

Material Safety Data Sheet

Drione Insecticide

POTENTIAL HEALTH EFFECTS (ACUTE EFFECTS)

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

AgrEvo Environmental Health, Inc.
95 Chestnut Ridge Road
Montvale, NJ 07645

EMERGENCY TELEPHONE NUMBER

In case of medical, environmental or transportation emergencies or inquiries, call 1-800-471-0660 (24 hours/day).

For product use information, call: (800) 331-2867 (Days)

PRODUCT NAME: Drione Insecticide
PRODUCT CODE: E72250WC
CHEMICAL NAME: Mixture; a.i.'s, pyrethrins, piperonyl butoxide
MSDS IDENTIFICATION CODE/NUMBER: E72250WC

Drione is a registered trademark of AgrEvo Environmental Health, Inc.

PRODUCT DESCRIPTION: Drione Insecticide is a dust that provides quick control of a variety of insects and kills up to 6 months if left undisturbed. For industrial/commercial use only.

2. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT: Pyrethrins
CAS NUMBER: 8003-34-7
PERCENT BY WEIGHT: = 1
None established (OSHA/ACGIH)

INGREDIENT: Piperonyl butoxide, technical
CAS NUMBER: 51-03-6
PERCENT BY WEIGHT: = 10
None established (OSHA/ACGIH)

INGREDIENT: Amorphous Silica Gel
CAS NUMBER: 112926-00-8
PERCENT BY WEIGHT: = 40
TLV = 10 mg/m³ (ACGIH)
PEL = 6 mg/m³ (OSHA)

INGREDIENT: Other ingredients, including:
PERCENT BY WEIGHT: = 49

INGREDIENT: Petroleum distillate
CAS NUMBER: 64742-47-8
PERCENT BY WEIGHT: = 49
None established (OSHA/ACGIH)

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

- A white to yellow solid with a very mild tea-like odor.
- Causes moderate eye irritation.
- This product is toxic to fish.

EYES

Causes moderate eye irritation.

SKIN

Harmful if absorbed through skin.

SIGNS AND SYMPTOMS OF ACUTE OVEREXPOSURE

May cause gastrointestinal effects such as nausea, vomiting and diarrhea. Ingestion of large quantities can result in nervous system effects such as dizziness, loss of coordination, tremors and loss of consciousness. Symptoms usually regress with no long lasting effects.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

None known.

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE

None known.

4. FIRST AID MEASURES

EYES

Flush eyes with plenty of water. Call a physician if irritation persists.

SKIN

Wash with plenty of soap and water. Get medical attention.

INGESTION

Drink 1 or 2 glasses of water and contact a physician or Poison Control Center immediately.

INHALATION

Remove individual to fresh air. Get medical attention if breathing difficulty develops.

NOTE TO PHYSICIAN

May pose an aspiration pneumonia hazard.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

FLASH POINT: 190 F 88 C TCC

EXTINGUISHING MEDIA

Carbon dioxide, dry chemical, foam or water.

FIRE FIGHTING INSTRUCTIONS

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH approved (or equivalent) 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: IIIA

NFPA Rating (Fire): 2

Revision Date: 01/14/99

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6. 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 residue 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 AgrEvo for further assistance if necessary.

7. HANDLING AND STORAGE

HANDLING PRECAUTIONS

- Avoid contact with skin, eyes or clothing.
- Containers larger than one pound may not be used in food handling establishments.

STORAGE PRECAUTIONS

- Do not contaminate water, food or feed by storage.
- Store upright at room temperature.
- Keep away from moisture.
- Containers larger than one pound may not be stored in food handling establishments.
- Containers one pound and smaller should be stored in original sealed container in a cool, dry place inaccessible to children and pets.

WORK/HYGIENIC PRACTICES

- Wash thoroughly with soap and water after handling.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

MANUFACTURING, FORMULATION AND OTHER NON-AGRICULTURAL USES

ENGINEERING CONTROLS

Control airborne concentrations below the appropriate exposure guideline (see Section 2 for applicable OSHA/ACGIH Exposure Limits). Local exhaust ventilation may be necessary.

EYE/FACE PROTECTION

Wear safety glasses, splash goggles or face shield.

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

A white to yellow solid.

ODOR

Very mild, tea-like odor.

BASIC PHYSICAL PROPERTIES

PHYSICAL STATE: Solid

pH: Normally not mixed with water; neutral (6 - 8)

VAPOR PRESSURE: Not available

VAPOR DENSITY (AIR=1): Not available

EVAPORATION RATE (BUTYLACETATE = 1): Not available

SPECIFIC GRAVITY OR DENSITY: Not available

PACKING DENSITY (SETTLED): 12.2 lb/ft³

PACKING DENSITY (FLUFFED): 9.2 lb/ft³

BOILING POINT/RANGE: Not available

MELTING/FREEZING POINT RANGE: Not available

SOLUBILITY (IN WATER): Insoluble

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

PARTICLE SIZE:: 3 microns

10. STABILITY AND REACTIVITY

STABILITY: Stable

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

THE FOLLOWING DATA WERE DEVELOPED WITH: Drione Insecticide

ACUTE TOXICITY

ORAL LD50 (rat): > 5,000 mg/kg (practically non-toxic)

DERMAL LD50 (rabbit): > 2,000 mg/kg (slightly toxic)

INHALATION LC50 (rat, 4hr): 2.99 mg/l (practically non-toxic)

EYE IRRITATION (rabbit): slightly irritating

SKIN IRRITATION (rabbit): non-irritating (Primary Irr. Index = 0.1)

SKIN SENSITIZATION (guinea pig): non-sensitizing

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

THE FOLLOWING DATA WERE DEVELOPED WITH: pyrethrin and piperonyl butoxide, the active ingredients

CHRONIC TOXICITY AND CARCINOGENICITY

In a recent study, marginally higher incidences of benign thyroid, parathyroid, ovary, and liver tumors were observed in rats and in lungs of mice following lifetime high doses exposures to pyrethrum.

Marginally higher incidences of benign liver tumors in mice were observed in mice following lifetime high dose exposures to piperonyl butoxide.

The significance of these observations is questionable and under review. The doses at which tumors were observed for both pyrethrum and piperonyl butoxide greatly exceeded potential human exposure from labeled uses.

REPRODUCTIVE AND DEVELOPMENTAL TOXICITY

There were no birth defects or adverse effects on reproductive parameters in tests with rats or rabbits for either pyrethrum or piperonyl butoxide. They are not considered to be teratogenic.

MUTAGENICITY (GENETIC EFFECTS)

Pyrethrum was not found to be genotoxic and did not damage DNA in any study conducted (Ames mutagenicity assay, chromosome aberration in Chinese hamster ovaries (CHO) cells, and in the unscheduled DNA synthesis (UDS) assay in cultured human liver cells.

PBO was not genotoxic in several tests including the Ames mutagenicity assay, chromosome aberration in Chinese hamster ovary (CHO) cells, CHO/HGPRT assay with S9 activation, and in the unscheduled DNA synthesis (UDS) assay in cultured human liver cells.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL PRECAUTIONS

This product is toxic to fish. Do not apply directly to water. Do not contaminate water when disposing of equipment washwater or rinsate.

13. DISPOSAL CONSIDERATIONS

Do not contaminate water, food or feed by disposal.

Pesticide Disposal: Pesticide or rinse water that cannot be used according to label instructions must be disposed of at or by an approved waste disposal facility.

Container Disposal: Completely empty liner by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. Then dispose of liner in a sanitary landfill or by incineration if allowed by State and local authorities. If drum is contaminated and cannot be reused, dispose of in the same manner.

Container One Pound and Smaller: Do not reuse container. Wrap container in several layers of newspaper and discard in trash.

RCRA INFORMATION

RCRA HAZARDOUS WASTE INGREDIENTS: None

14. TRANSPORT INFORMATION

PROPER SHIPPING NAME: Not DOT Regulated

ADDITIONAL SHIPPING PAPER DESCRIPTION

Pyrethrins have a Reportable Quantity of 1 pound. When sold in 40 pound boxes, Drione has a pyrethrin content of 0.4 pound which if spilled does not require reporting, therefore it is not DOT regulated at less than 100 pounds.

If Drione is sold in quantities of 100 pounds or more, then the correct DOT information is:

Environmentally hazardous substance, Solid, n.o.s.
(Pyrethrins)
UN3077, PG III, Class 9
Hazard Label: Class 9
RQ (Pyrethrins)

NOTE: For transport purposes (49 CFR Part 173.132), the calculated 1-Hour LC50 (Rat) is: > 11.96 mg/l.

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATORY INFORMATION

EPA Registration Number: 4816-353

TSCA Inventory: registered pesticide, exempt from TSCA

CARCINOGENICITY: NTP: No IARC: No OSHA: No

SARATITLE III SECTION 311/312 - HAZARD CLASSES:

Acute Health Hazard - Yes
Chronic Health Hazard - No
Fire Hazard - No
Sudden Release of Pressure Hazard - No
Reactivity Hazard - No

SARATITLE III - NOTIFICATIONS AND INFORMATION

Section 302 (EHS) ingredients: None

Section 304 (CERCLA & EHS) ingredients (RQ): Pyrethrins (= 1%): RQ=1

SARATITLE 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:

CAS NUMBER	INGREDIENT NAME	PERCENT BY WEIGHT
51-03-6	Piperonyl butoxide, technical	= 10

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

REGULATED INGREDIENTS

INGREDIENT: Pyrethrins
CAS NUMBER: 8003-34-7
PERCENT BY WEIGHT: = 1

Regulations: Illinois Toxic Substance
New Jersey Workplace Hazardous Substance
Pennsylvania Environmental Hazardous Substance
Pennsylvania Workplace Hazardous Substance

INGREDIENT: Piperonyl butoxide, technical
CAS NUMBER: 51-03-6
PERCENT BY WEIGHT: = 10
Regulations: SARA Section 313 Toxic Chemical

U.S. STATE REGULATORY INFORMATION

CALIFORNIA (Proposition 65): This product does not contain any chemical which is known to the State of California to cause cancer or birth defects or other reproductive harm.

CANADIAN REGULATORY INFORMATION
CPC NUMBERS: 15255 and 14431

WHMIS Classification for Control Product Regulations (CPR):
Registered pesticide under US FIFRA regulations; exempt from CPR classification.

The MSDS contains all CPR required hazard-related information.

WHMIS HAZARD RATING: See HMIS rating (Section 16)

16. OTHER INFORMATION

HMIS HAZARD RATING

- HEALTH: 1 Slight
- FIRE: 2 Moderate
- REACTIVITY: 0 Negligible
- PROTECTION: E

NFPA HAZARD RATING

- HEALTH: 1 Slight
- FIRE: 2 Moderate
- REACTIVITY: 0 Negligible
- SPECIAL:

MSDS IDENTIFICATION CODE/NUMBER: E72250WC

PREPARED BY: Regulatory Department
PHONE: (800)438-5837
SUPERCEDES MSDS DATED: 12/18/96

DATE AND TIME OF PRINTING: 04/14/99 07:30:17

MSDS Revision Indicators: Revisions made in Section 1 (added Product Information Number, Product Description, deleted EPA and PCP Registration numbers), Section 2 (added Other ingredient name), Section 3 (changed Emergency Overview, Eyes, added Skin, deleted Primary Routes of Entry and chronic information), Section 4 (changed Eyes, Skin and Note to Physician), Section 5 (changed Fire Fighting Instructions, added Flammability Classification/Rating), Section 6 (changed Accidental Release Measures), Section 7 (changed Handling and Storage Precautions, added Work/Hygienic Practices), Section 8 (Changed text under each subsection), Section 9

(reformatted Basic Physical Properties), Section 11 (reformatted the toxicity data, changed Acute Inhalation LC50, added Skin Sensitization), Section 12 (changed Environmental Precautions), Section 13 (added to Disposal Considerations) Section 14 (added 1-Hour LC50), Section 15 (reformatted and added to Regulatory Information) and Section 16 (changed HMIS/NFPA Fire Rating and Disclaimer text).

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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.