

# Orador™

## SAFETY DATA SHEET

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

### 1. IDENTIFICATION

**PRODUCT NAME:** Orador  
**DESCRIPTION:** A liquid herbicide  
**EPA Reg. No.:** 91234-324  
**COMPANY IDENTIFICATION:** Atticus, LLC  
940 NW Cary Parkway, Suite 200  
Cary, NC 27513

### 2. HAZARD IDENTIFICATION

#### WARNING

May cause an allergic skin reaction (H317)  
May cause damage to blood, kidney, liver, testes, central nervous system through prolonged or repeated exposure (H373)  
Causes eye irritation (H320)  
Causes mild skin irritation (H316)  
May cause respiratory irritation (H335)  
May be harmful if swallowed (H303)  
Very toxic to aquatic life with long lasting effects (H400+H410)



#### HAZARD CLASSIFICATION

##### Health Hazards

Skin sensitization  
Specific target organ toxicity, repeated exposure  
Serious eye damage/irritation  
Skin corrosion/irritation  
Specific target organ toxicity, single exposure  
Acute toxicity, oral

##### Physical Hazards

None

##### Environmental Hazards

Hazardous to the aquatic environment, acute  
Hazardous to the aquatic environment, chronic

#### Category

1B

2

2B

3

3

5

#### Category

-

#### Category

1

1

#### HAZARDS NOT REQUIRING CLASSIFICATION

Do not mix or allow coming in contact with oxidizing agent and reducing agents hazardous chemical reaction may occur.

#### PRECAUTIONARY STATEMENTS

Do not breathe mist/spray. Contaminated work clothing should not be allowed out of the workplace. Wash hands and exposed skin thoroughly after handling. Do not touch eyes. Wear protective gloves. Use only outdoors or in a well-ventilated area. (P260+P272+P284+P265+P280+P271)

**IF ON SKIN:** Wash with plenty of water. **If skin irritation or rash occurs:** Get medical help. Specific treatment (see Section 4 for additional medical information). Take off contaminated clothing and wash it before reuse. (P302+P352+P333+P317+P321+P362+P364)

**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 help. (P305+P351+P338+P337+P317)

**IF INHALED:** Remove person to fresh air and keep comfortable for breathing. Get medical help if you feel unwell. (P304+P340+P319)

**IF SWALLOWED:** Get medical help. (P301+P317)

Get medical help if you feel unwell. (P319)

Avoid release to the environment. Collect spillage. (P273+P391)

Store in a well-ventilated place. Keep container tightly closed. Store locked up. (P403+P233+P405)

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
Acetochlor	2-chloro-N-(ethoxymethyl-N-(2-ethyl-6-methylphenyl) acetamide	34256-82-1	31.0%
Mesotrione	1,3-Cyclohexanedione, 2-[4-(methylsulfonyl)-2-nitrobenzoyl]-	104206-82-8	3.3%
Clopyralid, monoethanolamine salt	2-Pyridinecarboxylic acid, 3,6-dichloro-, compd. with 2-aminoethanol (1:1)	57754-85-5	2.7%

**NOTE:** 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 Day or Night Within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted).

**IF ON SKIN OR CLOTHING:** Take off contaminated clothing. Rinse skin with plenty of water for 15-20 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 15-20 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.

**IF SWALLOWED:** 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.

## 5. FIREFIGHTING MEASURES

**Flash Point:** >110°C (>230°F)

**Flammability Limits:** Not determined

**Fire and Explosion Hazards:** Exposure to combustion products may be a hazard to health.

**Extinguishing Medium:** Water spray and alcohol-resistant foam.

**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 water spray to cool unopened containers.

**Hazardous Combustion Products:** During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Sulfur oxides, nitrogen oxides (NOx), hydrogen chloride gas, carbon oxides.

**NFPA Ratings:** Health - 2 / Flammability - 1 / Reactivity - 1

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined area. Use personal protective equipment as required. Keep people away from and upwind of spill/leak.

**Environmental Precautions:** Prevent material from entering public sewer systems or any waterways. Do not flush to drain. Large spills to soil or similar surfaces may necessitate removal of topsoil. The affected area should be removed and placed in an appropriate container for disposal.

**Spill Cleanup:** Dike spill using suitable absorbent or impervious materials such as 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. Collect washings for disposal.

## 7. HANDLING AND STORAGE

**Handling:** Avoid contact with skin, eyes or clothing. Wash hands 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:** Store in a tightly closed container in a cool, dry place. Store in original container and out of reach of children, preferably in a locked storage area.

## 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, shoes plus socks.

**General:** Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	tan liquid
<b>Odor:</b>	mild
<b>Melting/freezing point:</b>	not available
<b>Boiling point/Boiling range:</b>	not available
<b>Flammability:</b>	not available
<b>Flammability limits (upper/lower):</b>	not available
<b>Flash point (cc):</b>	>110°C (>230°F)
<b>Auto-ignition temperature:</b>	not available
<b>Decomposition temperature:</b>	not available
<b>pH:</b>	2.5-3.5 (1% dispersion)
<b>Viscosity:</b>	not available
<b>Solubility:</b>	not available
<b>Partition coefficient:</b>	not available
<b>Vapor pressure:</b>	not available
<b>Density:</b>	8.5-9.5 lb/gal
<b>Relative vapor density:</b>	not available
<b>Particle characteristics:</b>	not available

## 10. STABILITY AND REACTIVITY

**CONDITIONS TO AVOID:** None known.

**CHEMICAL STABILITY:** Stable at normal use and storage conditions.

**INCOMPATIBILITY WITH OTHER MATERIALS:** None.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: sulfur oxides, nitrogen oxides (NOx), hydrogen chloride gas, and carbon oxides.

**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 LD<sub>50</sub>):** >2,000 mg/kg

**DERMAL TOXICITY (rat LD<sub>50</sub>):** >2,000 mg/kg

**INHALATION TOXICITY (rat LC<sub>50</sub>):** 5.60 mg/L (4-hour)

**EYE IRRITATION:** May cause moderate eye irritation.

**SKIN IRRITATION:** Mild skin irritation (Rabbit)

**SKIN SENSITIZATION:** Has caused allergic skin reactions when tested in guinea pigs.

### CARCINOGENICITY:

**EPA:** Suggestive Evidence of Carcinogenic Potential (Acetochlor)  
Not likely to be carcinogenic to humans (Clopyralid)  
Not likely to be carcinogenic to humans (Mesotrione)

**ACGIH:** Not Listed **NTP:** Not Listed

**IARC:** Not Listed **OSHA:** Not Listed

**CARCINOGENICITY TOXICITY:** Quantification of cancer risk is not required because chronic endpoints are protective of both non-cancer and cancer effects (Acetochlor)

**NEUROTOXICITY:** Rats showed neurological clinical signs (hunched posture, piloerection) and decreased motor activity after a single large dose (1500 mg/kg) of acetochlor, however a repeated dose of neurotoxicity study found no significant neurological effects.

**SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE TOXICITY:** May cause respiratory irritation.

**SPECIFIC TARGET ORGAN TOXICITY – REPEATED EXPOSURE TOXICITY:** In animals, effects have been reported on the following organs: blood, kidney, liver, testes, central nervous system (acetochlor)

**REPRODUCTIVE TOXICITY:** Relevant data not available.

## 12. ECOLOGICAL INFORMATION

This pesticide is toxic to fish and plants.

The following information is for the active ingredient, acetochlor:

### AQUATIC TOXICITY

Rainbow Trout: (LC<sub>50</sub>): 0.38 mg/L; (NOAEC): 0.13 mg/L

Fathead Minnow (NOAEC): 0.147 mg/L

Daphnia Magna (EC<sub>50</sub>): 8.2 mg/L; (NOAEC): 0.0221 mg/L

Sheepshead Minnow (96-hr LC<sub>50</sub>): 2.1 mg/L; (NOAEC) 0.74 mg/L

Eastern Oyster (EC<sub>50</sub>): 3.82 mg/L

Mysid Shrimp (EC<sub>50</sub>): 2.2 mg/L; (NOAEC): 0.48 mg/L

Duckweed (EC<sub>50</sub>): 0.0034 mg/L

Freshwater Green Algae (EC<sub>50</sub>): 0.00143 mg/L

### AVIAN TOXICITY

Northern Bobwhite Quail (LD<sub>50</sub>): 1,567 mg/kg-bw

Northern Bobwhite Quail (LC<sub>50</sub>): >5,620 mg/kg-diet

Mallard Duck (NOAEC): 30 mg/L

### OTHER TOXICITY

Honeybee (LD<sub>50</sub>): 1,715 µg ai/bee

The following information is for the active ingredient, mesotrione:

### AQUATIC TOXICITY

Rainbow Trout (96-hour LC<sub>50</sub>): >120 mg/L

Fathead Minnow (NOAEC): 110 mg/L

Sheepshead Minnow (96-hour LC<sub>50</sub>): >100 mg/L

Daphnia (48-hour EC<sub>50</sub>): 840 mg/L; (NOAEC): 3.305 mg/L

Mysid Shrimp (96-hour LC<sub>50</sub>): 3.3 mg/L; (NOAEC): 0.012 mg/L

Duckweed (14-day EC<sub>50</sub>): 0.0048 mg/L

Green algae (120-hour EC<sub>50</sub>): > 0.82 mg/L

### AVIAN TOXICITY

Bobwhite Quail (LD<sub>50</sub>): >2,000 mg/kg; (8-days LC<sub>50</sub>): >4,770 mg/kg

Mallard Duck (NOAEC): 120 mg/kg diet

### OTHER TOXICITY

Honeybee (contact LD<sub>50</sub>): >100 µg/bee

The following information is for the active ingredient, clopyralid:

### AQUATIC TOXICITY

Rainbow Trout (96-hour LC<sub>50</sub>): 103.5 mg/L; (NOAEC): 10 mg/L

Bluegill Sunfish (96-hour LC<sub>50</sub>): 125.4 mg/L

Daphnia (48-hour EC<sub>50</sub>): 233 mg/L; (3-weeks NOAEC): 4.7 mg/L

Algae (96-hour IC<sub>50</sub>): 6.9 g/L; (NOAEC): <1.6 mg/L

### AVIAN TOXICITY

Bobwhite Quail (LD<sub>50</sub>): > 4,640 mg/kg

Mallard Duck (LD<sub>50</sub>): 1,465 mg/kg

### OTHER TOXICITY

Honeybee (contact/oral LD<sub>50</sub>): >100 µg/bee

## 13. DISPOSAL CONSIDERATIONS

**PESTICIDE DISPOSAL:** Pesticide spray mixture or rinsate that cannot be used must 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 the 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:** Non-refillable containers. See container labeling for complete disposal instructions.

## 14. TRANSPORT INFORMATION

### US-DOT:

Not regulated

### IMDG:

**Containers ≤ 1.3 gal. (5 L) in strong out packaging:**

Not regulated

**Containers > 1.3 gal. (5 L) or containers not in strong outer packaging:**

Shipped internationally by vessel: UN3082, Environmentally hazardous substance, liquid, N.O.S. (contains acetochlor, mesotrione, and clopyralid), 9, PG III, Marine Pollutant

### IATA:

**Containers > 1.3 gal. (5 L) or containers not in strong outer packaging:**

Shipments by air: UN3082, Environmentally hazardous substance, liquid, N.O.S. (contains acetochlor, mesotrione, and clopyralid), 9, PG III, Marine Pollutant

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.



Manufactured for:  
**Atticus, LLC**  
940 NW Cary Parkway, Suite 200  
Cary, NC 27513

## 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. Causes moderate eye irritation. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

Avoid contact with skin, eyes or clothing. Wash hands 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.

##### ENVIRONMENTAL HAZARDS

This pesticide is toxic to fish. 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 washwaters.

##### PHYSICAL/CHEMICAL HAZARD

Do not mix or allow coming in contact with Oxidizing agent and Reducing agents. Hazardous Chemical reaction may occur.

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 (Acute), Delayed (Chronic)

#### 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

Not listed

#### CERCLA Reportable Quantity (RQ) –

Not listed

#### CALIFORNIA PROP 65 STATUS –



**WARNING:** This product can expose you to chemicals including acetochlor, which are known to the State of California to cause cancer. For more information, go to [www.P65Warnings.ca.gov](http://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 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: 3.0

Effective Date: 5/5/2025