

1 Identification

1.1 Product identifier

· **Trade name:** Gavel® DF Fungicide

· **CAS Number:**

Mancozeb (66.7%): 8018-01-7

Zoxamide (8.3%): 156052-68-5

Registration number PCP Registration No.: 26842

Group M3 22 Fungicides

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

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

Acute Toxicity (Inhalation) - Category 4 H332 Harmful if inhaled.

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 GHS09

· **Signal word** Warning

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

Mancozèbe (ISO) / complexe (polymère) d'éthylènebis(dithio-carbamate) de manganèse avec sel de zinc

Zoxamide (ISO) / (RS)-3,5-dichloro-N-(3-chloro-1-ethyl-1-methyl-2-oxopropyl)-p-toluamide

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- **Hazard statements**

H332 Harmful if inhaled.
 H317 May cause an allergic skin reaction.
 H410 Very 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.
 P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
 P273 Avoid release to the environment.
 P280 Wear protective gloves.
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 P312 Call a poison center/doctor if you feel unwell.
 P321 Specific treatment (see on this label).
 P362+P364 Take off contaminated clothing and wash it before reuse.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Hazard description:**

Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, after handling, wash thoroughly with soap and water and change into clean clothing. Wash hands with soap and water before eating, drinking, chewing gum, using tobacco or using the toilet. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Harmful if inhaled. Avoid breathing dust. Remove contaminated clothing and wash clothing before reuse.

- **Classification system:**

- **NFPA ratings (scale 0 - 4)**



Health = 2
 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: 8018-01-7	Mancozèbe (ISO) / complexe (polymère) d'éthylènebis(dithio-carbamate) de manganèse avec sel de zinc	66.7% w/w
	<ul style="list-style-type: none"> ⚠ Reproductive Toxicity - Category 2, H361; ⚠ Aquatic Acute 1, H400; ⚠ Skin Sensitizer - Category 1, H317 	
CAS: 156052-68-5	Zoxamide (ISO) / (RS)-3,5-dichloro-N-(3-chloro-1-ethyl-1-methyl-2-oxopropyl)-p-toluamide	8.3% w/w
	<ul style="list-style-type: none"> ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Skin Sensitizer - Category 1, H317 	

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4 First aid measures

· 4.1 Description of first aid measures

· **General information:**

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

For medical emergencies call 1-888-478-0798.

· **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 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 No further relevant information available.

· 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

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)

Sulphur dioxide (SO₂)

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

Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, after handling, wash thoroughly with soap and water and change into clean clothing. Wash hands with soap and water before eating, drinking, chewing gum, using tobacco or using the toilet. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Harmful if inhaled. Avoid breathing dust. Remove contaminated clothing and wash clothing before reuse.

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- **6.2 Environmental precautions:**
Do not apply to any body of water. Avoid drifting of spray onto any body of water or other non-target areas. Specified buffer zones should be observed.
- **6.3 Methods and material for containment and cleaning up:**
Pick up mechanically.
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**
Keep away from fire and sparks. Store in a cool, dry, well-ventilated area. Do not allow to become wet or overheated in storage: decomposition, impaired activity, or fire may result. Keep container closed when not in use. Pallets of containers should not be stacked more than three high. Provide access aisle for each two rows. Decomposition produces a foul odor; if observed, check for hot containers and immediately remove to open areas for disposal. To prevent contamination store this product away from food or feed.
 - **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.
 - **Information about storage in one common storage facility:** Store away from foodstuffs.
 - **Further information about storage conditions:** Store in a cool, dry, well-ventilated area.
- **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:** Do not re-enter treated areas within 48 hours of application.
- **8.2 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.
Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning/ maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.
 - **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.

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· **Protection of hands:**



Protective gloves

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

· **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:**



Safety glasses

· **Body protection:**

Applicators and other handlers (other than mixers and loaders) must wear:

- Coveralls over long-sleeved shirt and long pants
- Chemical resistant gloves
- Shoes plus socks

Mixers and Loaders must wear:

- Coveralls over long-sleeved shirt and long pants
- Chemical resistant gloves
- Shoes plus socks
- Protective eyewear
- Chemical-resistant apron when cleaning equipment, mixing or loading

9 Physical and chemical properties

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

· **General Information**

· **Appearance:**

- **Form:** Granulate
- **Color:** Brown
- **Odor:** Sulphurous

· **pH-value at 20 °C (68 °F):** 6.5 - 7.5

· **Change in condition**

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

· **Flash point:** Not applicable.

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

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

· **Density at 20 °C (68 °F):** .500-.750 g/cm³ (4.1725-6.25875 lbs/gal)

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- **Solubility in / Miscibility with**
- **Water:** Dispersible.
- **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)
 - Sulfur oxides (SO_x)
 - Hydrogen chloride (HCl)

11 Toxicological information

- **11.1 Information on toxicological effects**
 - **Acute toxicity:** Harmful if inhaled.

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

Oral	LD50	>5000 mg/kg (rat)
Dermal	LD50	>5000 mg/kg (rat)
Inhalative	LC50/4 h	>5.0 mg/l (rat)

- **Primary irritant effect:**
 - **on the skin:** No irritant effect.
 - **on the eye:** No irritant effect.
- **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**

This pesticide is toxic to fish. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. For terrestrial uses, 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 disposing of equipment washwaters or disposing of wastes.

 - **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.

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- **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
- **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 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. 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:

14 Transport information

- | | |
|--|--|
| <ul style="list-style-type: none"> · 14.1 UN-Number · DOT/TDG, ADR · IMDG, IATA | <p style="margin: 0;">Void</p> <p style="margin: 0;">3077</p> |
| <ul style="list-style-type: none"> · 14.2 UN proper shipping name · DOT/TDG, ADR · IMDG, IATA | <p style="margin: 0;">Void</p> <p style="margin: 0;">ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
N.O.S. (Mancozeb)</p> |
| <ul style="list-style-type: none"> · 14.3 Transport hazard class(es) · 14.3 DOT/TDG (Transport dangerous goods): · Class · Label | <p style="margin: 0;">Void</p> <p style="margin: 0;">-</p> |
| <ul style="list-style-type: none"> · ADR <div style="text-align: center; margin: 10px 0;">  </div> <ul style="list-style-type: none"> · Class · Label | <p style="margin: 0;">Void</p> <p style="margin: 0;">-</p> |

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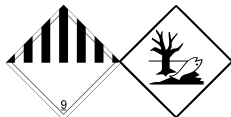
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· **IMDG, IATA**

· **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:** Yes
 Symbol (fish and tree)
 · **Special marking (ADR):** Symbol (fish and tree)
 · **Special marking (IATA):** Symbol (fish and tree)

· **14.6 Special precautions for user**

· **Danger code (Kemler):** Not applicable
 9
 · **EMS Number:** F-A,S-F

· **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable

· **UN "Model Regulation":**

Not regulated by US DOT, TDG
 UN3077, ENVIRONMENTALLY HAZARDOUS
 SUBSTANCE, SOLID, N.O.S., 9, III

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.

· **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.

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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.

H361 Suspected of damaging fertility or the unborn child.

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 / -

- **Abbreviations and acronyms:**

ICAO: International Civil Aviation Organisation

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** Gavel ® is a registered trademark used under license by Gowan Company, LLC.

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

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