

1 Identification

· 1.1 Product identifier

· **Trade name:** ENVIDOR® 240 SC MITICIDE

· **CAS Number:**

Spirodiclofen (223 g/L) : 148477-71-8

Registration number PCP Registration No.:28051

Group X Miticide

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

· 1.3 Details of the supplier of the safety data sheet

· **Manufacturer/Supplier:**

Gowan Company

P.O. Box 5569

Yuma, Arizona 85366-5569

(800) 960-4318

· **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 (ProPharma Group®): (888) 478-0798

2 Hazard identification

· 2.1 Classification of the substance or mixture

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



GHS07

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

· 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

· **Signal word** Warning

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

Spirodiclofen

· **Hazard statements**

H317 May cause an allergic skin reaction.

· **Precautionary statements**

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/spray.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 If on skin: Wash with plenty of soap and water.

P308+P313 IF exposed or concerned: Get medical advice/attention.

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P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P363 Wash contaminated clothing before reuse.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

- NFPA ratings (scale 0 - 4)



Health = 1

Fire = 0

Reactivity = 0

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: 148477-71-8 | Spirodiclofen | 22.30% w/w |
| | ⚠ Skin Sensitizer - Category 1, H317; Aquatic Chronic 4, H413 | |

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.

· **After inhalation:**

· Move person to fresh air.

· If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-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 affected person sip a glass of water if able to swallow.

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- Do not induce vomiting unless told 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** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
There is no specific antidote. Appropriate supportive and symptomatic treatment as indicated by the patient's condition is recommended.

5 Fire-fighting measures

- **5.1 Extinguishing media**
 - **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Use fire fighting measures that suit the environment.
- **5.2 Special hazards arising from the substance or mixture**
Hydrogen chloride (HCl)
Carbon monoxide (CO)
- **5.3 Advice for firefighters**
Keep out of smoke. Fight fire from upwind position. Cool closed containers exposed to fire with water spray.
Do not allow run-off from fire fighting to enter drains or water courses.
 - **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.
Mount respiratory protective device.
- **6.2 Environmental precautions:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
- **6.3 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.
- **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**
Wash hands after each use.
Remove and wash contaminated clothing before reuse.
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
 - **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
Keep respiratory protective device available.
- **7.2 Conditions for safe storage, including any incompatibilities**
 - **Storage:**
 - **Requirements to be met by storerooms and receptacles:** Store in a cool, dry, well-ventilated area.

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- **Information about storage in one common storage facility:**
Do not ship or store near food, feed, seed and fertilizers.
- **Further information about storage conditions:**
Protect from freezing.
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:**
 - **General protective and hygienic measures:**
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
 - **Breathing equipment:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
 - **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** 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:**



Safety glasses

- **Body protection:**
Applicators and other handlers must wear:
 - Long sleeved shirt and long pants
 - Chemical resistant gloves
 - Shoes plus socks

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9 Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

- Form: Suspension
- Color: White-beige
- Odor: Slight
- Odor threshold: Not determined.

· pH-value at 20 °C (68 °F): 4-6

· Change in condition

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

· Flash point: Not applicable.

· Flammability (solid, gaseous): Not applicable.

· 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 determined.

· Density at 20 °C (68 °F): 1.09 g/cm³ (9.09605 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.

· 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

· 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: Extremes of temperature and direct sunlight.

· 10.5 Incompatible materials: No further relevant information available.

· 10.6 Hazardous decomposition products: No dangerous decomposition products known.

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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 | >2,000 mg/kg (rat) |
| Dermal | LD50 | >4,000 mg/kg (rat) |
| Inhalative | LC50/4 h | >3.146 mg/l (rat) |

· Primary irritant effect:

· **on the skin:** Based on available data, the classification criteria are not met.

· **on the eye:** Based on available data, the classification criteria are not met.

· 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.

· **Germ cell mutagenicity** Based on available data, the classification criteria are not met.

· **Carcinogenicity** Based on available data, the classification criteria are not met.

· **Reproductive toxicity** Based on available data, the classification criteria are not met.

· Specific target organ toxicity - single exposure

Based on available data, the classification criteria are not met.

· Specific target organ toxicity - repeated exposure

Based on available data, the classification criteria are not met.

· **Aspiration hazard** Based on available data, the classification criteria are not met.

12 Ecological information

12.1 Toxicity

LC50 (*Oncorhynchus mykiss* (rainbow trout)) > 0.035 mg/l

Exposure time: 96 h

The value mentioned relates to the active ingredient spirodiclofen. No acute toxicity was observed at its limit of water solubility.

Oncorhynchus mykiss (rainbow trout) Early-life Stage NOEC: 0.00195 mg/l

Exposure time: 97 d

The value mentioned relates to the active ingredient spirodiclofen.

EC50 (*Daphnia magna* (Water flea)) > 0.045 mg/l

Exposure time: 48 h

The value mentioned relates to the active ingredient spirodiclofen. No acute toxicity was observed at its limit of water solubility.

IC50 (*Raphidocelis subcapitata* (freshwater green alga)) > 0.06 mg/l Growth rate;

Exposure time: 72 h

The value mentioned relates to the active ingredient spirodiclofen. No acute toxicity was observed at its limit of water solubility.

· **Aquatic toxicity:** No further relevant information available.

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- **12.2 Persistence and degradability**
Spirodiclofen: Not rapidly biodegradable
Spirodiclofen: Koc: 31097
- **12.3 Bioaccumulative potential** Spirodiclofen: Bioconcentration factor (BCF) 491 Does not bioaccumulate.
- **12.4 Mobility in soil** Spirodiclofen: Immobile in soil
 - **Other information:**
Do not allow to get into surface water, drains and ground water.
Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment wash water. D
o not apply when weather conditions favor runoff or drift.
Do not apply this product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.
Apply this product as specified on the label.
 - **Additional ecological information:**
 - **General notes:**
Water hazard class 1 (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **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:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Follow container label instructions for disposal of wastes generated during use in compliance with the product label.
Dispose in accordance with all local, state/provincial and federal regulations.
 - **Uncleaned packagings:**
 - **Recommendation:**
Triple rinse containers. Puncture container to avoid re-use. Dispose of empty container in a sanitary landfill or by incineration, or, if allowed by State/Provincial and local authorities, by burning. If burned, stay out of smoke.
 - **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport information

- | | |
|---|---|
| <ul style="list-style-type: none"> · 14.1 UN-Number <ul style="list-style-type: none"> · DOT/TDG, ADR · IMDG, IATA | <p>Void UN3082</p> |
| <ul style="list-style-type: none"> · 14.2 UN proper shipping name <ul style="list-style-type: none"> · DOT/TDG · ADR · IMDG | <p>Exempt from regulation when transported by road or rail, in accordance with TDG Regulations 1.45.1. Void ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., MARINE POLLUTANT</p> |

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| | |
|---|--|
| · IATA | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. |
| · 14.3 Transport hazard class(es) | |
| · 14.3 DOT, ADR, ADN | |
| · Class | Void |
| · IMDG, IATA | |
|  | |
| · Class | 9 Miscellaneous dangerous substances and articles |
| · Label | 9 |
| · 14.4 Packing group | |
| · DOT/TDG, ADR | Void |
| · IMDG, IATA | III |
| · 14.5 Environmental hazards: | |
| · Marine pollutant: | Symbol (fish and tree) |
| · Special marking (IATA): | Symbol (fish and tree) |
| · 14.6 Special precautions for user | Not applicable |
| · EMS Number: | F-A,S-F |
| · Stowage Category | A |
| · 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable |
| · Transport/Additional information: | |
| · IMDG | |
| · Limited quantities (LQ) | 5L |
| · Excepted quantities (EQ) | Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml |
| · UN "Model Regulation": | Void |

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):**

None of the ingredients are listed.

· **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.

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| |
|---|
| · 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. |
|-------------------------------------|

- **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**

H317 May cause an allergic skin reaction.

H413 May cause long lasting harmful effects to aquatic life.

- **Department issuing SDS:** Supply Chain

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

- **Date of the latest revision of the safety data sheet** 09/25/2020 / -

- **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

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

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