

SAFETY DATA SHEET

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

1. IDENTIFICATION

PRODUCT NAME: Purgatory

DESCRIPTION: Liquid herbicide

EPA REG. NO.: 91234-87

COMPANY Atticus, LLC

IDENTIFICATION: 5000 CentreGreen Way, Suite 100

Cary, NC 27513

2. HAZARD IDENTIFICATION

DANGER

Fatal if inhaled (H330)
Toxic if swallowed (H301)

Causes serious eye damage (H318)

May cause damage to organs (kidney, lungs)

through prolonged or repeated exposure (H371)

May cause respiratory irritation (H335)

May be corrosive to metals (H290)

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

HAZARD CLASSIFICATION

Health Hazards	Category	Physical Hazards	Category	
Acute toxicity, inhalation	1	Corrosive to metals	1	
Acute toxicity, oral Serious eye damage / irritation	3 1	Environmental Hazards Hazardous to the Aquatic Environment –	Category	
Specific target organ toxicity, repeated exposure	1	Chronic (long-term) Hazardous to the Aquatic Environment –	1	
Specific target organ toxicity, single exposure	3	Acute (short-term)	1	

HAZARDS NOT REQUIRING CLASSIFICATION

This product is mildly corrosive to aluminum and produces hydrogen gas which may form a highly combustible gas mixture. Do not mix or store in containers, spray tanks, nurse tanks, or such systems made of aluminum or having aluminum fittings.

PRECAUTIONARY STATEMENTS

Keep only in original packaging. (P234)

Do not breathe mist / vapors / spray. Use only outdoors in a well-ventilated area. (P260+P271)

Wear respiratory and eye protection and protective clothing as described in Section 8 of this document. (P284+P280)

Wash hands and skin thoroughly after handling. (P264)

Do not eat, drink or smoke when using this product. (P270)

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER / doctor. Specific treatment is urgent (see Section 4 of this document). (P304+P340+P310+P320) **IF SWALLOWED:** Immediately call a POISON CENTER / doctor for treatment advice. Specific treatment (see Section 4 of this document). Rinse mouth. (P301+P310+P321+P330)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER / doctor. (P305+P351+P338+P310)

IF exposed or concerned: Call a POISON CENTER / doctor for treatment advice. (P308+P311)

Absorb spillage to prevent material-damage. Collect spillage. (P391+P390) Store locked up. (P405)

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

Dispose of contents / container using instructions in the product label and in accordance with local / Federal regulations. (P501)

3. COMPOSITION / INFORMATION ON INGREDIENTS

Common Name	Chemical Name	CAS#	Composition
Paraquat dichloride	1,1'-dimethyl-4,4'-bipyridinium dichloride	1910-42-5	43.2%

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, 24 hours per day, 7 days per week for emergency medical treatment information. For chemical emergency: spill, leak, fire, exposure or accident, call CHEMTREC: 1-800-424-9300.

IF INHALED: Move person to fresh air. The odor of this product is from the stenching agent, which has been added, not from the paraquat. If person is not breathing, call 911 or an ambulance. Call a poison control center or doctor for treatment advice.

IF SWALLOWED: Call a poison control center or doctor IMMEDIATE-LY for treatment advice. SPEED IS ESSENTIAL. Immediate medical attention is required. If available, give an absorbent such as activated charcoal, bentonite or Fuller's Earth. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

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

NOTE TO PHYSICIAN: Administer either activated charcoal (100 g for adults or 2.0 g/kg body weight in children) or Fuller's Earth (15% solution; 1.0 liter for adults or 15.0 ml/kg body weight in children). NOTE: The use of gastric lavage without administration of an adsorbent has not shown any clinical benefit. Do not use supplemental oxygen. Eye splashes from concentrated material should be treated by an eye specialist after initial treatment. With the possibility of late onset corneal ulceration, it is advised that patients with paraquat eye injuries are reviewed by an eye specialist the day after first presentation. Use treatment that is appropriate for chemical burns. Intact skin is an effective barrier to paraquat; however, contact with irritated or cut skin or repeated contact with intact skin may result in poisoning.

5. FIREFIGHTING MEASURES

Flash Point: >100°C

Fire and Explosion Hazards: During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

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: oxides of carbon and nitrogen, chlorine, hydrogen chloride, possible trace amounts of phosgene, ammonia and other toxic and noxious fumes

NFPA Ratings: Health - 4 / 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 any waterways or low areas. Do not flush to drain or soil. Contain contaminated water. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

Spill Cleanup: Clean up spill immediately, observing precautions in Section 8. Prevent further leakage or spillage if safe to do so. For small spills: absorb spill with sand, clay or other inert material. For large spills: recover free product and dike for later disposal. Absorb remaining spill with inert material and place in suitable container for disposal. Prevent material from entering sewers, waterways, or low areas. Dispose of in accordance with local regulations.

7. HANDLING AND STORAGE

Handling: Do not get in eyes, on skin, or on clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. 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.

Storage: Paraquat should always be stored tightly closed in original container, and in a locked place away from children and animals.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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

Protective Clothing:

Applicators and other handlers (other than mixers and loaders) 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, natural rubber ≥14 mils, polyethylene, polyvinyl chloride (PVC) ≥14 mils, or Viton®≥14 mils
- Shoes plus socks
- Protective eyewear
- NIOSH-approved particulate respirator with any N, R, or P filter, NIOSH approval number prefix TC-84A, or a NIOSH-approved powered air-purifying respirator with an HE filter with NIOSH approval number prefix TC-21C.

Mixers and loaders 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, natural rubber ≥14 mils, polyethylene, polyvinyl chloride (PVC) ≥14 mils, or Viton®≥14 mils
- Shoes plus socks
- Chemical resistant apron
- Face shield
- NIOSH-approved particulate respirator with any N, R, or P filter, NIOSH approval number prefix TC-84A, or a NIOSH-approved powered air-purifying respirator with an HE filter with NIOSH approval number prefix TC-21C.

General: Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. 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: greenish blue liquid

Odor: weak pungent

Melting / Freezing point: no data available Boiling Point / Boiling Range: no data available

Flammability: not flammable

Flammability Limits (upper/lower): not applicable

Flash Point (closed cup): >100°C

Auto-ignition Temperature: no data available **Decomposition Temperature:** no data available

pH: 6-7 (1% ag.)

Kinematic Viscosity: 0.005 Pa·s @ 20°C 0.004 Pa·s @ 40°C

Solubility: no data available

Partition coefficient: no data available Vapor Pressure: no data available

Density: 9.3-9.4 lbs./gal.

Relative Vapor Density: no data available Particle Characteristics: no data available

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Extremes of temperature and direct sunlight. Freezing.

CHEMICAL STABILITY: Stable at normal temperatures and storage conditions.

INCOMPATIBILITY WITH OTHER MATERIALS: Oxidizing agents,

aluminum.

HAZARDOUS DECOMPOSITION PRODUCTS: oxides of carbon and nitrogen, chlorine, hydrogen chloride, possible trace amounts of phosgene, ammonia and other toxic and noxious fumes

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): 283 mg/kg

DERMAL TOXICITY (rat LD₅₀): > 2,000 mg/kg

INHALATION TOXICITY (rat LC₅₀): 0.006 mg/L (4-hour)

EYE IRRITATION: causes irreversible eye damage **SKIN IRRITATION:** slightly irritating (rabbit) **SKIN SENSITIZATION:** not a contact sensitizer

CARCINOGENICITY: NTP: Not listed

IARC: Not listed

EPA: Group E – evidence of non-carcinogenicity in humans (paraquat

MUTAGENIC TOXICITY: Paraquat was weakly positive in mouse lymphoma cell assay and mammalian cell cytogenetic assays, and positive in the sister chromatid exchange assay.

REPRODUCTIVE TOXICITY / TERATOGENICITY: A three generation reproductive study showed no evidence of fertility or reproductive effects at doses below that causing maternal toxicity.

OTHER TOXICITY: Target organ effects include kidney and lungs. Repeated exposure can cause damage to organs. Single exposure may cause respiratory irritation.

12. ECOLOGICAL INFORMATION

This product is toxic to wildlife. Paraquat dichloride is toxic to nontarget crops and plants if off-target movement occurs because it desiccates all green plant tissue.

The following information is for the active ingredient, Paraquat dichloride:

Fish (LC₅₀): 6.1-32.7 mg/L Aquatic invertebrate (EC₅₀): 1.2 mg/L Aquatic plants (IC₅₀): 0.00040 mg/L Aquatic plants (NOAEC): 0.00016 mg/L

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: UN2922

Proper Shipping Name: Corrosive liquid, toxic, N.O.S. (contains

Paraguat Dichloride)

Transport Hazard Class: 8.6.1 Packing Group: Ш **Hazard Zone:** Α **Marine Pollutant:** Yes1 Hazardous Substance RQ: None

Labels / Placards: US-DOT: Class 8 Corrosive Substance, Class 6.1

Toxic Substance²

IMDG, IATA: Class 8 Corrosive Substance, Class 6.1

Toxic Substance³

154 (NAERG – North American Emergency **Emergency Guide:**

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

² US-DOT Note: Not regulated when shipped in single or

inner packaging ≤ 1.3 gal. (5 L) in strong

outer packaging.

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

DANGER. POISON. May be fatal if swallowed. Fatal if inhaled. Corrosive. Causes irreversible eye damage. Harmful if absorbed through skin. IMPORTANT: Inhalation is an unlikely route of exposure due to low vapor pressure and large spray droplet size, but mucosal irritation or nose bleeds may occur. Prolonged contact with this concentrated product can irritate your skin.

See inside label booklet for additional precautionary statements.

ENVIRONMENTAL HAZARDS

This product is toxic to wildlife. Paraguat dichloride is toxic to nontarget crops and plants if off-target movement occurs because it desiccates all green plant tissue.

PHYSICAL OR CHEMICAL HAZARDS

This product is mildly corrosive to aluminum and produces hydrogen gas which may form a highly combustible gas mixture. Do not mix or store in containers, spray tanks, nurse tanks, or such systems made of aluminum or having aluminum fittings. The product is compatible with high density polyethylene and rubber-lined steel containers. Do not use this product in or around strong oxidizing/reducing agents.

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

SARA Title III - Section 302 Extremely Hazardous Substances Paraguat dichloride (CAS No. 1910-42-5) (43.2%)

SARA Title III - Section 311/312 Hazard Categories

Immediate (acute), Delayed (chronic)

SARA Title III - Section 312 Threshold Planning Quantity Paraquat dichloride (CAS No. 1910-42-5) (43.2%): 10 lbs. (2.4 gallons of product)

SARA Title III - Section 313 Reportable Ingredients Paraquat dichloride (CAS No. 1910-42-5) (43.2%)

CERCLA Reportable Quantity (RQ)

None

CALIFORNIA PROP 65 STATUS -

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

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 PROD-UCT 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 REM-EDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILI-TY 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 ELEC-TION OF ATTICUS, LLC OR SELLER, THE REPLACEMENT OF THE PRODUCT.

SDS Version: 1.0 Effective Date: 01/09/2019