

1 Identification

· **Product identifier**

· **Trade name:** *Far-GO® Herbicide*

EPA Registration No.: 10163-286

· **CAS Number:** Active Ingredient: Triallate (46.3%), CAS:2303-17-5

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

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

· **Manufacturer/Supplier:**

Gowan Company

P.O. Box 5569

Yuma, Arizona 85366-5569

(928) 783-8844

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

· **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 (Prostar®): (888) 478-0798

2 Hazard(s) identification

· **Classification of the substance or mixture**



Acute Tox. 4 H302 Harmful if swallowed.

· **Label elements**

· **GHS label elements**

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

· **Hazard pictograms**



GHS07

· **Signal word** Warning

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

triallate (ISO)

· **Hazard statements**

Harmful if swallowed.

· **Precautionary statements**

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

Rinse mouth.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Hazard description:**

Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

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- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 1
 Fire = 2
 Reactivity = 0

HAZARD INDEX:

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

- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable in US.
- **vPvB:** Not applicable in US.

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) ⚠ STOT RE 2, H373; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Acute Tox. 4, H302; Skin Sens. 1, H317	46.3%
CAS: 64742-95-6	Solvent naphtha (petroleum), light arom. ⚠ Asp. Tox. 1, H304; ⚠ Aquatic Chronic 2, H411; ⚠ Acute Tox. 4, H332; STOT SE 3, H335; Flam. Liq. 4, H227; Aquatic Acute 2, H401	46.0%

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 medical emergencies involving this product, call toll free 1-888-478-0798.
- **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:**
 - Immediately call a poison control center or doctor.
 - Do not induce vomiting unless told to do so by the poison control center or doctor.
 - Do not give any liquid to the person.
 - Do not give anything by mouth to an unconscious person.

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- **Information for doctor:**
 - **Most important symptoms and effects, both acute and delayed** Unknown
 - **Indication of any immediate medical attention and special treatment needed**
 May pose an aspiration pneumonia hazard. Contains petroleum distillate.

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.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
 - **Protective equipment:** Wear self-contained respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
 Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**
 Do not apply directly to water, or to areas where 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.
- **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 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**
 Harmful if swallowed. Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. 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.
- **Conditions for safe storage, including any incompatibilities**
 - **Storage:**
 - **Requirements to be met by storerooms and receptacles:**
 STORE ABOVE 32°F TO KEEP FROM FREEZING.
 Freezing will result in crystals which settle to the bottom. If allowed to freeze, place in a warm area (72°F.) and roll or shake the container frequently for several days to redissolve before using. For bulk containers, see the container label for alternate storage information.
 Keep this container 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.

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8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 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:**

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- 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. As soon as possible, wash thoroughly and change into clean clothing.

- **Protection of hands:**



Protective gloves

- **Material of gloves** Chemical-resistant gloves (such as barrier laminate or viton).
- **Body protection:**
 Long-sleeved shirt and long pants, shoes plus socks. chemical-resistant gloves (such as barrier laminate or viton).

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:** Not determined.

- **Change in condition**

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

- **Flash point:** Not applicable.

- **Flammability (solid, gaseous):** Not applicable.

- **Ignition temperature:** 450 °C (842 °F)

- **Decomposition temperature:** Not determined.

- **Auto igniting:** Product is not self-igniting.

- **Danger of explosion:** Product does not present an explosion hazard.

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· **Explosion limits:**

- **Lower:** Not determined.
- **Upper:** Not determined.

· **Vapor pressure:** Not determined.

· **Density at 20 °C (68 °F):** 1.03 g/cm³ (8.595 lbs/gal)

- **Relative density** Not determined.
- **Vapor density** Not determined.
- **Evaporation rate** Not determined.

· **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	2193 mg/kg (rat)
Dermal	LD50	>5000 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:** Sensitization possible through skin contact.

· **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Harmful

Triallate:

Abnormal behavioral effects have been observed in laboratory animals following single and repeated oral doses of triallate. No evidence of delayed neurotoxicity effects in chickens (repeat oral and dermal doses) or cholinesterase inhibition in rats (single oral doses) have been observed.

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Following repeated exposures (30 to 90 days) in their feed, abnormal behavior, reduced body weights/body weight gains and food consumption, changes in blood composition, effects on gastrointestinal tract, sex organ, liver, thymus, spleen and kidney tissues, and some deaths were observed in laboratory animals (rats, hamsters, or dogs). Degeneration of nerve fibers in the peripheral nervous system and in a specific sensory nervous tract of the spinal cord were observed in rats after repeated dietary exposure (90 days) to high doses. Dogs fed at a lower dose for a longer period (1 year) exhibited changes in blood chemistry. Following repeated skin exposure (3 week), skin irritation was the primary effect in rabbits with one death observed at the highest dose. No skin allergy was observed in guinea pigs following repeated skin exposure. Eye and nasal irritation, changes in body weight and blood composition and effects on kidney tissues were noted following repeated inhalation (7 week) in rats.

Mice fed in long-term (2 year) studies showed some organ weight changes, effects on liver, cornea, brain and spleen tissues and tumors in the liver. Liver tumors are the most common spontaneous tumor in this strain of mice, and it was concluded that the increased incidence of these tumors provides insufficient evidence of a treatment response. Hamsters and/or rats fed (18-24 months) showed reduced body weight gain and survival, some organ weight changes and slight anemia. No adverse effects were observed in long-term (2 year) feeding studies in dogs. Triallate did not produce tumors in these studies.

No birth defects were noted in rats and rabbits given the triallate orally during pregnancy, even at amounts which produced toxic effects on the mothers and their offspring. Clinical signs of toxicity, reduced body and pup weights, and effects on some reproductive parameters (second generation only) were noted when rats were fed triallate for two successive generations.

Triallate produced genetic changes in standard tests which use animals or fruit flies. Both positive and negative responses have been reported in assays using animal or bacterial cells.

C9 Aromatics:

This component is a complex, variable and combustible mixture consisting predominantly of C9 aromatic hydrocarbons. Accidental swallowing of hydrocarbons is often associated with stomach and intestinal irritation, vomiting and CNS depression. These aromatic components have a low order of acute oral toxicity unless they enter the lungs (aspiration) during swallowing, or during spontaneous or induced vomiting following accidental swallowing. This may cause mild to severe injury to the lungs; symptoms of injury include increased breathing and heart rates, coughing, and related signs of respiratory distress. Irritation, changes in blood composition and toxic effects on liver and lung have been reported following repeated inhalation of trimethylbenzenes and xylenes by laboratory animals. Birth defects were reported in mice given mixed xylenes (containing ethylbenzene) orally during pregnancy, but only at a level which produced adverse effects on the mother. No adverse genetic changes in standard tests using bacterial and yeast cells, insects, animals and animals cells.

Emulsifier:

Concentrated material is severely irritating or corrosive to eyes and irritating to skin and may contribute to the eye and skin irritation potential reported in tests on this product. This emulsifier is irritating to the respiratory tract. If large amounts are ingested, CNS depression may occur.

· 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.

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· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients are listed.

12 Ecological information

· **Toxicity**

Do not apply directly to water, or to areas where 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.

· **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.

· **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:**

Wastes of this pesticide may cause eye irritation and may be dangerous. Improper disposal of excess pesticide, spray mixtures, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by 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. Pesticide wastes are toxic.

· **Uncleaned packagings:**

· **Recommendation:**

Disposal must be made according to official regulations.

Emptied container retains vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned or destroyed.

FOR PLASTIC 1-WAY CONTAINERS & BOTTLES:

Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse container as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling if available, or then puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

FOR DRUMS:

Nonrefillable container. Do not reuse or refill this container. Return container per the Gowan Company container return program. If not returned, triple rinse container as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times, then puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of

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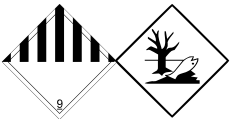
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smoke.

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14 Transport information

<ul style="list-style-type: none"> · UN-Number · DOT · ADR, IMDG, IATA 	<p style="margin: 0;">Not regulated UN3082</p>
<ul style="list-style-type: none"> · UN proper shipping name · ADR · IMDG · IATA 	<p style="margin: 0;">3082 Environmentally hazardous substances, liquid, n.o.s. (tri- allate (ISO)) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (tri-allate (ISO)), MARINE POLLUTANT ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (tri-allate (ISO))</p>
<ul style="list-style-type: none"> · Transport hazard class(es) · ADR, IMDG, IATA <div style="text-align: center; margin: 10px 0;">  </div> <ul style="list-style-type: none"> · Class · Label 	<p style="margin: 0;">9 Miscellaneous dangerous substances and articles 9</p>
<ul style="list-style-type: none"> · Packing group · ADR, IMDG, IATA 	<p style="margin: 0;">III</p>
<ul style="list-style-type: none"> · Environmental hazards: · Marine pollutant: · Special marking (ADR): · Special marking (IATA): 	<p style="margin: 0;">Product contains environmentally hazardous substances: triallate (ISO) Yes Symbol (fish and tree) Symbol (fish and tree) Symbol (fish and tree)</p>
<ul style="list-style-type: none"> · Special precautions for user · Danger code (Kemler): · EMS Number: 	<p style="margin: 0;">Warning: Miscellaneous dangerous substances and articles 90 F-A,S-F</p>
<ul style="list-style-type: none"> · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code 	<p style="margin: 0;">Not applicable</p>
<ul style="list-style-type: none"> · Transport/Additional information: 	<p style="margin: 0;">-----</p>
<ul style="list-style-type: none"> · ADR · Excepted quantities (EQ) 	<p style="margin: 0;">Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml</p>
<ul style="list-style-type: none"> · IMDG · Limited quantities (LQ) 	<p style="margin: 0;">5L</p>

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· **Exempted quantities (EQ)**

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

· **UN "Model Regulation":**

US DOT:

Non Bulk: Not regulated

Bulk: UN1993, Flammable Liquid, N.O.S. (Triallate, Solvent naphtha (petroleum) light aromatic),3, PGIII

15 Regulatory information

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

EPA /FIFRA Information:

This chemical is a pesticide product registered by the Environmental Protection Agency (EPA) 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.

· **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)

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

CAS: 64742-95-6 | Solvent naphtha (petroleum), light arom.

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients are listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients are listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients are listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

· **Carcinogenicity categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients are listed.

· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients are listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients are listed.

· **GHS label elements**

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

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- **Hazard pictograms**

Not applicable

- **Signal word:**

(US EPA) CAUTION

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

triallate (ISO)

- **Hazard statements**

Harmful if swallowed.

Causes moderate eye irritation.

Avoid contact with skin, eyes, or clothing.

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

Harmful if swallowed.

- **Precautionary statements**

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

Rinse mouth.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- **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.

- **Department issuing SDS:** *Supply Chain*

- **Contact:** *sds@gowanco.com*

- **Date of preparation / last revision** *04/28/2017 / 7*

- **Abbreviations and acronyms:**

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

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Flam. Liq. 4: Flammable liquids – Category 4

Acute Tox. 4: Acute toxicity – Category 4

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Skin Sens. 1: Skin sensitisation – Category 1

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Asp. Tox. 1: Aspiration hazard – Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Acute 2: Hazardous to the aquatic environment - acute aquatic hazard – Category 2

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

· **Sources** Far-Go® is a registered trademark used under license by Gowan Company, L.L.C.

· *** Data compared to the previous version altered.**

US