



SAFETY DATA SHEET

EMERGENCY CALL: 1-800-424-9300 (CHEMTREC)

1. IDENTIFICATION

PRODUCT NAME: Vango ESQ
DESCRIPTION: Liquid fungicide
EPA REG. NO.: 91234-91
COMPANY IDENTIFICATION: Atticus, LLC
 5000 CentreGreen Way, Suite 100
 Cary, NC 27513

2. HAZARD IDENTIFICATION

WARNING

Very toxic to aquatic life with long-lasting effects (H400+H410)



HAZARD CLASSIFICATION

Health Hazards **Category**
 None -

Physical Hazards **Category**
 None -

Environmental Hazards **Category**
 Hazardous to the aquatic environment, short-term 1
 Hazardous to the aquatic environment, long-term 1

PRECAUTIONARY STATEMENTS

Avoid release to the environment not in accordance with the product label. (P273)
 Collect spillage . (P391)
 Dispose of contents / container in accordance with local regulations. Refer to the product label for specific disposal instructions. (P501)

3. COMPOSITION / INFORMATION ON INGREDIENTS

Common Name	Chemical Name	CAS#	Composition
Cyprodinil	4-cyclopropyl-6-methyl-N-phenylpyrimidiamine-2-amine	121552-61-2	24.1%
Difenoconazole	1-[2-[2-chloro-4-(4-chlorophenoxy)phenyl]-4-methyl-1,3-dioxolan-2-ylmethyl]-1H-1,2,4-triazole	119446-68-3	8.4%

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

4. FIRST AID MEASURES

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact SafetyCall at 1-844-685-9173 for emergency medical treatment information. For chemical emergency: spill, leak, fire, exposure or accident, call CHEMTREC: 1-800-424-9300.

5. FIREFIGHTING MEASURES

Flash Point: >214°F

Fire and Explosion Hazards: No information available.

Extinguishing Medium: Foam, dry chemical, or carbon dioxide (CO2). If water is used to fight fire, dike and collect runoff.

Fire Fighting Equipment: Firefighters should be equipped with self-contained positive pressure breathing apparatus and full bunker gear.

Fire Fighting Instructions: Evacuate area of all unnecessary personnel and fight fire from a safe distance upwind. Contain contaminated water / firefighting water; do not allow to enter drains or waterways. Use foam or dry chemical fire extinguishing systems to prevent environmental damage from excessive water runoff.

Hazardous Combustion Products: During a fire, irritating and possible toxic gases may be generated by thermal decomposition or combustion.

NFPA Ratings: Health – 1 / Flammability – 1 / Reactivity - 0



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6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Isolate area and keep unnecessary and unprotected personnel from entering. Wear suitable personal protective clothing and equipment as described in Section 8 of this document.

Environmental Precautions: Prevent material from entering public sewer systems or any waterways. Do not flush to drain or soil. Contain contaminated water.

Spill Cleanup: Control the spill at its source. Clean up spill immediately, observing precautions outlined in Section 8. Cover entire spill with absorbing material and place into compatible disposal container. Scrub area with hard water detergent (e.g., commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposal.

7. HANDLING AND STORAGE

Handling: Avoid contact with eyes, skin or clothing. Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

Storage: Store in a tightly closed container in a cool, dry place. Do not contaminate water, food or feed by storage or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash station and a safety shower.

Protective Clothing: Applicators, and other handlers must wear: long-sleeved shirt and long pants; chemical-resistant gloves made of barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, polyvinyl chloride (PVC) ≥ 14 mils, or Viton® ≥ 14 mils; and shoes plus socks.

General: Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: off-white liquid

Odor: musty

Melting/freezing point: not available

Boiling point/Boiling range: not available

Flammability: not applicable

Flammability limits (upper/lower): not available

Flash point: $> 214^{\circ}\text{F}$

Auto-ignition temperature: 869°F

Decomposition temperature: not available

pH: 5.5-7.5

Kinematic Viscosity: not available

Solubility:

Cyprodinil (@20°C) 12 mg/L

Difenoconazole (@25°C) 15 mg/L

Partition coefficient: not available

Vapor pressure:

Cyprodinil (@25°C) 3.8×10^{-6} mmHg

Difenoconazole (@25°C) 2.5×10^{-10} mmHg

Density: 1.01-1.03 g/mL

Relative vapor density: not available

Particle characteristics: not available

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID: None Known.

CHEMICAL STABILITY: Stable under normal use and storage conditions.

INCOMPATIBILITY WITH OTHER MATERIALS: None known.

HAZARDOUS DECOMPOSITION PRODUCTS: None known.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

Information presented below is from testing done on an identical or substantially similar product:

ORAL TOXICITY (rat LD₅₀): 5,000 mg/kg

DERMAL TOXICITY (rat LD₅₀): $> 5,000$ mg/kg

INHALATION TOXICITY (rat LC₅₀): > 2.53 mg/L (4-hour)

EYE IRRITATION: Mildly irritating (Rabbit)

SKIN IRRITATION: Slightly irritating (Rabbit)

SKIN SENSITIZATION: Not a Sensitizer (Guinea pig)

The following information is for the active ingredients, Cyprodinil and Difenoconazole

CARCINOGENICITY:

EPA: Not Listed

ACGIH: Not Listed

IARC: Not Listed

NTP: Not Listed

OSHA: Not Listed

MUTAGENIC TOXICITY: No data

REPRODUCTIVE TOXICITY: No evidence of fertility or reproductive effects.

TERATOGENICITY: No data

OTHER TOXICITY: May cause damage to organs (liver, kidneys and thyroid effects) at high doses.

12. ECOLOGICAL INFORMATION

Difenoconazole and cyprodinil are toxic to fish, mammals and aquatic invertebrates.

The following information is for the active ingredients, Cyprodinil and Difenoconazole:

Cyprodinil:

AQUATIC TOXICITY

Bluegill: (96h LC₅₀) 2.18 mg/L

Daphnia Magna: (48h EC₅₀)

0.032 mg/L

AVIAN TOXICITY

Mallard Duck: (14-day LD₅₀) > 500 mg/kg

Difenoconazole:

AQUATIC TOXICITY

Rainbow Trout: (96h LC₅₀) 1.1 mg/L

Daphnia Magna: (48h EC₅₀) 0.77 mg/L

Green Algae: (72h EbC₅₀) 0.032 mg/L



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13. DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL: Pesticide spray mixture or rinsate that cannot be used should be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. See container labeling for complete disposal instructions.

14. TRANSPORT INFORMATION

UN Number: UN3082
Proper Shipping Name: Environmentally hazardous substance, liquid, N.O.S. (Contains Cyprodinil and Difenoconazole)
Transport Hazard Class: 9
Packing Group: III
Hazard Zone: A
Marine Pollutant: Yes¹
Hazardous Substance RQ: None
Labels / Placards: US-DOT: Class 9 Environmentally Hazardous Substance²
IMDG, IATA: Class 9 Environmentally Hazardous Substance³
Emergency Guide: 171 (NAERG – North American Emergency Response Guide)

¹**Marine Pollutant Note:** Ground-only shipments are excluded from Marine Pollutant labeling requirements as per 49CFR§172.101 Appendix B(4). For any shipments involving all or part of the transport by vessel, the shipment must be classified as a Marine Pollutant unless a limited quantity exemption applies (see note 3 below).

²**US-DOT Note:** Not regulated for “ground only” shipments.

³**IMDG / IATA Note:** Not regulated when shipped in single or inner packaging ≤ 1.3 gallons (5.0L).

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

15. REGULATORY INFORMATION

FIFRA –

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. The following is the hazard information as required on the pesticide label:

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION. Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet.

Remove and wash contaminated clothing before reuse.

See inside label booklet for additional precautionary statements.

ENVIRONMENTAL HAZARDS

Difenoconazole and cyprodinil are toxic to fish, mammals and aquatic invertebrates. Drift and runoff may be hazardous to aquatic estuarine/marine organisms in water adjacent to treated areas. For terrestrial uses: Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters or rinsate.

Surface and Ground Water Advisory:

This chemicals in this product may contaminate water through drift or spray in wind.

All pesticides are governed under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). The regulatory information presented below is pertinent only when this product is handled outside of the normal use and application as a pesticide. This product is excluded from listing requirements under EPA/TSCA.

SARA Title III – Section 302 Extremely Hazardous Substances

Not listed

SARA Title III – Section 311/312 Hazard Categories

Acute

SARA Title III – Section 312 Threshold Planning Quantity

The threshold planning quantity (TPQ) for this product treated as a mixture is 10,000 lbs. This product contains no ingredients with a TPQ of less than 10,000 lbs.

SARA Title III – Section 313 Reportable Ingredients

None

CERCLA Reportable Quantity (RQ) –

Not listed

CALIFORNIA PROP 65 STATUS –

This product does not contain any chemicals known to the state of California to cause cancer or other reproductive harm.

CANADA –

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

16. OTHER INFORMATION

This Safety Data Sheet (SDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA APPROVED PRODUCT LABELING (attached to and accompanying the product container). This SDS provides important health, safety, and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course.

To the extent consistent with applicable law, neither Atticus, LLC nor Seller be liable for any incidental, consequential or special damages resulting from the use or handling of this product. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF ATTICUS, LLC AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF ATTICUS, LLC OR SELLER, THE REPLACEMENT OF THE PRODUCT.

SDS Version: 1.0

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