

Safety Data Sheet
according to PMRA

Printing date 11/07/2023

Reviewed on 11/07/2023

1 Identification

· **Product identifier**

· **Trade name:** AVADEX® LIQUID EC HERBICIDE

· **Article number:** CA15_Eng

· **CAS Number:**

Triallate (480 g/L): 2303-17-5

Registration number: PCP Registration No.: 16759

Group 15 Herbicide

· **Application of the substance / the mixture** Agricultural herbicide

· **Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

Gowan Company, L.L.C.

P.O. Box 5569

Yuma, Arizona 85366-5569

Gowan Canada 1-800-960-4318

· **Information department:** sds@gowanco.com

· **Emergency telephone number:**

Chemtec® Emergency Telephone 24 - Hours: (Spills, leak or fire) Inside U.S. & Canada: (800) 424-9300

Outside the U.S. & Canada: +011 (703) 527-3887

For medical emergency (ProPharma Group®): (888) 478-0798

2 Hazard identification

· **Classification of the substance or mixture**



GHS02 Flame

Flammable Liquids - Category 3 H226 Flammable liquid and vapour.

· **Label elements**

· **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS02

· **Signal word** Warning

· **Hazard statements**

H226 Flammable liquid and vapour.

· **Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

P240 Ground and bond container and receiving equipment.

P241 Use explosion-proof [electrical/ventilating/lighting] equipment.

P242 Use non-sparking tools.

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- P243 Take actions to prevent static discharges.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
 P370+P378 In case of fire: Use CO₂, powder or water spray to extinguish.
 P403+P235 Store in a well-ventilated place. Keep cool.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard description:

KEEP OUT OF REACH OF CHILDREN
 COMBUSTIBLE
 MAY CAUSE SKIN AND EYE IRRITATION.
 MAY BE HARMFUL IF SWALLOWED.

Classification system:

- NFPA ratings (scale 0 - 4)



Health = 1
 Fire = 2
 Reactivity = 0

HAZARD INDEX:

- 4 Severe Hazard
- 3 Serious Hazard
- 2 Moderate Hazard
- 1 Slight Hazard
- 0 Minimal Hazard

Other hazards

- PBT: Not applicable.
- vPvB: Not applicable.

3 Composition/Information on ingredients

Chemical characterization: Mixtures

- **Description:** Mixture of the substances listed below with nonhazardous additions.

Dangerous components:

CAS: 2303-17-5	Triallate (ISO) / diisopropylthiocarbamate de S-2,3,3-tri-chloroallyle ⚠ Specific Target Organ Toxicity - Repeated Exposure - Category 2, H373; ⚠ Acute Toxicity (Oral) - Category 4, H302; Skin Sensitizer - Category 1, H317	480 g/L
CAS: 64742-95-6	Solvent naphtha (petroleum), light arom. ⚠ Aspiration Hazard - Category 1, H304; ⚠ Acute Toxicity (Inhalation) - Category 4, H332; Specific Target Organ Toxicity - Single Exposure - Category 3, H335; Flammable Liquids - Category 4, H227	46.0% w/w

4 First-aid measures

Description of first aid measures
General information:

Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

For emergency information concerning this product, contact 1-888-478-0798, day or night.

After inhalation:

- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-

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- mouth if possible.
- Call poison control center or doctor for further treatment advice.
- **After skin contact:**
 - 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.
- **After eye contact:**
 - Hold eye open and rinse slowly and gently with water for 15-20 minutes.
 - Remove contact lenses, if present, after first 5 minutes, then continue rinsing eyes.
 - Call a poison control center or doctor for treatment advice.
- **After swallowing:**
 - Call a poison control center or doctor immediately for treatment advice.
 - Have person sip a glass of water if able to swallow.
 - Do not induce vomiting unless told to do so by a poison control center or doctor.
 - Do not give anything by mouth to an unconscious person.
- **Information for doctor:**
 - **Most important symptoms and effects, both acute and delayed** No further relevant information available.
 - **Indication of any immediate medical attention and special treatment needed**
This product contains petroleum distillates. Treat symptomatically.

5 Fire-fighting measures

- **Extinguishing media**
 - **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
 - **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
 - **Protective equipment:** Mouth respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Do not use, pour, spill or store near heat or flame. Do not take internally. Do not get in eyes or on skin or on clothing. Wear a long-sleeved shirt and long pants, chemical-resistant gloves, socks and chemical-resistant footwear during mixing, loading, application, clean-up and repair. In addition, during clean-up and repair, wear either a respirator with a NIOSH/MSHA/BHSE approved organic-vapour-removing cartridge with a prefilter approved for pesticides OR a NIOSH/MSHA/BHSE-approved canister approved for pesticides.
- **Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information.

7 Handling and storage

· Handling:

· Precautions for safe handling

Avoid contact with eyes, skin or clothing. Avoid breathing vapors or spray mist. User should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Do not use, pour, spill or store near heat or flame. Use only with adequate ventilation.

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 washings.

· Information about protection against explosions and fires:

Keep respiratory protective device available.

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

· Conditions for safe storage, including any incompatibilities

· Storage:

· Requirements to be met by storerooms and receptacles:

STORE ABOVE 32° F (0° C) TO KEEP FROM FREEZING.

Freezing will result in crystals, which settle to the bottom. If allowed to freeze, place in a warm room (72° F, 22° C) and gently shake the jug frequently for several days to dissolve crystals before using. For bulk containers, see the bulk container label for alternate storage information. Keep containers closed to prevent spills, evaporation and contamination.

· Information about storage in one common storage facility: Store away from foodstuffs.

· Further information about storage conditions: Keep receptacle tightly sealed.

· Specific end use(s) No further relevant information available.

8 Exposure controls/ Personal protection

· Additional information about design of technical systems: No further data; see section 7.

· Control parameters

· Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· Additional information: The lists that were valid during the creation were used as basis.

· Exposure controls

· Personal protective equipment:

· General protective and hygienic measures:

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

· Breathing equipment: Not required.

· Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves** Chemical-resistant gloves.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**



Tightly sealed goggles

- **Body protection:**

Wear a long-sleeved shirt and long pants, chemical-resistant gloves, socks and chemical-resistant footwear during mixing, loading, application, clean-up and repair. In addition, during clean-up and repair, wear either a respirator with a NIOSH/MSHA/BHSE approved organic-vapour-removing cartridge with a prefilter approved for pesticides OR a NIOSH/MSHA/BHSE-approved canister approved for pesticides.

9 Physical and chemical properties

- **Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

- **Form:** Liquid
- **Color:** Amber to Brown

- **Odor:** Characteristic

- **Odor threshold:** Not determined.

- **pH-value at 20 °C (68 °F):** 5.2

- **Change in condition**

- **Melting point/Melting range:** Undetermined.

- **Boiling point/Boiling range:** 160 °C (320 °F)

- **Flash point:** 46 °C (114.8 °F)

- **Flammability (solid, gaseous):** Flammable.

- **Auto igniting:** 450 °C (842 °F)

- **Decomposition temperature:** Not determined.

- **Ignition temperature:** Product is not self-igniting.

- **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

- **Explosion limits:**

- **Lower:** Not determined.

- **Upper:** Not determined.

- **Vapor pressure:** Not determined.

- **Density at 20 °C (68 °F):** 1.053 g/cm³ (8.78729 lbs/gal)

- **Relative density** Not determined.

- **Vapor density** Not determined.

- **Evaporation rate** Not determined.

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· **Solubility in / Miscibility with**

· **Water:** Dispersible.

· **Partition coefficient (n-octanol/water):** Not determined.

· **Viscosity:**

· **Dynamic:** Not determined.

· **Kinematic:** Not determined.

· **Other information** No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability** Stable under normal conditions
 - **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

· **Information on toxicological effects**

· **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

Oral	LD50	2,193 mg/kg (rat)
Dermal	LD50	>5,000 mg/kg (rabbit)
Inhalative	LC50/4 h	>5.2 mg/l (rat)

· **Primary irritant effect:**

- **on the skin:** Slightly irritating
- **on the eye:** Moderately Irritating
- **Sensitization:** No sensitizing effects known.

· **Additional toxicological information:**

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

None of the ingredients are listed.

· **NTP (National Toxicology Program)**

None of the ingredients are listed.

12 Ecological information

· **Toxicity**

This product contains a petroleum distillate which is moderately to highly toxic to aquatic organisms. Avoid contamination of aquatic habitats (such as lakes, rivers, sloughs, ponds, prairie potholes, creeks, marshes, streams, reservoirs, ditches and wetlands) estuaries and marine habitats during application. Do not contaminate irrigation or drinking water supplies or aquatic habitats through direct application, disposal of waste or cleaning equipment.

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- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
 - **Bioaccumulative potential** No further relevant information available.
 - **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
 - **General notes:**

Water hazard class 3 (Self-assessment): extremely hazardous for water
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Danger to drinking water if even extremely small quantities leak into the ground.
- **Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
 - **Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Wastes resulting from the use of this product that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable federal, provincial or municipal regulations. Keep out of drains, sewers, ditches and waterways.
- **Uncleaned packagings:**
 - **Recommendation:**

Do not reuse this container for any purpose. This is a recyclable container, and is to be disposed of at a container collection site. Contact your local distributor/dealer or municipality for the location of the nearest collection site. Before taking the container to the collection site:

 1. Triple- or pressure-rinse the empty container. Add the rinsings to the spray mixture in the tank.
 2. Make the empty, rinsed container unsuitable for further use.

If there is no container collection site in your area, dispose of the container in accordance with provincial requirements.

14 Transport information

- | | |
|--|---|
| <ul style="list-style-type: none"> · UN-Number · DOT/TDG, ADR, IMDG, IATA | <p>UN1268</p> |
| <ul style="list-style-type: none"> · UN proper shipping name · DOT/TDG · ADR · IMDG · IATA | <p>Packages less than 450 L
Exemption TDG 1.33
1268 Petroleum distillates, n.o.s.(Triallate, Solvent naphtha), 3,III, ENVIRONMENTALLY HAZARDOUS
1268 PETROLEUM DISTILLATES, N.O.S.(Triallate, Solvent naphtha), 3,III, MARINE POLLUTANT
1268 PETROLEUM DISTILLATES, N.O.S.(Triallate, Solvent naphtha), 3,III</p> |

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· **Transport hazard class(es)**· **DOT/TDG (Transport dangerous goods):**

· **Class** 3 Flammable liquids
 · **Label** 3

· **ADR, IMDG**

· **Class** 3 Flammable liquids
 · **Label** 3

· **IATA**

· **Class** 3 Flammable liquids
 · **Label** 3

· **Packing group**

· **DOT/TDG, ADR, IMDG, IATA** III

· **Environmental hazards:**

Product contains environmentally hazardous substances: Triallate (ISO) / diisopropylthiocarbamate de S-2,3,3-tri-chloroallyle

· **Marine pollutant:**

Symbol (fish and tree)

· **Special marking (ADR):**

Symbol (fish and tree)

· **Special precautions for user**

Warning: Flammable liquids

· **Hazard identification number (Kemler code):** 30

· **EMS Number:** F-E,S-E

· **Stowage Category** E

· **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable

· **Transport/Additional information:**· **DOT/TDG**

· **Quantity limitations** On passenger aircraft/rail: 1 L
 On cargo aircraft only: 30 L

· **ADR**

· **Excepted quantities (EQ)** Code: E3
 Maximum net quantity per inner packaging: 30 ml
 Maximum net quantity per outer packaging: 300 ml

· **IMDG**

· **Limited quantities (LQ)** 500 ml

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· **Excepted quantities (EQ)** Code: E3
 Maximum net quantity per inner packaging: 30 ml
 Maximum net quantity per outer packaging: 300 ml

· **UN "Model Regulation":** Packages less than 450 L
 Exemption TDG 1.33

Packages greater than 450 L
 UN 1268 PETROLEUM DISTILLATES, N.O.S. 3, I,
 ENVIRONMENTALLY HAZARDOUS

15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **Marketing authorization number:**

· **SARA Title III**

· **Section 355 (extremely hazardous substances):**

None of the ingredients are listed.

· **Section 313 (Specific toxic chemical listings):**

CAS: 2303-17-5 Triallate (ISO) / diisopropylthiocarbamate de S-2,3,3-tri-chloroallyle

· **TSCA (Toxic Substances Control Act):**

None of the ingredients are listed.

· **Canadian substance listings:**

· **Canadian Domestic Substances List (DSL)**

None of the ingredients are listed.

· **Canadian Non-Domestic Substances List (NDSL)**

None of the ingredients are listed.

· **Canadian Ingredient Disclosure list (limit 0.1%)**

None of the ingredients are listed.

· **Canadian Ingredient Disclosure list (limit 1%)**

None of the ingredients are listed.

· **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**



GHS02

· **Signal word** Warning

· **Hazard statements**

H226 Flammable liquid and vapour.

· **Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

P240 Ground and bond container and receiving equipment.

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P241	Use explosion-proof [electrical/ventilating/lighting] equipment.
P242	Use non-sparking tools.
P243	Take actions to prevent static discharges.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P370+P378	In case of fire: Use CO ₂ , powder or water spray to extinguish.
P403+P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

· **National regulations:**

· **Additional classification according to Decree on Hazardous Materials:**

Read the label, authorized under the Pest Control Products Act, prior to using or handling the pest control product.

There are Canada-specific environmental requirements for handling, use, and disposal of this pest control product that are indicated on the label.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

- H227 Combustible liquid.
- H302 Harmful if swallowed.
- H304 May be fatal if swallowed and enters airways.
- H317 May cause an allergic skin reaction.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H373 May cause damage to organs through prolonged or repeated exposure.

· **Department issuing SDS:** Supply Chain

· **Contact:** sds@gowanco.com

· **Date of the latest revision of the safety data sheet** 11/07/2023

· **Abbreviations and acronyms:**

- IMDG: International Maritime Code for Dangerous Goods
- DOT: US Department of Transportation
- IATA: International Air Transport Association
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- NFPA: National Fire Protection Association (USA)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: very Persistent and very Bioaccumulative

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