

SAFETY DATA SHEET



Date Issued : 9/29/2015
SDS No : CASCADE LV-4

CASCADE LV-4

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: CASCADE LV-4

CHEMICAL FAMILY: Harbicide

DISTRIBUTOR

ALTITUDE CROP INNOVATIONS LLC
4850 Hahn's Peak Drive
Suite 200
Loveland, CO 80538

24 HR. EMERGENCY TELEPHONE NUMBERS

24-Hour Emergency Assistance Call: 1-800-222-1222
Chemical Emergency Call CHEMTREC: 1-800-424-9300

EPA REG. NO.: 89168-6-91395

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Acute Toxicity (Oral), Category 4
Acute Toxicity (Dermal), Category 5
Acute Toxicity (Inhalation), Category 5
Skin Irritation, Category 3
Eye Irritation, Category 2A
Carcinogenicity, Category 2
Target Organ Toxicity (Repeated exposure), Category 2
Skin Sensitization, Category 1B

Environmental:

Acute Hazards to the Aquatic Environment, Category 2

GHS LABEL



Exclamation
mark



Health
hazard

SIGNAL WORD: WARNING

HAZARD STATEMENTS

H302: Harmful if swallowed.
H313: May be harmful in contact with skin.
H316: Causes mild skin irritation.
H317: May cause an allergic skin reaction.
H319: Causes serious eye irritation.
H332: Harmful if inhaled.
H351: Suspected of causing cancer.
H373: May cause damage to liver or kidneys through prolonged or repeated exposure.

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H401: Toxic to aquatic life.

PRECAUTIONARY STATEMENTS**General:**

- P101: If medical advice is needed, have product container or label at hand.
 P102: Keep out of reach of children.
 P103: Read label before use.

Prevention:

- P201: Obtain special instructions before use.
 P202: Do not handle until all safety precautions have been read and understood.
 P260: Do not breathe mist, vapors or spray.
 P264: Wash hands, face and other affected areas thoroughly after handling.
 P271: Use only outdoors or in a well-ventilated area.
 P272: Contaminated work clothing should not be allowed out of the workplace.
 P273: Avoid release to the environment.
 P281: Use personal protective equipment as required.

Response:

- P308+P313: IF exposed or concerned: Get medical advice/attention.
 P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
 P330: Rinse mouth.
 P304+P312: IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.
 P302+P352: IF ON SKIN: Wash with plenty of soap and water.
 P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
 P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P310: Immediately call a POISON CENTER or doctor/physician.
 P321: Specific treatment see Section 4, First Aid Measures, on this SDS.
 P363: Wash contaminated clothing before reuse.

Storage:

- P405: Store locked up.

Disposal:

- P501: Dispose of contents/container to Local, State and Federal Regulations.

POTENTIAL HEALTH EFFECTS

INGESTION: This product contains petroleum distillates.

CARCINOGENICITY: IARC List 2B

TARGET ORGAN STATEMENT: Liver, kidneys

SENSITIZATION: This product may cause an allergic skin reaction.

COMMENTS HEALTH: Read all precautions of products being handled and follow the most restrictive language for all products to provide the safest work environment.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
2,4-Dichlorophenoxyacetic Acid, 2-Ethylhexyl Ester	68	1928-43-4
Other Ingredients	32	Mixture

4. FIRST AID MEASURES

EYES: Hold eyes 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 eyes. 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: Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

INHALATION: Move person 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 further treatment advice.

NOTES TO PHYSICIAN: Contains petroleum distillates. Vomiting may cause aspiration pneumonia. Probable mucosal damage may contraindicate the use of gastric lavage. Treat symptomatically and give supportive therapy.

ADDITIONAL INFORMATION: Have the product container or label with you when calling a poison control center or doctor, or going in for treatment. For emergency medical assistance call **NPCC 1-800-222-1222** or call **CHEMTREC 1-800-424-9300**.

5. FIRE FIGHTING MEASURES

GENERAL HAZARD: Toxic fumes may be emitted in a fire situation.

EXTINGUISHING MEDIA: Foam, dry chemical, carbon dioxide, water spray or fog.

HAZARDOUS COMBUSTION PRODUCTS: Normal combustion forms carbon dioxide, water vapor and may produce oxides of carbon, nitrogen and phosphorous.

EXPLOSION HAZARDS: No specific explosion hazards are identified or expected. Always fight fire with the implication that other volatile substances may be present.

FIRE FIGHTING PROCEDURES: Evacuate area and fight fire upwind a safe distance to avoid hazardous vapors and decomposition products. Fire exposed containers can build up pressure and should be kept cool with water spray if possible. Explosive vapor could form from ruptured containers. Dike and collect water used to fight fire to prevent environmental damage due to runoff. Foam or dry chemical fire extinguishing systems are preferred to prevent environmental damage from excessive water runoff.

FIRE FIGHTING EQUIPMENT: As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Pick up spilled liquid with absorbent material and sweep up for disposal. Place it and damaged unusable containers in a landfill appropriate for non hazardous chemical waste. Check local, state, and federal regulations for proper disposal.

LARGE SPILL: Dike around the spill area to prevent spreading. Pick up spilled material with suitable absorbent material and place in appropriate container for disposal. Scrub the contaminated area with a detergent or soap solution. Place it and unusable containers in a landfill appropriate for non hazardous chemical waste. Check local, state, and federal regulations for proper disposal.

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Do not contaminate any body of water.

LAND SPILL: Avoid runoff onto any adjacent land.

SPECIAL PROTECTIVE EQUIPMENT: Always wear proper protective equipment when handling this product.

7. HANDLING AND STORAGE

HANDLING: Avoid breathing vapors or spray mist. Wash hands after handling, before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing 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. As soon as possible, wash thoroughly and change into clean clothing.

STORAGE: Storage should be under lock and key in a ventilated room and secure from access by unauthorized persons and children. Storage should be in a cool, dry area away from any heat or ignition source and away from children and animals. Mix well before using. Keep tightly closed. Do not contaminate water, foodstuffs, feed or seed by storage or disposal.

STORAGE TEMPERATURE: Store above 40°F. If exposed to subfreezing temperatures, the product should be warmed to at least 40°F and mixed thoroughly before using.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler

PPE requirements may be reduced or modified as specified in the WPS.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Wear chemical goggles or shielded safety glasses (ANSI Z87.1 or approved equivalent) when handling and mixing product. Contact lenses should not be worn when working with chemicals.

SKIN: Wear chemical resistant gloves such as Viton or barrier laminate, Coveralls over long-sleeved shirt, long pants and chemical resistant footwear plus socks. Chemical resistant headgear for overhead exposure. When exposed to product concentrate, wear a chemical resistant apron. Always refer to the label of the pesticide(s) in the tank mix and follow the most restrictive requirements.

RESPIRATORY: Proper ventilation is required when handling or using this product to keep exposure to airborne contaminants below the exposure limit. Wear a NIOSH/MSHA approved dust mask or filter when vapors are expected to be generated above the permissible limit.

PROTECTIVE CLOTHING: Eye protection, long sleeved shirt and long pants, shoes plus socks and chemical resistant gloves. 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.

OTHER USE PRECAUTIONS: Avoid contact with skin, eyes, and clothing. Avoid breathing vapors. Wash thoroughly after handling product. Eye wash fountains and drench showers should be located within 100 feet or a 10 second walk from the work area per ANSI Z358.1-1990

9. PHYSICAL AND CHEMICAL PROPERTIES

ODOR: Phenolic

APPEARANCE: Liquid

COLOR: Amber

pH: 3.3

PERCENT VOLATILE: Not Established

FLASH POINT AND METHOD: > (200°F)

FLAMMABLE LIMITS: Not Established

AUTOIGNITION TEMPERATURE: Not Established

VAPOR PRESSURE: Not Established

VAPOR DENSITY: Not Established

BOILING POINT: Not Established

FREEZING POINT: <= (40°F)

MELTING POINT: Not Established

POUR POINT: Not Established

THERMAL DECOMPOSITION: Not Established

SOLUBILITY IN WATER: Emulsifies

EVAPORATION RATE: Not Established

DENSITY: 8.59 - 8.67 lbs/gal.

SPECIFIC GRAVITY: 1.03 to 1.04 g/mL

VISCOSITY: Not Established

MOLECULAR WEIGHT: Not Established

10. STABILITY AND REACTIVITY

STABLE: Yes

HAZARDOUS POLYMERIZATION: No

POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: None known.

INCOMPATIBLE MATERIALS: Avoid strong oxidizers or bases; mild and galvanized steel.

11. TOXICOLOGICAL INFORMATION**ACUTE****DERMAL LD₅₀:** > 2000 mg/kg**ORAL LD₅₀:** > 1100 mg/kg**INHALATION LC₅₀:** > 5.00 mg/L**EYE EFFECTS:** Causes serious eye irritation.**SKIN EFFECTS:** Causes mild skin irritation.**CARCINOGENICITY****IARC:** IARC List 2B**SENSITIZATION:** This product may cause an allergic skin reaction.**TARGET ORGANS:** This product may effect the liver or kidneys from prolonged or repeated exposure.**COMMENTS:** These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.**12. ECOLOGICAL INFORMATION****ENVIRONMENTAL DATA:** This product is toxic to fish and aquatic invertebrates. For terrestrial uses: Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift or runoff may be hazardous to aquatic organisms in water adjacent to treated areas, and non-target plants. Do not contaminate water when disposing of equipment wash waters or rinsate.**13. DISPOSAL CONSIDERATIONS****DISPOSAL METHOD:** Do not reuse product containers. Triple rinse (or equivalent), then offer for recycling at an ACRC site (go to <http://www.acrecycle.org/> for locations) or by reconditioning, or puncture and dispose of in a sanitary landfill or by other procedures approved by local, state, and federal regulations.**14. TRANSPORT INFORMATION****DOT (DEPARTMENT OF TRANSPORTATION)****PROPER SHIPPING NAME:**

<18Gallons per complete package - Not regulated by DOT

>= 18 Gallons and < 119 gallons per complete package -

UN 3082, Environmentally hazardous substance, liquid, N.O.S (2,4-D Ester), 9, III, RQ, ERG 171

>= 119 Gallons per complete package -

UN 3082, Environmentally hazardous substance, liquid, N.O.S (2,4-D Ester), 9, III, RQ, ERG 171, Marine Pollutant

PRIMARY HAZARD CLASS/DIVISION: 9**UN/NA NUMBER:** 3082**PACKING GROUP:** III**NAERG:** 171**REPORTABLE QUANTITY (RQ) UNDER CERCLA:** 100 Lbs.**15. REGULATORY INFORMATION****UNITED STATES****SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)****311/312 HAZARD CATEGORIES:** Immediate, Delayed**FIRE:** No **PRESSURE GENERATING:** No **REACTIVITY:** No **ACUTE:** Yes **CHRONIC:** Yes**313 REPORTABLE INGREDIENTS:** Acetic Acid (2,4-Dichlorophenoxy) - (CAS No. 94-75-7) 100 lbs.**CALIFORNIA PROPOSITION 65:** Not Listed**FIFRA (FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT):****Labeling Information:**

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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. Following is the hazard information as required on the pesticide label:

PRECAUTIONARY STATEMENTS**Hazards to Humans and Domestic Animals****CAUTION/PRECAUCION**

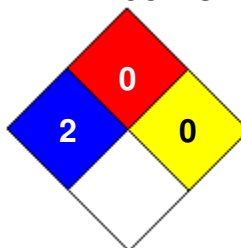
Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand the label, find someone to explain it to you in detail.)

Harmful if swallowed or absorbed through skin. Avoid breathing vapors or mists. Avoid contact with skin, eyes, or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

16. OTHER INFORMATION

REASON FOR ISSUE: New Product

PREPARED BY: Lighthouse Product Services LLC

NFPA CODES**GENERAL STATEMENTS: DISCLAIMER AND LIMITATION OF LIABILITY**

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