



SAFETY DATA SHEET

DATE: 12th April 2024

1. Identification

Product Name: Permethrin

CAS Number: 52645-53-1

Recommended use/Use advised against: No information available

Details of the Australian Supplier:

Astral Scientific Pty Ltd
29 Mangrove Lane
Taren Point NSW 2229

Company Phone Number: 02 9540 2055

Email Address: support@astralscientific.com.au

Emergency Telephone Number: 13 11 26

2. Hazard(s) Identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Label Elements

Signal Word: WARNING

Hazard Statements:

H302 + H332 Harmful if swallowed or if inhaled.

H317 May cause an allergic skin reaction.

H410 Very toxic to aquatic life with long lasting effects.



Precautionary Statements:

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

3.Composition / Information on ingredients

Component	CAS #	Purity / Weight %
Permethrin	52645-53-1	<= 100 %

4.First-aid measures

General Advice	If symptoms persist, call a physician.
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.
Inhalation	Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.
Ingestion	Clean mouth with water and drink plenty of water afterwards. Get immediate medical attention if symptoms occur. Never give anything by mouth to an unconscious person.
Most important symptoms/effects	May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause allergic skin reaction. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing.
Notes to physician	Treat symptomatically

5.Fire-fighting measures

Suitable extinguishing media	Water Foam Carbon dioxide (CO2) Dry powder
Unsuitable extinguishing media	No information available
Flash Point	No information available
Method	No information available
Autoignition temperature	No information available
<u>Explosion limits</u>	
Upper	No information available

Lower No information available

Sensitivity to mechanical impact No information available

Sensitivity to static discharge No information available

Specific hazards arising from the chemical

Carbon oxides Hydrogen chloride gas Combustible. Development of hazardous combustion gases or vapours possible in the event of fire.

Protective equipment and precautions for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

Further information

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

6.Accidental release measure

Personal precautions Use personal protective equipment as required. Ensure adequate ventilation. Avoid dust formation.

Environmental precautions Should not be released into the environment. See section 12 for additional Ecological Information.

Methods for containment/clean-up Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal.

7.Handling and storage

Handling Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes.

Storage Tightly closed. Dry.

8.Exposure controls / personal protection

Personal protective equipment

Eye/Face protection Wear appropriate protective eyeglasses or chemical safety goggles as described by oSHA's eye and face protection regulations in 29 CFR 1910. 133 or European Standard EN166.

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory protection Use an approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene measures Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Physical state Semi-solid melting to a liquid

Appearance No information available

Odor Odorless

Odor threshold No information available

pH No information available

Melting point/range 34 - 35 °C

Boiling point/range > 290 °C at 1,013 hPa

Flash point No information available

Evaporation rate Not applicable

Flammability (solid, gas) No information available

Flammability or explosive elements

Upper No information available

Lower No information available

Vapor pressure No information available

Vapor density Not applicable

Specific gravity No information available

Solubility No information available

Partition coefficient; n-octanol/water No data available

Autoignition temperature No information available

Decomposition temperature No information available

Viscosity Not applicable

10. Stability and reactivity

Reactive hazard None known, based on information available

Stability The product is chemically stable under standard ambient conditions (room temperature) .

Conditions to avoid Incompatible products. Excess heat. Avoid dust formation.

Incompatible materials Strong oxidizing agents

Hazardous decomposition products Carbon monoxide (CO), Carbon dioxide (CO₂), Nitrogen oxides (NO_x), Sulfur oxides

Hazardous polymerization Hazardous polymerization does not occur

Hazardous reactions None under normal processing

11.Toxicological information

Acute Toxicity

Product information / Component information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Permethrin	Rat - 383 mg/kg Remarks: (RTECS) Inhalation: Classified according to Regulation (EU) 1272/2008	Rabbit - > 2,000 mg/kg Remarks: (RTECS)	n/a

Toxicologically synergistic products No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation No information available

Sensitization No information available

Carcinogenicity No information available

Mutagenic effects No information available

Reproductive effects No information available

Developmental effects No information available

Teratogenicity No information available

STOT – single exposure None known

STOT – repeated exposure None known

Aspiration hazard No information available

Symptoms/effects, both acute and delayed Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

Endocrine disruptor information No information available

Other adverse effects The toxicological properties have not been fully investigated.

12.Ecological information

Ecotoxicity

Toxicity to fish flow-through test LC50 - Oncorhynchus mykiss (rainbow trout) - 0.00062 mg/l - 96 h
Remarks: (ECOTOX Database)

Toxicity to daphnia and other aquatic invertebrates static test EC50 - Ceriodaphnia dubia (water flea) - 0.0005 mg/l - 48 h
Remarks: (ECOTOX Database)

Toxicity to algae static test ErC50 - Skeletonema costatum - 0.068 mg/l - 96 h
Remarks: (ECOTOX Database)

Persistence and degradability No information available

Bioaccumulative potential Bioaccumulation Oncorhynchus mykiss (rainbow trout) -
24 h - 0.73µg/l(Permethrin)

Bioconcentration factor (BCF): 3,620

Mobility in soil No information available

Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety
assessment not required/not conducted

Other adverse effects No information available

13. Disposal considerations

Waste disposal methods Waste material must be disposed of in accordance with the
national and local regulations. Leave chemicals in original
containers. No mixing with other waste. Handle uncleaned
containers like the product itself. See www.retrologistik.com
for processes regarding the return of chemicals and
containers, or contact us there if you have further
questions.

14. Transport information

DOT Not regulated

TDG Not regulated

IATA Not regulated

IMDG/IMO Not regulated

15. Regulatory information

International Inventories

TSCA Not listed

Note *Contact supplier for details. One or more substances in this product are either not listed
on the US TSCA inventory, listed on the confidential US TSCA inventory or are otherwise
exempted from inventory listing requirements

DSL/NDSL Complies

EINECS/ELINCS Complies

ENCS This product complies with ENCS:

IECSC This product does not comply with china:

KECL Does not Comply

PICCS Does not Comply

AICS All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

Revision date 12th April 2024

Revision Note No information available.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet