

# Material Safety Data Sheet

## D-Phenothrin Technical Grade

### SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Chemical product name:** D-Phenothrin Technical Grade  
**Common chemical name:** Sumithrin TG  
**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 731 89878447  
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 – Harmful by inhalation.  
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):** Not scheduled.

**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:**

PYRETHROID PESTICIDE, LIQUID, TOXIC (d-Phenothrin)

**Dangerous Goods Class:** 6.1

**UN Number:** 3352

**Hazchem Code:** 2X

**Packaging Group:** III

CHOICE CHEMICALS LTD.

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### SECTION 3 - HAZARDS IDENTIFICATION

Chemical Identity	CAS number	Proportion
d-Phenothrin	188023-86-1	≥ 94%
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:** 140 C (Cleveland open-cup)

**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 - 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 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 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 liquid.

**Odour:** Faint characteristic odour.

**pH:** 5.16 (20 C)

**Vapour Pressure:** 0.0187 mPa (21 C)

**Vapour Density:** NDA

**Boiling Point:** >290 C

**Solubility in water:** <0.0097 g/L (25 C)

**Solubility in other solvents:** Hexane, methanol: >5.0 g/mL

**Density:** 1.06 g/mL (20 C)

**Flashpoint:** 140 C (Cleveland open-cup)

**Explosive Limits:** NDA

**Ignition Temperature:** NDA

**Octanol/Water Partition**

**Coefficient:** Log Pow = 6.01 (20 C)

## 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:** NOT HARMFUL. (LD50 (rat) > 5000 mg/kg)

**Skin:** NOT HARMFUL. (LD50 (rat) > 5000 mg/kg)

**Inhalation:** MODERATELY TOXIC. (LC50 rat (4 hour) > 2.10 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) > 16 µg/L

LC50 Rainbow trout (96 hour) = 2.7 µg/L

**Highly toxic to aquatic**

**invertebrates:** EC50 Daphnia magna (48 hour) = 4.3 µg/L

**Low toxicity to birds:** Acute Oral LD50 Bobwhite quail > 2500 mg/kg Toxic to bees.

**ENVIRONMENTAL FATE**

Studies have shown that d-Phenothrin is readily absorbed into soil, is photodegradable but not readily biodegradable and has bioaccumulation potential.

### 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.

<b>Contaminated Packaging:</b>	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.
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### 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:** PYRETHROID PESTICIDE, LIQUID, TOXIC. (d-Phenothrin)

**Class:** 6.1

**Sub Risk Class:** Not applicable

**UN Number:** 3352

**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

CHOICE CHEMICALS LTD.

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