## **MATERIAL SAFETY DATA SHEET**

#### POUNCE® 1.5 G INSECTICIDE



**MSDS Ref. No.:** 52645-53-1-21 **Date Approved:** 11/01/2005

**Revision No.:** 6

This document has been prepared to meet the requirements of the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200; the EC directive, 2001/58/EC and other regulatory requirements. The information contained herein is for the concentrate as packaged, unless otherwise noted.

#### 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** POUNCE® 1.5 G INSECTICIDE

**PRODUCT CODE:** 1606

**ACTIVE INGREDIENT(S):** Permethrin

CHEMICAL FAMILY: Pyrethroid Pesticide

**MOLECULAR FORMULA:**  $C_{21}H_{20}Cl_2O_{3}$  (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**

### **EMERGENCY TELEPHONE NUMBERS**

FMC CORPORATION
Agricultural Products Group
1735 Market Street
Philadelphia, PA 19103

(800) 331-3148 (FMC - U.S.A. & Canada) (716) 735-3765 (FMC - Reverse charges)

(215) 299 6000 (General Information)

For leak, fire, spill, or accident emergencies, call: (800) 424-9300 (CHEMTREC - U.S.A. & Canada) (703) 527-3887 (CHEMTREC - All Other Countries)

## 2. HAZARDS IDENTIFICATION

#### **EMERGENCY OVERVIEW:**

- White to beige granules with an aromatic hydrocarbon odor.
- Slightly combustible. May support combustion at elevated temperatures. Finely dispersed particles can form explosive mixtures in air.
- 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.

Date: 11/01/2005

**MEDICAL CONDITIONS AGGRAVATED:** None presently known.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Wt.%	EC No.	EC Class
Permethrin	52645-53-1	1.6	258-067-9	R20/22-43-50/53; S2-13-24- 36/37/39-60-61
Aromatic Hydrocarbons	64742-94-5	<1.1	265-198-5	R65; S2-23-24-62

## 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:** Do not induce vomiting and do not give liquids of any kind to the person. Never give anything by mouth to an unconscious person. See a medical doctor immediately.

**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, CO<sub>2</sub> or dry chemical. Soft stream water fog only if necessary. Contain all runoff.

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**FIRE / EXPLOSION HAZARDS:** Slightly combustible. May support combustion at elevated temperatures. Finely dispersed particles can form explosive mixtures in air.

**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.

### 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 contaminated area, scrub area with a solution of detergent (e.g. commercial product such as SuperSoap<sup>TM</sup>, Tide®, Spic and Span®, or other high pH detergent) and water. Let solution sit for 5 minutes. Use a stiff brush to scrub affected area. Repeat if necessary to remove visible staining. Additional decontamination can be made by applying bleach (Clorox® or equivalent) to affected area.

Absorb wash-liquid as noted above, remove visibly contaminated soil and place into recovery / disposal container (plastic, open-top steel drum or equivalent). Place all clean-up material in a container, seal and dispose of in accordance with the method outlined in Section 13 "Disposal Considerations" below.

For further information on spill clean-up, waste disposal, or return of salvaged product, call the FMC Emergency Hotline number listed in Section 1 "Product and Company Identification" above.

## 7. HANDLING AND STORAGE

**HANDLING AND STORAGE:** 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

#### **EXPOSURE LIMITS**

Chemical Name	ACGIH	OSHA	Supplier
Aromatic Hydrocarbons			18 ppm

Date: 11/01/2005

**ENGINEERING CONTROLS:** No open flames. Prevent deposition of dust; use closed system, consider use of dust explosion-proof electrical equipment and lighting. 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 exposures 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).

**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.

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

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**ODOR:** Aromatic hydrocarbon

**APPEARANCE:** White to beige granules

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

**MOLECULAR WEIGHT:** 391.3 (permethrin)

## 10. STABILITY AND REACTIVITY

**CONDITIONS TO AVOID:** Excessive heat and fire.

STABILITY: Stable

**POLYMERIZATION:** Will not occur

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide and/or carbon dioxide. Chlorine

and hydrogen chloride may be formed.

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## 11. TOXICOLOGICAL INFORMATION

**EYE EFFECTS:** Minimally irritating

**SKIN EFFECTS:** Slightly irritating

**DERMAL LD**<sub>50</sub>: > 5,000 mg/kg (rabbit)

**ORAL LD**<sub>50</sub>: > 5,000 mg/kg (rat)

**INHALATION LC**<sub>50</sub>: Permethrin: 2.3 mg/l (4 h) (rat)

**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:**

NTP: Not listed

IARC: 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 (Koc = 86,000), there is little potential for movement in soil or entry into ground water. Permethrin has a Log Pow 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).

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**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. DEPARTMENT OF TRANSPORTATION (DOT)

PACKAGING TYPE: Non-Bulk

**ADDITIONAL INFORMATION:** This material is not a hazardous material as

defined by US Department of

Transportation at 49 CFR Parts 100 through

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185.

PACKAGING TYPE: Bulk

**PROPER SHIPPING NAME:** Environmentally hazardous substance,

solid, n.o.s.

**TECHNICAL NAME(S):** Permethrin

PRIMARY HAZARD CLASS / DIVISION: 9

UN/NA NUMBER: UN 3077

PACKING GROUP: III

MARINE POLLUTANT: Permethrin

LABEL(S): 9
PLACARD(S): 9
MARKING(S): 3077

### INTERNATIONAL MARITIME DANGEROUS GOODS (IMDG)

PACKAGING TYPE: Non-Bulk

**PROPER SHIPPING NAME:** Environmentally hazardous substance,

solid, n.o.s.

TECHNICAL NAME(S): Permethrin

PRIMARY HAZARD CLASS / DIVISION: 9

UN/NA NUMBER: UN 3077

PACKING GROUP: III

MARINE POLLUTANT: Permethrin

LABEL(S): 9
PLACARD(S): 9

**MARKING(S):** Environmentally hazardous substance,

solid, n.o.s. (permethrin), UN 3077 +

Marine Pollutant

**ADDITIONAL INFORMATION:** EmS Number: F-A, S-F

# ADR - EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD

PACKAGING TYPE: Non-Bulk

**PROPER SHIPPING NAME:** Environmentally hazardous substance,

solid, n.o.s.

Date: 11/01/2005

TECHNICAL NAME(S): Permethrin

PRIMARY HAZARD CLASS / DIVISION: 9

CLASSIFICATION CODE: M7

UN/NA NUMBER: UN3077

PACKING GROUP: III
HAZARD IDENTIFICATION NUMBER: 90

MARINE POLLUTANT: Permethrin

LABEL(S): 9
PLACARD(S): 9

MARKING(S): UN 3077 + Marine Pollutant

# INTERNATIONAL CIVIL AVIATION ORGANIZATION (ICAO) / INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA)

PACKAGING TYPE: Non-Bulk

**ADDITIONAL INFORMATION:** This material is not a dangerous good when

shipped by air.

#### **OTHER INFORMATION:**

HARMONIZED SYSTEM

Import to the U.S.A.: 3808.10.2500 Export from the U.S.A.: 3808.10.0000

## 15. REGULATORY INFORMATION

#### **UNITED STATES**

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355, APPENDIX A):

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; however, this product contains the following ingredients with a TPQ of less than 10,000 lbs.: None

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#### **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 DESIGNATION & REPORTABLE QUANTITIES (RQ) (40 CFR 302.4):

Not listed

#### FEDERAL INSECTICIDE FUNGICIDE RODENTICIDE ACT

U.S. EPA Signal Word: CAUTION

#### INTERNATIONAL LISTINGS

Australian Hazard Code: 3XE

#### HAZARD, RISK AND SAFETY PHRASE DESCRIPTIONS:

Permethrin, (Index #613-058-00-2):

EC Symbols: Xn (Harmful)

N (Dangerous for the environment)

EC Risk Phrases: R20/22 (Harmful by inhalation and if swallowed.)

R43 (May cause sensitization by skin contact.)

R50/53 (Very toxic to aquatic organisms, may cause long-term adverse

effects in the aquatic environment.)

EC Safety Phrases: S2 (Keep out of the reach of children.)

S13 (Keep away from food, drink and animal feeding stuffs.)

S24 (Avoid contact with skin.)

S36/37/39 (Wear suitable protective clothing, gloves and eye/face

protection.)

S60 (This material and its container must be disposed of as

hazardous waste)

S61 (Avoid release to the environment. Refer to special

instructions/safety data sheets.)

Aromatic Hydrocarbons, (Index #649-356-00-4):

EC Symbols: Xn (Harmful)

EC Risk Phrases: R65 (Harmful: may cause lung damage if swallowed.)

EC Safety Phrases: S2 (Keep out of the reach of children.)

S23 (Do not breathe gas, fumes, vapor, or spray)

S24 (Avoid contact with skin.)

S62 (If swallowed, do not induce vomiting: seek medical advice

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immediately and show this container or label.)

## 16. OTHER INFORMATION

#### **REVISION SUMMARY:**

This MSDS replaces Revision #5, dated August 05, 2005. Changes in information are as follows:
Section 3 (Composition / Information on Ingredients)
Section 5 (Fire Fighting Measures)
Section 8 (Exposure Controls / Personal Protection)
Section 16 (Other Information)

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