

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 23.05.2012

Revision: 14.04.2011

1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** Avadex® 15G
- **Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the preparation** Agricultural Herbicide
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Gowan Comércio Internacional e Serviços, Limitada
Avenida do Infante 50
9004-521 Funchal, Madeira
Portugal
Telephone: +351 291 232 484
- **Further information obtainable from:** jabel@gowanco.com
- **Emergency telephone number:** Telephone (24 hour emergency) +44 (0) 1865 407333

2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS08 health hazard

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



GHS09 environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



GHS07

Skin Sens. 1 H317 May cause an allergic skin reaction.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



Xn; Harmful

R48/22: Harmful: danger of serious damage to health by prolonged exposure if swallowed.



Xi; Sensitising

R43: May cause sensitisation by skin contact.



N; Dangerous for the environment

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

- **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

- **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

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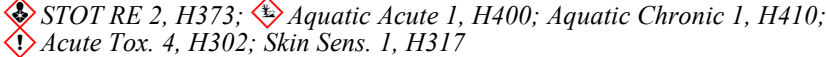
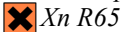
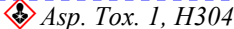
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- **Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms** GHS07, GHS08, GHS09
- **Signal word** Warning
- **Hazard-determining components of labelling:**
tri-allate (ISO)
- **Hazard statements**
H317 May cause an allergic skin reaction.
H373 May cause damage to organs through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.
- **Precautionary statements**
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.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P321 Specific treatment (see on this label).
P363 Wash contaminated clothing before reuse.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

| | | |
|--------------------------------------|--|-------|
| CAS: 2303-17-5 EINECS: 218-962-7 | tri-allate (ISO)   | 15.0% |
| CAS: 64742-94-5 EINECS: 265-198-5 | Solvent naphtha (petroleum), heavy arom.   | 7.5% |

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- **Description of first aid measures**
- **General information:**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

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- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.
- **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**
No further relevant information available.

5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** Product may decompose in a fire to release toxic fumes.
- **Advice for firefighters**
- **Protective equipment:** Wear chemical-resistant protective clothing and self-contained breathing apparatus.
- **Additional information**
Prevent run-off water contaminating drains or watercourses (bund if necessary); inform appropriate authority immediately if this happens.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation (see Section 8 if this is not possible). Avoid contamination with chemical; wear personal protective equipment (see Section 8). Keep people and animals away.
- **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:**
Dispose contaminated material as waste according to item 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.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Ensure appropriate measures (eg engineering controls and/or personal protective equipment) are in place to minimise exposure – see Section 8. Avoid contact with skin or eyes. Avoid inhaling dust.
- **Information about fire - and explosion protection:** Product is non-combustible but packaging is combustible.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Store in a secure, cool, dry, designated area in original packaging, in accordance with any label storage advice.
Keep children and public away. Rotate stock and check regularly for damage.

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

8 Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.

· **Control parameters**

· **Ingredients 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 valid during the making were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

· **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· **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.

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

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **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:** Wear goggles with side pieces.

9 Physical and chemical properties

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

· **General Information**

· **Appearance:**

Form: Granules

Colour: Tan-purple

· **Odour:** Characteristic

· **pH-value at 20°C:** 7.2

· **Change in condition**

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

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| | |
|--|---|
| Boiling point/Boiling range: | 117°C |
| · Flash point: | Not applicable. |
| · Self-igniting: | Product is not selfigniting. |
| · Danger of explosion: | Product does not present an explosion hazard. |
| · Density at 20°C: | 0.87 g/cm ³ |
| · Solubility in / Miscibility with water: | Soluble. |
| · Solvent content: | |
| Organic solvents: | 0.0 % |
| Solids content: | 100.0 % |
| · Other information | No further relevant information available. |

10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **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 relevant for classification: | | |
| Oral | LD50 | 12.000 mg/kg (rat) |
| Dermal | LD50 | >20.000 mg/kg (rabbit) |
| Inhalative | LC50/4 h | >5.3 mg/l (rat) |

| | | |
|-----------------------------------|------|------------------|
| 2303-17-5 tri-allyle (ISO) | | |
| Oral | LD50 | 1700 mg/kg (rat) |

- **Primary irritant effect:**
- **on the skin:**
Low acute toxicity: rabbit dermal LD50 >20,000 mg/kg. May cause sensitisation. In modified Draize test, mean EU scores for redness 1.25, swelling 0.25.
- **on the eye:**
Unlikely to cause irritation. In OECD 405 test, mean EU scores for conjunctival redness 1.11, conjunctival swelling 0.28, corneal opacity 0, iris lesions 0 (3 days to heal) †.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Irritant
Sub-chronic toxicity: Harmful: danger of serious damage to health by prolonged exposure if swallowed.

Chronic toxicity: The ingredients of this preparation are not classified by their suppliers as carcinogenic,

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mutagenic or toxic for reproduction under EU rules.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability**
May cause long-term adverse effects to the aquatic environment. For triallate, half lives are 2-3 days (water/sediment) and 35-61 days (soil, aerobic); not readily degradable, <1% degradation within 28 days in manometric respirometry test.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** Triallate adsorbs strongly to soil and is not expected to leach to groundwater.
- **Ecotoxic effects:**
- **Remark:**
Toxic for fish
Avarian toxicity: For Triallate, bobwhite quail oral LD50 2,251 mg/kg.
Toxicity to honey bees: For triallate, oral/contact 48 hr. LD50 >100 µg/bee.
Toxicity to earthworms: For triallate, 14 day LC50 549 mg/kg dry soil.
- **Additional ecological information:**
- **General notes:**
Water hazard class 3 (German Regulation) (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.
Also poisonous for fish and plankton in water bodies.
Toxic for aquatic organisms
- **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 together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

14 Transport information

- | | |
|----------------------------------|--|
| · UN-Number | |
| · ADR, IMDG, IATA | 3077 |
| · ADN | Void |
| · UN proper shipping name | |
| · ADR | 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (tri-allate (ISO)) |

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| | |
|--|--|
| · ADN · IMDG, IATA | Void ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (tri-allate (ISO)) |
| · Transport hazard class(es) · ADR, IMDG, IATA | |
|  | |
| · Class · Label · ADN/R Class: | 9 Miscellaneous dangerous substances and articles. 9 Void |
| · Packing group · ADR, IMDG, IATA | III |
| · Environmental hazards: · Marine pollutant: · Special marking (ADR): · Special marking (IATA): | Product contains environmentally hazardous substances: tri-allate (ISO) Yes Symbol (fish and tree) Symbol (fish and tree) Symbol (fish and tree) |
| · Special precautions for user · Danger code (Kemler): · EMS Number: | Warning: Miscellaneous dangerous substances and articles. 90 F-A,S-F |
| · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable. |
| · Transport/Additional information: | |
| · ADR · Tunnel restriction code | E |
| · UN "Model Regulation": | UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 9, III |

15 Regulatory information

· **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.
H304 May be fatal if swallowed and enters airways.
H317 May cause an allergic skin reaction.
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.

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R22 Harmful if swallowed.

R43 May cause sensitisation by skin contact.

R48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R65 Harmful: may cause lung damage if swallowed.

· **Department issuing MSDS:** Exigent Sciences, L.L.C.

· **Contact:** Janet Abel

· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organization

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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