

1 Identification

1.1 Product identifier

· **Trade name:** Avadex® MicroActiv Herbicide

· **CAS Number:**

Triallate (10.0 %): 2303-17-5

Registration number: PCP Registration No.: 25112

Group 8 Herbicide

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

1.3 Details of the supplier of the safety data sheet

· **Manufacturer/Supplier:**

Gowan Company

P.O. Box 5569

Yuma, Arizona 85366-5569

(800) 883-1844

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

1.4 Emergency telephone number:

Chemtrec® 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 (Prosar®): (888) 478-0798

2 Hazard identification

2.1 Classification of the substance or mixture

· **Classification according to Regulation (EC) No 1272/2008**



GHS09 Environment

Aquatic Acute 1

H400 Very toxic to aquatic life.

Aquatic Chronic 1

H410 Very toxic to aquatic life with long lasting effects.



GHS07

Skin Irritation - Category 2 H315 Causes skin irritation.

Skin Sensitizer - Category 1 H317 May cause an allergic skin reaction.

Eye Irritation - Category 2B H320 Causes eye irritation.

2.2 Label elements

· **Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labeled according to the CLP regulation.

· **Hazard pictograms**



GHS07 GHS09

· **Signal word** Warning

· **Hazard-determining components of labeling:**

Triallate (ISO) / diisopropylthiocarbamate de S-2,3,3-tri-chloroallyle

(Contd. on page 2)

CA/EN

Safety Data Sheet

according to HPR, Schedule 1

Printing date 07/01/2019

Reviewed on 07/01/2019

Trade name: Avadex® MicroActiv Herbicide

(Contd. of page 1)

· Hazard statements

- H315+H320 Causes skin and eye irritation.
 H317 May cause an allergic skin reaction.
 H410 Very toxic to aquatic life with long lasting effects.

· Precautionary statements

- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P305+P351+P338 **IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.**
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
 P321 Specific treatment (see on this label).
 P337+P313 If eye irritation persists: Get medical advice/attention.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· Hazard description:

Causes skin and eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

· Classification system:

- NFPA ratings (scale 0 - 4)



Health = 1
 Fire = 1
 Reactivity = 1

HAZARD INDEX:

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

· 2.3 Other hazards

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

3 Composition/Information on ingredients

· 3.2 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	10.0% w/w

4 First aid measures

· 4.1 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.

You may also contact 1-888-478-0798 for emergency medical treatment information.

(Contd. on page 3)

Safety Data Sheet

according to HPR, Schedule 1

Printing date 07/01/2019

Reviewed on 07/01/2019

Trade name: Avadex® MicroActiv Herbicide

(Contd. of page 2)

- **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.
- **4.2 Most important symptoms and effects, both acute and delayed** Unknown
- **4.3 Indication of any immediate medical attention and special treatment needed** None

5 Firefighting measures

- **5.1 Extinguishing media**
 - **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2 Special hazards arising from the substance or mixture**
 - Carbon monoxide (CO)
 - Nitrogen oxides (NO_x)
 - Phosgene (COCL₂)
 - Carbonyl sulphide (COS)
 - Hydrogen chloride (HCl)
- **5.3 Advice for firefighters**
 - **Protective equipment:** Wear self-contained respiratory protective device.

6 Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to item 13.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **7.1 Precautions for safe handling**
Causes skin and eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.
 - **Information about protection against explosions and fires:** Keep ignition sources away - Do not smoke.
- **7.2 Conditions for safe storage, including any incompatibilities**
 - **Storage:**
 - **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.

(Contd. on page 4)

CA/EN

Safety Data Sheet

according to HPR, Schedule 1

Printing date 07/01/2019

Reviewed on 07/01/2019

Trade name: Avadex® MicroActiv Herbicide

(Contd. of page 3)

- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **7.3 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 item 7.
- **8.1 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.
- **8.2 Exposure controls**
 - **Personal protective equipment:**
 - **Breathing equipment:**
during mixing, loading, 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.
 - **Protection of hands:**



Protective gloves

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

- **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.
- **Body protection:**
Wear chemical-resistant coveralls over long-sleeved shirt and long pants, chemical-resistant gloves, socks, and chemical-resistant footwear during mixing, loading, application, clean-up and repair.

9 Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
 - **General Information**
 - **Appearance:**
 - **Form:** Granulate
 - **Color:** Beige-grey
 - **Odor:** Sulfur-like
 - **Odor threshold:** Not determined.
 - **pH-value:** N/A
 - **Change in condition**
 - **Melting point/Melting range:** Undetermined.
 - **Boiling point/Boiling range:** Undetermined.
 - **Flash point:** Not applicable.
 - **Flammability (solid, gaseous):** Not determined.

(Contd. on page 5)

CA/EN

Safety Data Sheet

according to HPR, Schedule 1

Printing date 07/01/2019

Reviewed on 07/01/2019

Trade name: Avadex® MicroActiv Herbicide

(Contd. of page 4)

· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not self-igniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
· Lower:	Not determined.
· Upper:	Not determined.
· Vapor pressure:	Not applicable.
· Density:	Not determined.
· Relative density	Not determined.
· Vapor density	Not applicable.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with	
· Water:	Dispersible.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
· Dynamic:	Not applicable.
· Kinematic:	Not applicable.
· 9.2 Other information	No further relevant information available.

10 Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability** Stable under normal conditions
 - **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**
 - Carbon monoxide (CO)
 - Nitrogen oxides (NO_x)
 - Phosgene (COCL₂)
 - Carbon sulphide (COS)
 - Hydrogen chloride (HCl)

11 Toxicological information

- **11.1 Information on toxicological effects**
 - **Acute toxicity:** Based on available data, the classification criteria are not met.

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

Oral	LD50	12000 mg/kg (rat)
Dermal	LD50	>20000 mg/kg (rabbit)

- **Primary irritant effect:**
 - **on the skin:**
 - Slightly irritating
 - Causes skin and eye irritation.
 - **on the eye:** Slight irritation

(Contd. on page 6)

CA/EN

Safety Data Sheet

according to HPR, Schedule 1

Printing date 07/01/2019

Reviewed on 07/01/2019

Trade name: Avadex® MicroActiv Herbicide

(Contd. of page 5)

- **Sensitization:**
May cause an allergic skin reaction.
- **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

· **12.1 Toxicity**

Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters or rinsate.

- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.

· **Ecotoxicological effects:**

· **Remark:** Toxic for fish

· **Additional ecological information:**

· **General notes:**

"DO NOT contaminate irrigation or drinking water supplies or aquatic habitats by cleaning of equipment or disposal of wastes."

· **12.5 Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

13 Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation:**

For information on the disposal of unused, unwanted product, contact the manufacturer or the Provincial Regulatory Agency. Contact the manufacturer and the Provincial Regulatory Agency in case of a spill, and for clean-up of spills.

· **Uncleaned packagings:**

· **Recommendation:**

Do not reuse this container for any purpose. Thoroughly empty the contents of the container into the application device. Make the empty container unsuitable for further use. Dispose of the container in accordance with provincial requirements.

14 Transport information

· **14.1 UN-Number**

· **DOT/TDG**

· **ADR**

Not regulated

Marine Pollutants Exemption (TDG 1.45.1)

(Contd. on page 7)

Safety Data Sheet

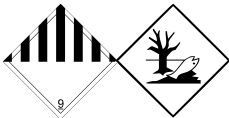
according to HPR, Schedule 1

Printing date 07/01/2019

Reviewed on 07/01/2019

Trade name: Avadex® MicroActiv Herbicide

(Contd. of page 6)

· IMDG, IATA	UN3077
· 14.2 UN proper shipping name · DOT/TDG · ADR · IMDG · IATA	Void Marine Pollutants Exemption (TDG 1.45.1) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (tri-allate (ISO)), MARINE POLLUTANT ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (tri-allate (ISO))
· 14.3 Transport hazard class(es) · 14.3 DOT/TDG (Transport dangerous goods): · Class	Void
· ADR, IMDG, IATA  · Class · Label	9 Miscellaneous dangerous substances and articles 9
· 14.4 Packing group · DOT/TDG · ADR, IMDG, IATA	Void III
· 14.5 Environmental hazards: · Marine pollutant: · Special marking (ADR): · Special marking (IATA):	Product contains environmentally hazardous substances: Triallate (ISO) / diisopropylthiocarbamate de S-2,3,3- tri-chloroallyle Yes Symbol (fish and tree) Symbol (fish and tree) Symbol (fish and tree)
· 14.6 Special precautions for user · Danger code (Kemler): · EMS Number:	Warning: Miscellaneous dangerous substances and articles 90 F-A,S-F
· 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable
· Transport/Additional information: · ADR · Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	5 kg Code: E1 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 1000 g

(Contd. on page 8)

CA/EN

Safety Data Sheet

according to HPR, Schedule 1

Printing date 07/01/2019

Reviewed on 07/01/2019

Trade name: Avadex® MicroActiv Herbicide

(Contd. of page 7)

- | | |
|--|--|
| <ul style="list-style-type: none"> · UN "Model Regulation": | <ul style="list-style-type: none"> Canada TDG Marine Pollutants Exemption (TDG 1.45.1)
 US DOT No Regulated |
|--|--|

15 Regulatory information

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

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

None of the ingredients are listed.

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

None of the ingredients are listed.

· **Labelling according to Regulation (EC) No 1272/2008**

· **Hazard pictograms** Not applicable

· **Hazard statements**

Causes moderate eye irritation.

Avoid contact with skin, eyes, or clothing.

Wash thoroughly with soap and water after handling.

Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

· **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.

· **15.2 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**

H302 Harmful if swallowed.

H317 May cause an allergic skin reaction.

(Contd. on page 9)

CA/EN

Safety Data Sheet
according to HPR, Schedule 1

Printing date 07/01/2019

Reviewed on 07/01/2019

Trade name: Avadex® MicroActiv Herbicide

(Contd. of page 8)

H373 May cause damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

- **Department issuing SDS:** Supply Chain
- **Contact:** *sds@gowanco.com*
- **Date of the latest revision of the safety data sheet** 07/01/2019 / 6
- **Abbreviations and acronyms:**
 - IMDG: International Maritime Code for Dangerous Goods*
 - DOT: US Department of Transportation*
 - IATA: International Air Transport Association*
 - GHS: Globally Harmonised System of Classification and Labelling of Chemicals*
 - 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*
- **Sources** Avadex® is a registered trademark of Gowan Company LLC.
- *** Data compared to the previous version altered.**

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