

MATERIAL SAFETY DATA SHEET

Doktor Doom Spider Mite Knock Out Insecticide Plant Spray for Tomatoes and Vegetables

Manufacturer: Ultrasol Industries Limited

Address: 10755-69 Avenue, Edmonton, Alberta T6H 2C9

Emergency Phone: 1-613-996-6666 (24 hr)

1. CHEMICAL PRODUCT INFORMATION

Product Name: Doktor Doom Spider Mite Knock Out Insecticide Plant Spray for Tomatoes and Vegetables

Chemical Name/Synonym: Pyrethrins; a mixture of pyrethrin I, pyrethrin II, jasmolin I, jasmolin II, cinerin I, and cinerin II.

Chemical Family: Pyrethroid.

Formula: C₂₁ H₂₈ O₃, C₂₂ H₂₈ O₅, C₂₁ H₃₀ O₃, C₂₂ H₃₀ O₅, C₂₀ H₂₈ O₃ and C₂₁ H₂₈ O₅ respectively.

EPA Registration No.: 2724-568-72804

RF Number: N/A.

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Component (chemical, common name)</u>	<u>CAS Number</u>	<u>Weight</u>	<u>Tolerance</u>
Pyrethrins	8003-34-7	0.20%	5 mg/m ³ (OSHA & ACGIH)
Inert ingredients (non-hazardous and/or trade secret):		99.80%	
Mixture of C10-13 Isoparaffins	68551-17-7		Not established
Propane	74-98-6		1800 mg/m ³ (OSHA)Asphyxiant (ACGIH)

3. HAZARD INFORMATION

PRECAUTIONARY STATEMENTS
CAUTION
KEEP OUT OF REACH OF CHILDREN
HAZARDOUS TO HUMANS AND ANIMALS
HARMFUL IF SWALLOWED OR ABSORBED THROUGH SKIN
AVOID BREATHING VAPORS OR SPRAY MIST
AVOID CONTACT WITH SKIN AND EYES
IN CASE OF CONTACT IMMEDIATELY FLUSH EYES AND SKIN WITH WATER

PRIMARY ROUTE OF ENTRY **Dermal/Eye:** Yes. **Oral:** No. **Inhalation:** Yes.

ACUTE TOXICITY **Oral:** Aspiration hazard.
 Dermal: Irritant.
 Inhalation: Inhalation of vapors may produce anesthetic effects. Prolonged overexposure can cause rapid breathing, headaches, dizziness, narcosis, unconsciousness and death from asphyxiation, depending on concentration and time of exposure.

OTHER TOXICOLOGICAL INFORMATION

Skin Irritation: Irritant.
Eye Irritation: Irritant.
Sensitizer: Unknown.

4. FIRST AID MEASURES

Eye: Hold eye open and rinse slowly and gently for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Skin: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Ingestion: Call a poison control center or doctor immediately for treatment advice. Have a person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

Inhalation: Remove victim to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for treatment advice.

Note to Physician: Contains petroleum distillates. Vomiting may cause aspiration pneumonia.

5. FIRE FIGHTING MEASURES

NFPA Rating: **Health: 1** **Fire: 2** **Reactivity: 0**

Flammability Class: NFPA Aerosol Classification: Level 1.

Flash Point/Flame Extension: Flame extension: 0".

Explosive Limits (% of Volume): Not available.

Extinguishing Media: Dry chemical, foam, CO₂.

Special Protective Equipment: Firefighters should wear full protective clothing including self-contained breathing apparatus.

Fire Fighting Procedures: Cool fire exposed area and equipment. Do not allow run-off waters to enter water ways or sewer.

Combustion Products: Toxic vapors or fumes may be released during fire including oxides of carbon from incomplete combustion.

Unusual Fire/Explosion Hazards: Contents under pressure. Exposure to temperatures above 130°F may cause container to burst.

6. ACCIDENTAL RELEASE MEASURES

Steps to be taken: Approach leaking or punctured pressurized containers cautiously. Isolate leaking container from all sources of ignition. Provide proper ventilation. Do not allow to enter water ways or sewers. Absorb spills with an inert material and put in container for disposal.

Absorbents: Use clay granules or other inert, compatible, absorbent material.

Incompatibles: Strong acids, alkalies, strong oxidizers.

7. HANDLING AND STORAGE

Handling: Avoid contact with skin, eyes or clothing. Avoid breathing vapors or spray mist.

Storage: Do not store above 130°F. Do not store near open flames. Store in a cool, dry place. Do not contaminate water, food, or feed, by storage.

8. EXPOSURE CONTROL / PERSONAL MEASURES

Exposure Limits: Pyrethrins: 5 mg/m³ (OSHA & ACGIH). Propane 1800 mg/m³ (OSHA) 1000 mg/m³ (ACGIH).

Ventilation: Use adequate ventilation to avoid breathing of vapors and spray mist and to control concentrations below permissible exposure limits.

Personal Protective Equipment: Use safety goggles, impervious gloves and other appropriate clothing to prevent contact with eyes and skin. If prolonged exposure is anticipated, appropriate respiratory protection may be necessary.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Not available.

Boiling Point: Not available.

Melting Point: Not available.

Vapor Pressure (mm Hg): Not available.

Vapor Density (Air = 1): Not available.

Specific Gravity: Not available.

Bulk Density: 8.163 lbs/gallon.

Solubility: Not available.

Evaporation Rate: Not available.

pH: 6.98.

10. STABILITY AND REACTIVITY

Stability: Stable.

Reactivity: Non reactive.

Incompatibility w/ Other Materials: Strong acids, alkalies, strong oxidizers.

Decomposition Products: Carbon oxides.

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY [Specific to Active Ingredient(s)]

Pyrethrins (pyrethrum)

Acute oral toxicity: LD50 = 2370 mg/kg (male rats).
LD50 = 1030 mg/kg (female rats).
LD50 = 273 – 796 mg/kg (mice).
Acute dermal toxicity: LD50 > 1500 mg/kg (rats).
LD50 = 5000 mg/kg (rabbits).
Acute inhalation toxicity: 4-Hour LC50 3.4 mg/L (rats).
Skin irritation: Slightly irritating.
Eye irritation: Slightly irritating.

CHRONIC TOXICITY [Specific to Active Ingredient(s)]

Pyrethrins: Marginally higher incidences of benign thyroid, parathyroid, ovary, and liver tumors were observed in rats and in lungs of mice following lifetime high dose exposure to pyrethrum. The significance of these observations is questionable.

Carcinogenicity: NTP: No IARC: No OSHA: No

DEVELOPMENTAL/REPRODUCTIVE TOXICITY [Specific to Active Ingredient(s)]

Pyrethrins: There were no birth defects or adverse effects on reproductive parameters in tests with rats or rabbits. It is not considered to be teratogenic.

MUTAGENICITY [Specific to Active Ingredient(s)]

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

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE [Active Ingredient Only]

Pyrethrins are toxic to fish. Do not discharge effluent containing these components to sewer systems without previously notifying the local sewage treatment plant authority. Do not contaminate water by cleaning of equipment or disposal of wastes.

13. DISPOSAL CONSIDERATIONS

Do not puncture or incinerate. Call the appropriate solid waste agency for disposal recommendations.

14. TRANSPORT INFORMATION

DOT49CFR Description: Consumer Commodity ORM-D.

Freight Classification: Insecticides NOI O/T Poison NMFC I-102120 CLASS 60.

15. REGULATORY INFORMATION

CERCLA (Superfund): RQ (Pyrethrins) 1lbs.

RCRA: Not Regulated.

SARA 311/312 HAZARD CATEGORIES

Immediate Health: Yes.

Delayed Health: No.

Fire: Yes.

Sudden Pressure: Yes.

Reactivity: No.

The information presented herein, while not guaranteed, was prepared by technically knowledgeable personnel and to the best of our knowledge is true and accurate. It is not intended to be all inclusive and the manner and conditions of use and handling may involve other or additional considerations.