

ELUVIUM

SAFETY DATA SHEET

1. IDENTIFICATION

PRODUCT NAME: ELUVIUM
DESCRIPTION: Liquid Agricultural Fungicide
EPA REG. NO.: 89167-80-89391
COMPANY: Innvictis Crop Care, LLC
1880 Fall River Drive, Suite 100
Loveland, CO 80538
EMERGENCY CALL: 1-800-424-9300 (CHEMTREC)

2. HAZARD IDENTIFICATION

DANGER

Toxic if inhaled (H331)
Causes eye irritation (H320)
May cause an allergic skin reaction (H317)
May cause respiratory irritation (H335)
Suspected of causing cancer (H351)
Very toxic to aquatic life with long lasting effects (H400+H410)



HAZARD CLASSIFICATION

Health Hazards	Category
Acute Toxicity – Inhalation	3
Eye Damage / Irritation	2B
Skin Sensitization	1
Specific Target Organ Toxicity – Single Exposure	3
Carcinogenicity	2

Physical Hazards	Category
None	-

Environmental Hazards	Category
Hazardous to the Aquatic Environment, Acute	1
Hazardous to the Aquatic Environment, Chronic	1

HAZARDS NOT REQUIRING CLASSIFICATION

Do not allow to come into contact with oxidizing agents, hazardous chemical reaction may occur.

PRECAUTIONARY STATEMENTS

Avoid breathing spray mist. Wash hands and skin thoroughly after handling. (P261+P264)

Use only outdoors or in a well-ventilated area in accordance with the product label. (P271)

Wear protective gloves and clothing. Contaminated work clothing should not be allowed out of the workplace. (P272+P280)

Do not handle until all safety precautions have been read and understood. (P202)

Avoid release to the environment in a manner not in accordance with the product label. (P273)

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a poison control center or doctor for medical advice. (P304+P340+P311)

IF ON SKIN: Rinse skin immediately with plenty of water for 15-20 minutes. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. Specific treatment: see First Aid on the label. (P302+P352+P333+P313+P362+P364+P321)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. **If eye irritation persists:** Get medical advice or attention (P305+P351+P338+P337+P313)

IF exposed or concerned: Get medical advice/attention. (P308 + P313)
Store locked up in a well-ventilated place. Keep container tightly closed. (P405+P403+P233)

Collect spillage. (P391)

Dispose of contents / containers at an approved waste disposal plant in accordance with local, State and Federal regulations. Refer to the product label for specific disposal instructions. (P501)

3. COMPOSITION / INFORMATION ON INGREDIENTS

Common Name	Chemical Name	CAS#	Composition
Chlorothalonil	CAS: 2,4,5,6-tetrachloro-1,3-benzenedicarbonitrile IUPAC: tetrachloroisophthalonitrile	1897-45-6	54%
Proprietary Solvent	Trade Secret	-	Proprietary

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**, 24 hours per day, 7 days per week for emergency medical treatment information.

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

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15 to 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.

NOTE TO PHYSICIAN: Persons suffering with temporary allergic skin reactions may respond to treatment with oral antihistamines and topical or oral steroids.

5. FIREFIGHTING MEASURES

Fire and Explosion Hazards: Thermal decomposition may produce toxic fumes and gases.

Extinguishing Medium: Foam, dry chemical or carbon dioxide (CO₂).

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: Hydrogen chloride

NFPA Ratings: Health – 2 / Flammability – 1 / Reactivity - 0

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.

Spill Cleanup: Dike spill using suitable absorbent or impervious materials such as earth, sand, or clay. Collect and contain contaminated absorbent and place in an appropriate container for disposal. Pump any free liquid into an appropriate closed container and decontaminate tools and equipment following cleanup. Wash area with soap and water. Pick up wash liquid with inert absorbent and place in a chemical waste container for disposal.

7. HANDLING AND STORAGE

Handling: Avoid contact with skin, eyes, or clothing. Avoid breathing spray mist. Wash hands thoroughly after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Storage: Store in a tightly closed container in a cool, dry place. Protect from excessive heat.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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

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

General: Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. 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: opaque white liquid

Odor: mild sweet

Melting/freezing point: not determined

Boiling point/Boiling range: 212°F

Flammability: not flammable

Flammability limits (upper/lower): not determined

Flash point: > 230°F (> 110°C)

Auto-ignition temperature: not applicable

Decomposition temperature: not determined

pH: 6.0-6.5 (1% disp.)

Viscosity: non-Newtonian fluid

Water Solubility: not determined

Partition coefficient: not determined

Vapor Pressure: not determined

Density: 1.34 g/ml

11.2 lbs./gal.

Relative Vapor Density: not determined

Particle Characteristics: not determined

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Alkaline conditions. Contact with metals listed below.

CHEMICAL STABILITY: Stable under all normal use and storage conditions.

INCOMPATIBILITY WITH OTHER MATERIALS: Alkaline materials. Aluminum, tin and zinc.

HAZARDOUS DECOMPOSITION PRODUCTS: This product is chemically stable, and no hazardous reactions should occur if stored and handled as prescribed / indicated. Thermal decomposition can lead to the formation of toxic gases and fumes such as hydrogen chloride.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

The following information is for an identical or substantially similar product:

INHALATION TOXICITY (rat LC₅₀): > 0.50 mg/L(4-hour)

The following information is for the active ingredient, chlorothalonil:

ORAL TOXICITY (rat LD₅₀): > 5000 mg/kg

DERMAL TOXICITY (rabbit LD₅₀): > 5000 mg/kg

EYE IRRITATION: Moderately irritating

SKIN IRRITATION: Mildly irritating

SKIN SENSITIZATION: Positive contact sensitizer

STOT – SINGLE EXPOSURE: May cause respiratory irritation.

CARCINOGENICITY:

EPA: Group B2 (chlorothalonil)

ACGIH: Not listed

IARC: 2B (chlorothalonil)

NTP: Not Listed

OSHA: Listed

MUTAGENIC TOXICITY: No data available.

TERATOGENICITY: No data available.

REPRODUCTIVE TOXICITY: No data available.

12. ECOLOGICAL INFORMATION

This product is toxic to aquatic invertebrates and wildlife.

The following information is for the active ingredient, chlorothalonil:

AQUATIC TOXICITY

Rainbow Trout (96-hour LC₅₀): 0.076 mg/L

Daphnia (48-hour EC₅₀): 0.0342-0.143 mg/L

Algae (72-hr EC₅₀): 0.0068 mg/L

13. DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL: Pesticide wastes are toxic. 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. Refer to the product label for specific container disposal instructions.

14. TRANSPORT INFORMATION

UN Number:	UN3082
Proper Shipping Name:	Environmentally hazardous substance, liquid, N.O.S. (contains Chlorothalonil) Transport Hazard Class:
Transport Hazard Class:	9
Packing Group:	III
Hazard Zone:	A
Marine Pollutant:	Yes ¹
Hazardous Substance RQ:	None
Labels / Placards:	US-DOT: Class 9 Environmentally Hazardous Substance ² IMDG, IATA: Class 9 Environmentally Hazardous Substance ³
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 gal. (5 L) in strong outer packaging.

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, absorbed through skin, or inhaled. Causes moderate eye irritation. Avoid contact with skin, eyes, or clothing. Avoid breathing spray mist. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

ENVIRONMENTAL HAZARDS

This product is toxic to aquatic invertebrates and wildlife. Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high-water mark. Drift and runoff may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwater or rinsate.

Groundwater Advisory

Chlorothalonil is known to leach through soil into groundwater under certain conditions as a result of label use. This chemical may leach into groundwater if used in areas where soils are permeable, particularly where the water table is shallow.

Surface Water Advisory

This chemical can contaminate surface water through spray drift. Under some conditions, it may also have a high potential for runoff into surface water for several days to weeks after application. These include poorly draining or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, areas overlaying extremely shallow groundwater, areas with infield canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over-laying tile drainage systems that drain to surface water.

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

Immediate, Delayed

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

Chlorothalonil (CAS No. 1897-45-6) (54%)

CERCLA Reportable Quantity (RQ) –

None

CALIFORNIA PROP 65 STATUS –

⚠ WARNING: This product can expose you to chlorothalonil, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

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 INNVICTIS CROP CARE, 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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