

MATERIAL SAFETY DATA SHEET

POUNCE® 1.5 G INSECTICIDE



MSDS Ref. No: 52645-53-1-21

Version: Global

Date Approved: 11/03/1999

Revision No: 3

This document has been prepared to meet the requirements of the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200; the EC directive, 91/155/EEC and other regulatory requirements. The information contained herein is for the concentrate as packaged, unless otherwise noted.

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: POUNCE® 1.5 G INSECTICIDE**PRODUCT CODE:** 1606**ACTIVE INGREDIENT:** Permethrin**CHEMICAL FAMILY:** Pyrethroid Pesticide**MOLECULAR FORMULA:** C₂₁H₂₀Cl₂O₃ (permethrin)

SYNONYMS: FMC 33297; (3-Phenoxyphenyl)methyl(+/-) cis-trans-3-(2,2-dichloroethenyl)-2,2-dimethylcyclopropanecarboxylate; IUPAC: 3-phenoxybenzyl (1RS)-cis-trans-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate

MANUFACTURER

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Emergency Phone (FMC) 716-735-3765 (Reverse charges)

CHEMTREC (800) 424-9300 (U.S.A. & Canada)
(202) 483-7616 (All other countries)

2. COMPOSITION / INFORMATION ON INGREDIENTS

| <u>Chemical Name</u> | <u>CAS #</u> | <u>Wt.%</u> | <u>PEL/TLV</u> | <u>EC No.</u> | <u>EC Class</u> |
|-----------------------|--------------|-------------|--------------------|---------------|-----------------|
| Permethrin | 52645-53-1 | 1.6 | None | 613-058-00-2 | R22 |
| Aromatic Hydrocarbons | 64742-94-5 | <1.1 | 100 ppm (supplier) | 650-001-00-0 | None |

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

- IMMEDIATE CONCERNS:** - White to beige granules with an aromatic hydrocarbon odor.
- Slightly combustible. May support combustion at elevated temperatures.
 - Thermal decomposition and burning may form toxic by-products.
 - For large exposures or fire, wear personal protective equipment.
 - Highly toxic to fish and aquatic organisms. Keep out of drains and water courses.

POTENTIAL HEALTH EFFECTS: Effects from overexposure result from coming into contact with the eyes or skin, and may result from breathing the dust. Symptoms of overexposure include diarrhea, salivation, tremors, convulsions, hyperactivity and hypersensitivity. Contact with this product rarely produces skin sensations such as numbing, burning and tingling. These skin sensations are reversible and usually subside within 12 hours.

MEDICAL CONDITIONS AGGRAVATED: None presently known.

4. FIRST AID MEASURES

EYES: Flush with water for at least 15 minutes. If irritation occurs and persists, obtain medical attention.

SKIN: Wash with plenty of soap and water. Get medical attention if irritation occurs and persists.

INGESTION: Drink 1 or 2 glasses of water. Never give anything by mouth to an unconscious person. If any discomfort persists, obtain medical attention.

INHALATION: Remove to fresh air. If breathing difficulty or discomfort occurs and persists, contact a medical doctor.

NOTES TO MEDICAL DOCTOR: This product has low oral and dermal toxicity. It is expected to have low inhalation toxicity. It is minimally irritating to the eyes and slightly irritating to the skin. This product contains a granular material (sand) that may cause mechanical irritation to the eyes. Reversible skin sensations (paresthesia) may occur and ordinary skin salves have been found useful in reducing discomfort. Treatment is otherwise controlled removal of exposure followed by symptomatic and supportive care.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Foam, CO₂ or dry chemical. Soft stream water fog only if necessary. Contain all runoff.

FIRE / EXPLOSION HAZARDS: Slightly combustible. This material may support combustion at elevated temperatures.

FIRE FIGHTING PROCEDURES: Isolate fire area. Evacuate downwind. Wear full protective clothing and self-contained breathing apparatus. Do not breathe smoke, gases or vapors generated.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide and/or carbon dioxide. Chlorine and hydrogen chloride may be formed.

6. ACCIDENTAL RELEASE MEASURES

RELEASE NOTES: Isolate and post spill area. Wear protective clothing and personal protective equipment as prescribed in Section 8, "Exposure Controls/Personal Protection". Keep unprotected persons and animals out of the

area.

Keep material out of lakes, streams, ponds and sewer drains. Large spills should be covered to prevent dispersal. For dry material, use a wet sweeping compound or water to prevent the formation of dust. If water is used, prevent runoff or dispersion of excess liquid by diking and absorbing with a non-combustible absorbent such as clay, sand or soil. Vacuum, shovel or pump all waste material, including absorbent, into a drum and label contents for disposal.

To clean and neutralize spill area, tools and equipment, wash with a suitable solution (i.e., bleach or caustic/soda ash and either ethylene glycol or an appropriate alcohol, i.e., methanol, ethanol or isopropanol). Follow this by washing with a strong soap and water solution. Absorb as above, any excess liquid and add to the drums of waste already collected. Repeat if necessary. Dispose of drummed waste according to the method outlined in Section 13, "Disposal Considerations".

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Store in a cool, dry, well-ventilated place. Do not use or store near heat, open flame or hot surfaces. Store in original containers only. Keep out of reach of children and animals. Do not contaminate other pesticides, fertilizers, water, food or feed by storage or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Use local exhaust at all process locations where dust may be emitted. Ventilate all transport vehicles prior to unloading.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: For dust exposure, wear chemical protective goggles or a face shield.

RESPIRATORY: For dust exposure wear, as a minimum, a properly fitted half-face or full-face air-purifying respirator which is approved for pesticides (U.S. NIOSH/MSHA, EU CEN or comparable certification organization). Respirator use and selection must be based on airborne concentrations.

PROTECTIVE CLOTHING: Depending upon concentrations encountered, wear coveralls or long-sleeved uniform and head covering. For larger exposures as in the case of spills, wear full body cover barrier suit, such as a PVC suit. Leather items - such as shoes, belts and watchbands - that become contaminated should be removed and destroyed. Launder all work clothing before reuse (separately from household laundry).

WORK HYGIENIC PRACTICES: Clean water should be available for washing in case of eye or skin contamination. Wash skin prior to eating, drinking or using tobacco. Shower at the end of the workday.

GLOVES:

Wear chemical protective gloves made of materials such as rubber or nitrile. Thoroughly wash the outside of gloves with soap and water prior to removal. Inspect regularly for leaks.

9. PHYSICAL AND CHEMICAL PROPERTIES

ODOR: Aromatic hydrocarbon

APPEARANCE: White to beige granules

MOLECULAR WEIGHT: 391.3 (permethrin)

WEIGHT PER VOLUME: 85 - 89 lb/cu ft. (1360 - 1420 g/L)

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Excessive heat and fire.

STABILITY: Stable

POLYMERIZATION: Will not occur

11. TOXICOLOGICAL INFORMATION

DERMAL LD₅₀: >5000 mg/kg (rabbit)

ORAL LD₅₀: >5000 mg/kg (rat)

INHALATION LC₅₀: 2.3 mg/L/4 hour (rat) (permethrin)

ACUTE EFFECTS FROM OVEREXPOSURE: This product has low oral and dermal toxicity. It is expected to have low inhalation toxicity. It is minimally irritating to the eyes and slightly irritating to the skin. Excessive exposure to dust may irritate the respiratory system, skin and eyes. Experience to date indicates that contact with this product has rarely produced skin sensations such as numbing, burning or tingling. These sensations are reversible and usually subside within 12 hours. Large, toxic doses administered to laboratory animals have produced symptoms such as diarrhea, salivation, tremors and intermittent convulsions. Overexposure to animals, via inhalation, has also produced hyperactivity and hypersensitivity.

CHRONIC EFFECTS FROM OVEREXPOSURE: No data available for the formulation. In studies with laboratory animals, permethrin did not cause reproductive toxicity or teratogenicity. Analysis of chronic feeding studies in both mice and rats with permethrin resulted in the conclusion that permethrin's potential for induction of oncogenicity in experimental animals is low and that the likelihood of oncogenic effects in humans is nonexistent or extremely low. Long-term feeding studies in animals resulted in increased liver and kidney weights, induction of the liver microsomal drug metabolizing enzyme system and histopathological changes in the lungs and liver. An overall absence of genotoxicity has been demonstrated in mutagenicity testing with permethrin.

CARCINOGENICITY:

IARC: Not listed

NTP: Not listed

OSHA: Not listed

OTHER: Not Listed (ACGIH)

12. ECOLOGICAL INFORMATION

Unless otherwise indicated, the data presented below are for the active ingredient.

ENVIRONMENTAL DATA: Permethrin is stable at a wide range of pH values. Permethrin has a moderate rate of degradation in soil and the half-life is related to the soil type, microbial population, concentration in the soil and the

aerobic condition of the soil. Because of its high affinity for organic matter ($K_{oc} = 86,000$), there is little potential for movement in soil or entry into ground water. Permethrin has a Log P_{ow} of 6.1, but because of the ease with which biological systems degrade the molecule, the potential for bioconcentration and accumulation in the environment is low ($BCF = 500$).

ECOTOXICOLOGICAL INFORMATION: Permethrin is highly toxic to fish ($LC_{50} = 0.5 \mu\text{g/L}$ to $315 \mu\text{g/L}$) and aquatic arthropods ($LC_{50} = 0.02 \mu\text{g/L}$ to $7.6 \mu\text{g/L}$). Marine species are often more sensitive than the freshwater species. Bacteria, algae, mollusks and amphibians are much more tolerant of permethrin than the fish and arthropods. Care should be taken to avoid contamination of the aquatic environment. Permethrin is slightly toxic to birds and oral LD_{50} values are greater than 3600 mg/kg . Longer dietary studies showed that concentrations of up to 500 ppm in the diet had no effect on bird reproduction.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Open dumping or burning of this material or its packaging is prohibited. If spilled material cannot be disposed of by use according to label instructions, an acceptable method of disposal is to incinerate in accordance with local, state and national environmental laws, rules, standards and regulations. However, because acceptable methods of disposal may vary by location and regulatory requirements may change, the appropriate agencies should be contacted prior to disposal.

EMPTY CONTAINER: Completely empty package into application equipment then dispose of empty package in accordance with all Federal, State and local regulations.

14. TRANSPORT INFORMATION

U.S. DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Environmentally hazardous substance, solid, n.o.s.

TECHNICAL NAME: Permethrin

PRIMARY HAZARD CLASS/DIVISION: 9

UN/NA NUMBER: UN3077

PACKING GROUP: III

REPORTABLE QUANTITY (RQ): None

U.S. SURFACE FREIGHT CLASS: Insecticide, NOI, other than Poison.

MARINE POLLUTANT #1: permethrin (Severe Marine Pollutant)

NAERG: 171

OTHER SHIPPING INFORMATION:

NOTE: This product is regulated for water shipment ONLY. For shipments other than by water, describe using only the 'U.S. Surface Freight Class' above.

15. REGULATORY INFORMATION

UNITED STATES**SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)****SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355):** Not listed**SECTION 311 HAZARD CATEGORIES (40 CFR 370):** Immediate, Delayed**SECTION 312 THRESHOLD PLANNING QUANTITY (40 CFR 370):** The threshold planning quantity (TPQ) for this product, if treated as a mixture, is 10,000 lbs. This product contains the following ingredients with a TPQ of less than 10,000 lbs.: None**SECTION 313 REPORTABLE INGREDIENTS (40 CFR 372):** This product contains the following ingredients subject to Section 313 reporting requirements: (permethrin)**CERCLA (COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT)****CERCLA REGULATORY (40 CFR 302.4):** Not listed**COMMENTS:** Australian Hazard Code : 3XE

U.S. EPA Signal Word : CAUTION

16. OTHER INFORMATION**REVISION SUMMARY** This MSDS replaces Revision #2, dated June 12, 1998. Changes in information are as follows:

Sections: 2, 11, 13 and 16

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