



MATERIAL SAFETY DATA SHEET

Universal Crop Protection Alliance LLC
1300 Corporate Center Curve
Eagan, MN 55121

In Case of Emergency, Call:
24 Hour Emergency Number
CHEMTREC: 800-424-9300

Medical Emergency Contact:
1-800-228-5635 Ext. 138

1. CHEMICAL IDENTIFICATION

Product Name: Termite Kill III Product No.: 002109
EPA Signal Word: Caution
EPA Reg. Number: 70506-7-72693
Active Ingredient (%): Permethrin 39.1% CAS No.: 52645-53-1
Chemical Name: C₁₂H₂₀Cl₂O₃ (permethrin)
Chemical Class: Pyrethroid Insecticide

2. COMPOSITION/INFORMATION ON INGREDIENTS

| Material | OSHA PEL | ACGIH TLV | Other | EU Class |
|--|-------------|--------------|-------|-------------|
| Hydrocarbon Solvent CAS Number: 8052-41-3 | 100 ppm | | | None |
| Permethrin CAS Number: 52645-53-1 | | | | R22 |
| Triacetin CAS Number: 102-76-1 | | | | None |
| Surfactant Blend | | | | None |

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Clear amber liquid. Mild petroleum odor. The material can cause irritation to the eyes and skin. Cholinesterase depression. This material can enter the lungs during swallowing or vomiting and cause severe lung damage through aspiration into the lungs. Do not induce vomiting. No special handling procedures other than normal procedures for combustible material.

Potential Health Effects: May cause moderate eye and skin irritation. Swallowing material can cause mild to severe lung damage. Do not induce vomiting.

Eye: Mild eye irritation. There may be moderate stinging, tearing and redness.

Skin: Exposure may result in mild skin irritation. Prolonged or repeat contact may result in drying of the skin. May cause itching, redness, burning, drying, or swelling.

Ingestion: Swallowing large amounts may be harmful. This material can enter the lungs during swallowing or vomiting and cause lung inflammation and/or damage.

Inhalation: May cause irritation of the mucous membrane. Breathing mist may cause damage to the lungs. May cause dizziness. Disturbances in vision drowsiness, respiratory irritation, and eye and skin irritation may occur.

Systemic (other Target Organs) Effects: May aggravate existing dermatitis. Lung damage from swallowing or vomiting may occur. High oral doses can result in damage to the liver and kidneys. 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 mutagenicity testing with permethrin.

Physical Properties

Appearance: Clear light to straw color liquid.
Odor: Mild odor

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| 4. FIRST AID MEASURES |
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Ingestion: Do not induce vomiting. Consult a physician immediately or Poison Control center immediately. Dilute by giving 1 or 2 glasses of water. Never give anything by mouth to an unconscious person.

Eye Contact: Flush with water immediately and continuously for 15 minutes. Consult a physician.

Skin Contact: Immediately wash the skin with plenty of soap and water. Remove contaminated clothing and wash before reuse. If contact has been extensive or prolonged or irritation persists, consult a physician.

Inhalation: Remove to fresh air. Consult a physician if irritation develops or breathing is difficult.

Notes to Physician:

Aspiration may occur during vomiting causing severe lung damage. Low oral, dermal and inhalation toxicity. It is minimally irritation to the eyes and slightly irritating to the skin. The low oral toxicity of the product compared to the risk of pneumonitis from aspiration of hydrocarbon solvents suggests vomiting should not be induced.

Consideration should be given to gastric lavage with an endotracheal tube in place. Activated charcoal and cathartic are recommended and nervous stimulation should be controlled with a sedative, e.g. barbiturates. Reversible skin sensations (paresthesia) may occur and ordinary skin slaves have been found useful in reducing discomfort.

Treatment is otherwise controlled removal of exposure by symptomatic and supportive care.

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| 5. FIRE FIGHTING MEASURES |
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Fire and Explosion

Flash Point (Test Method): 44 C (111 F) Setaflash
Flammable Limits (% in Air): N/D
Autoignition Temperature: N/D
Flammability: N/D

Hazardous Combustion Products: Chlorine, hydrogen chloride, carbon dioxide, carbon monoxide, and aldehydes.

Extinguishing Media: Foam CO2 or dry chemical. Contain all runoff and do not allow material to leave area.

Fire Fighting Instructions: Prevent human exposure to fire, fumes, smoke and products of combustion.

Protective Equipment for Fire Fighters: Emergency personnel should wear full face, self contained breathing apparatus and impervious protective clothing.

Special Fire and Explosive Hazards: Moderately combustible. When heating above the flash point, this material releases vapors which, when mixed with air, can burn or have a potential for an explosive hazard.

6. ACCIDENTAL RELEASE MEASURES

In Case of Spill or Leak

Keep away from ignition sources. Contain spill. Absorb spill with sand, floor-clay or dirt. Shovel or sweep up using nonspark equipment. Use explosion proof equipment. Use personal protective equipment. Prevent liquid from entering sewers, waterways, or low areas. Use a caustic or soda ash with alcohol (methanol, ethanol or isopropanol) to neutralize spill area. Dispose of material according state and federal laws.

7. HANDLING AND STORAGE

Precautions to be Taken in Handling and Storage: See label. Keep out of reach of children. Do not get in the eyes, on skin, or on clothing. Avoid breathing mist or vapors. Good housekeeping is necessary for safe handling of product. No smoking, open flames or sources of ignition in handling and storage area. Wash thoroughly with soap and water after handling. Do not contaminate water, food or feed by storage or disposal. Store in original container above 40°F and below 100 F. Do not store near heat or open flame.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

These precautions are suggested for conditions with a high potential for exposure. If handling procedures are such that there is only a low potential for exposure, less protection may be needed. Emergency conditions may require additional precautions.

Engineering Controls: Use only with adequate ventilation.

Eye Contact: Use chemical goggles or face shield.

Skin Contact: Use protective clothing impervious to this material. Use of items such as gloves, boots, apron, or full-body suit will depend on the operation.

Inhalation: Use only a NIOSH/MESA approved respirator.

Personal Hygiene: 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

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| Appearance: | Clear light to amber color liquid. |
| Odor: | Faint mild petroleum. |
| Specific Gravity/Density: | 1.039 @ 20C |
| pH: | 4.8-5.0 @ 20C (6% water) |
| Solubility in H ₂ O: | Emulsifies |
| Vapor Pressure: | N/D |
| Vapor Density: | N/D |

10. STABILITY AND REACTIVITY

Reactivity

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|---------------------------|-------------------------|
| Stability: | Stable |
| Hazardous Polymerization: | Will not occur |
| Conditions to Avoid: | Excessive heat and fire |

Hazardous Decomposition Products

Carbon monoxide and asphyxiates from heating

11. TOXICOLOGICAL INFORMATION

None Provided

12. ECOLOGICAL INFORMATION

In soil, permethrin is stable over a wide range of pH values. When applied at agricultural use rates, permethrin has a moderate rate of degradation in soil. At termiticidal use rates, permethrin degrades at a slower rate, which is governed by soil characteristics.

Permethrin is highly toxic to fish ($LC_{50} = 0.5 \mu\text{g/L}$ to $315 \mu\text{g/L}$) and aquatic arthropods ($LC_{50} = 0.002 \mu\text{g/L}$ to $7.6 \mu\text{g/L}$). Marloe species are often more sensitive than the freshwater species. Bacterial, algae, mollusks and amphibians are much more tolerant for 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 CONSIDERATION

Disposal Method: Do not contaminate food, feed or water by storage or disposal. Improper disposal of excess pesticide, spray mixture, or rinse is a violation of federal law. Use according to label instructions, otherwise contact your state or federal environmental control agency for disposal guidance.

14. TRANSPORT INFORMATION

Reportable Quantity (RQ): None

US Surface Freight Class: Insecticides, NOI, other than Poison, NMPC item 102120

Highway and railroad shipments in the USA: Insecticide. NOI, other than Poison.

For air and water shipment and also road and rail other than in the U.S.A.: Flammable Liquids, n.o.s. (contains hydrocarbon solvent), 3, III, UN1993, NAERG Guide 128.

MARPOL Designation: #1 Severe Marine Pollutant (permethrin 39.1%)

15. REGULATORY INFORMATION

NOTICE: The information herein is presented in good faith and believed to be accurate as of the issue or revision date shown below. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ from one location to another, it is users responsibility to ensure that its activities comply with federal, state and local laws and regulations.

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| Section 302 Extremely Hazardous Substances (40CFR 355): | None Listed |
| Section 311 Hazard Categories (40 CFR 370): | Immediate, Delayed, Fire |
| Section 312 Threshold Quantity (40 CFR 370): | As a mixture, 10000 lbs. Product contains no ingredients with a TPQ of less than 10,000 lbs. |

Section 313 chemical(s): 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):

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|------------|-------|
| Permethrin | 39.1% |
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16. OTHER INFORMATION

NFPA Hazard Ratings

Health: 2
Flammability: 2
Reactivity: 0

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|---|----------|
| 0 | Least |
| 1 | Slight |
| 2 | Moderate |
| 3 | High |
| 4 | Severe |

Issued Date: 04-19-01

Supersedes: New

Reference MSDS:

Tengard SFR Termite Kill

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