidation.

SECTION 13: DISPOSAL CONSIDERATIONS

Product	This material must be disposed of as a hazardous waste. Disposal should be in accordance with local, national or state regulations.
Contaminated Packaging	Puncture, or shred and bury empty containers in a local authority landfill. If not available, bury the containers below 500 mm 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

UN Number	2902
Class	6.1
Hazchem Code	2WE
Proper Shipping Name	Pesticide, Liquid, Toxic, N.O.S.
Packaging Group	III
Poison Schedule	S6

SECTION 15: REGULATORY INFORMATION

Technical grade is registered with the Australian Pesticides and Veterinary Medicines Authority (APVMA).

SECTION 16: OTHER INFORMATION

Abbreviations	NA Not Applicable NDA No Data Available
Revision date	7-02-2007
Revision number	3

THE INFORMATION ONLY CONCERNS THE ABOVE MENTIONED PRODUCT AND DOES NOT NEED TO BE VALID IF USED WITH OTHER PRODUCT(S) OR IN ANY PROCESS. THE INFORMATION IS TO OUR BEST PRESENT KNOWLEDGE CORRECT AND COMPLETE AND IS GIVEN IN GOOD FAITH BUT WITHOUT WARRANTY. IT REMAINS THE USER'S OWN RESPONSIBILITY TO MAKE SURE THAT THE INFORMATION IS APPROPRIATE AND COMPLETE FOR THE SPECIAL USE OF THIS PRODUCT.