



GARDEN INSECT DUST CONTAINS .25% PERMETHRIN

Page 1 of 4

Manufacturer's Name & Address

Southern Agricultural Insecticides, Inc.
P.O. Box 218, Palmetto, Fla. 33561

Phone: 1-941-722-3285
Chemtrec: 1-800-424-9300

I. IDENTIFICATION

Product Names: PERMANONE DUST(.25) EPA Reg. No. 829-293
Chemical Name: N/A - Mixture, active ingredient, Permethrin
D.O.T. Class: Not Regulated by D.O.T.

II. INGREDIENTS

Permethrin CAS NUMBER: 52645-53-1

OSHA/ACGIH Limits:
None established

EXPOSURE LIMITS: None established

OTHER INGREDIENTS: None established

III. HAZARDS IDENTIFICATION

Appearance/Odor: A white/off-white solid, dust with a faint odor.
This product is extremely toxic to fish and aquatic invertebrates.

POTENTIAL HEALTH EFFECTS (ACUTE EFFECTS)

INHALATION: Harmful if inhaled.

IV. FIRST AID MEASURES

EYES: Rinse with plenty of water and call a physician if irritation persists.

SKIN: Wash promptly with soap and water. Rinse thoroughly.

INGESTION: If large amounts were swallowed, give water to drink and get medical advice.

INHALATION: Remove victim to fresh air. If not breathing, give artificial respiration preferably mouth-to-mouth. Get medical attention.

V. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Foam, carbon dioxide, dry chemical or water. Use any means suitable for extinguishing surrounding fire.

FIRE FIGHTING INSTRUCTIONS: As in any fire, wear self-contained breathing apparatus pressure-demand MSHA/NIOSH approved (or equivalents and full protective gear. Keep upwind. Isolate hazard area. Avoid inhalation of smoke and fumes. Use water or foam to reduce fumes. Do not touch spilled material. If possible, move containers from area. Extinguish only if flow can be stopped. Use flooding amounts of water as a fog. Cool containers with flooding amounts of water from as far a distance as possible. Avoid breathing vapors.

FLAMMABILITY CLASSIFICATION RATING: NFPA/OSHA Class: IIIB NFPA Rating (Fire): 1

VI. ACCIDENTAL RELEASE MEASURES

GENERAL AND DISPOSAL: Use proper protective equipment to minimize personal exposure (see Section 8). Take all necessary action to prevent and to remedy the adverse effect of the spill. Ensure that the disposal is in compliance with all Federal, State/Provincial, and local regulations (see Section 13 for applicable RCRA Number). Refer to Section 15 for applicable Reportable Quantity (RQ) and other regulatory requirements.

LAND SPILL OR LEAK: Small Spills: Sweep up carefully while avoiding the formation of a dust cloud. Place in an approved chemical waste container for disposal. Rinse spill area with small amount of soapy water. Contain and absorb the rinsate with inert absorbents and place into the same disposal container. Area can be washed with water to remove the last trace residue. Do not allow water to contaminate water supplies or sewers.

LARGE SPILLS: Eliminate all ignition sources. Stop leak if you can do so without coming into contact with spilled material. All equipment used to clean up spill should be grounded. Prevent entry into waterways, sewers, basements or confined areas. Inform appropriate authorities immediately if contamination occurs. Contact Chemtrec for further assistance if necessary.

VII. HANDLING AND STORAGE

HANDLING PRECAUTIONS: Avoid breathing dust. Avoid contact with eyes or clothing.

STORAGE PRECAUTIONS: Do not contaminate water, food or feed by storage.

WORK/HYGIENIC PRACTICES: Remove contaminated clothing and wash clothing before reuse. Wash thoroughly with soap and water after handling and before smoking or eating.

VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

MANUFACTURING, FORMULATION AND OTHER NON-AGRICULTURAL USES:

ENGINEERING CONTROLS: Control airborne concentrations below the appropriate exposure guideline (see Section II. for applicable OSHA/ACGIH Exposure Limits). Local exhaust ventilation may be necessary.

EYE/FACE PROTECTION: Wear protective eyewear (goggles, face shield or safety glasses).

SKIN PROTECTION: Wear chemical-resistant gloves (Neoprene, Nitrile, PVC) and other protective clothing to avoid skin contact.

RESPIRATORY PROTECTION: Ensure good ventilation. If not adequate, use a chemical cartridge-type respirator approved by the National Institute of Occupational Health and Safety.

GENERAL PROTECTION: Eye wash facility and safety shower should be available.

VIII. PHYSICAL AND CHEMICAL

BASIC PHYSICAL PROPERTIES:

APPEARANCE: A white/off-white solid, dust.

ODOR: Faint odor.

PHYSICAL STATE: Solid

PH: Not applicable

VAPOR PRESSURE: Not applicable

VAPOR DENSITY (AIR= 1): Not available

EVAPORATION RATE (BUTYL ACETATE = 1): Not available

SPECIFIC GRAVITY OR DENSITY (FLUFFED): Approximately 29 lbs/ft³

SPECIFIC GRAVITY OR DENSITY (COMPACTED): Approximately 61 lbs/ft³

PACKING (BULK) DENSITY: Not available

BOILING POINT/RANGE: Not available

MELTING/FREEZING POINT RANGE: Not available

SOLUBILITY (IN WATER): Not applicable

SOLUBILITY IN SOLVENTS/OIL (SPECIFIED): Not available

DUST EXPLOSION SEVERITY DATA: Not available

MINIMUM IGNITION ENERGY (MJ): Not available

MINIMUM EXPLOSION CONCENTRATION (MEC): Not available

LIMITED OXYGEN CONCENTRATION (LOC): Not available

X. STABILITY AND REACTIVITY

STABILITY: Stable

HAZARDOUS POLYMERIZATION: Will not occur

XI. TOXICOLOGICAL INFORMATION

THE FOLLOWING DATA WERE DEVELOPED WITH: Two similar products, Permanone Household Dusting Powder (EPA Reg. No. 4816-758) and Permanone (20-5) Dust Concentrate (EPA Reg. No. 4816-724).

ACUTE TOXICITY:

ORAL LD50 (rat): >5,050 mg/kg (practically non-toxic)

DERMAL LD50 (rabbit): > 5,050 mg/kg (practically non-toxic)

INHALATION LC50 (rat, 4hr): 4.09 mg/l (practically non-toxic)

EYE IRRITATION (rabbit): Non-irritating

SKIN IRRITATION (rabbit): Non-irritating (Max Irritation Score = 2.2/8.0)

SKIN SENSITIZATION (guinea pig): Non-sensitizing

NOTE: The severity classifications listed above are those of AqrEvo, and, particularly for eye irritation, may not always coincide with EPA-mandated Precautionary Statements.

THE FOLLOWING DATA WERE DEVELOPED WITH: permethrin, the active ingredient. The below statement was taken directly from the supplier's msds.

CHRONIC TOXICITY AND CARCINOGENICITY

Chronic Effects of Overexposure 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 oncogenicity 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.

XII. ECOLOGICAL INFORMATION

ENVIRONMENTAL PRECAUTIONS: This product is extremely toxic to fish and aquatic invertebrates. Do not apply directly to water. Do not contaminate water when disposing of equipment washwaters.

THE FOLLOWING PHYSICAL/ENVIRONMENTAL PROPERTIES DATA AND THE ENVIRONMENTAL TOXICOLOGY DATA IS FOR THE ACTIVE INGREDIENT PERMETHRIN AND WERE TAKEN DIRECTLY FROM THE SUPPLIER'S MSDS.

Physical/Environmental Properties: 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 ($BCF = 500$).

Environmental Toxicology:

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.

XIII. DISPOSAL CONSIDERATIONS

Do not contaminate water, food or feed by storage. Do not reuse container. Wrap container in several layers of newspaper and discard in trash.

RCRA INFORMATION: RCRA HAZARDOUS WASTE INGREDIENTS: None

XIV. TRANSPORT INFORMATION

PROPER SHIPPING NAME: Not DOT Regulated

NOTE: For transport purposes (49 CFR Part 173.132), the calculated 1-Hour LC_{50} {Rat is: 16.36 mg/l).

XV. REGULATORY INFORMATION

U.S. FEDERAL REGULATORY INFORMATION

TSCA Inventory: registered pesticide, exempt from TSCA

CARCINOGENICITY: NTP: No I ARC No OSHA: No

SARA TITLE III SECTION 311/312 - HAZARD CLASSES:

Acute Health Hazard - Yes

Chronic Health Hazard - Yes

Fire Hazard - No

Sudden Release of Pressure Hazard - No

Reactivity Hazard - No

SARA TITLE III - NOTIFICATIONS AND INFORMATION

Section 302 (EHS) ingredients. None

Section 304 (CERCLA & EHS) ingredients (RQ): None

SARA TITLE III - SECTION 313 SUPPLIER NOTIFICATION This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act (EPCRA) of 1986 and of 40 CFR 372:

PERCENT BY WEIGHT= 0.25

This information must be included on all MSDSs that are copied and distributed for this material.

REGULATED INGREDIENTS

INGREDIENT: Permethrin CAS NUMBER: 52645-53-1

PERCENT BY WEIGHT: = 0.25

Regulations: Massachusetts Hazardous Substance

New Jersey Workplace Hazardous Substance

SARA Section 313 Toxic Chemical

XVI. OTHER INFORMATION

HMIS HAZARD RATING - HEALTH: 1 Slight FIRE 1 Slight REACTIVITY: 0 Negligible PROTECTION: E

NFPA HAZARD RATING - HEALTH: 1 Slight - FIRE 1 Slight - REACTIVITY: 0 Negligible - SPECIAL:

DISCLAIMER OF EXPRESSED AND IMPLIED WARRANTIES: This information is provided in good faith but without express or implied warranty. Buyer assumes all responsibility for safety and use not in accordance with label instructions.