# MAXIM MZ

| Version | Revision Date: | SDS Number: | Date of last issue: - |
|---|---|---|---|
| 0.0 | 07/12/2024 | S00000000435 | Date of first issue: 07/31/2018 |

## SECTION 1. IDENTIFICATION

Product name : MAXIM MZ
Design code : A13677B

Product Registration number : 100-1158

**Manufacturer or supplier's details**

Company name of supplier : Syngenta Crop Protection, LLC
Address : Post Office Box 18300
Greensboro NC 27419
United States of America (USA)

Telephone : 1 800 334 9481
Telefax : 1 336 632 2192

E-mail address : sds.requests@syngenta.com
Emergency telephone : 1 800 888 8372

**Recommended use of the chemical and restrictions on use**

Recommended use : Fungicide

Restrictions on use : General Use Pesticide

## SECTION 2. HAZARDS IDENTIFICATION

**GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)**

Combustible dust

Carcinogenicity : Category 2

Reproductive toxicity : Category 1B

Specific target organ toxicity - repeated exposure : Category 2 (Thyroid, Nervous system)

**GHS label elements**

Hazard pictograms :

Signal Word : Danger

Hazard Statements : May form combustible dust concentrations in air.
H351 Suspected of causing cancer.
H360D May damage the unborn child.
H373 May cause damage to organs (Thyroid, Nervous system) through prolonged or repeated exposure.

Precautionary Statements :

**Prevention:**

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe dust.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

**Response:**

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

**Storage:**

P405 Store locked up.

**Disposal:**

P501 Dispose of contents/ container to an approved waste disposal plant.

**Other hazards**

May form combustible dust concentrations in air.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

**Components**

| Chemical name | CAS-No. | Concentration (% w/w) |
|---|---|---|
| talc | 14807-96-6 | >= 30 - < 50 |
| wood dust particles | Not Assigned | >= 20 - < 30 |
| sulfuric acid, calcium salt (1:1), dihydrate | 10101-41-4 | >= 20 - < 30 |
| mancozeb | 8018-01-7 | 5.72 |
| fludioxonil | 131341-86-1 | 0.5 |
| dioxosilane | 14808-60-7 | >= 0.1 - < 1 |

Actual concentration is withheld as a trade secret

## SECTION 4. FIRST AID MEASURES

General advice : Have the product container, label or Safety Data Sheet with you when calling the emergency number, a poison control center or physician, or going for treatment.

If inhaled : Take the victim into fresh air.
If breathing is irregular or stopped, administer artificial respiration.
Keep patient warm and at rest.
Call a physician or poison control center immediately.

In case of skin contact : Take off all contaminated clothing immediately.
Wash off immediately with plenty of water.
If skin irritation persists, call a physician.
Wash contaminated clothing before re-use.

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids,

| | | |
|---|---|---|
| | | for at least 15 minutes.<br>Remove contact lenses.<br>Immediate medical attention is required. |
| If swallowed | : | If swallowed, seek medical advice immediately and show this container or label.<br>Do NOT induce vomiting. |
| Most important symptoms and effects, both acute and delayed | : | Nonspecific<br>No symptoms known or expected.<br>Suspected of causing cancer.<br>May damage the unborn child.<br>May cause damage to organs through prolonged or repeated exposure. |
| Notes to physician | : | There is no specific antidote available.<br>Treat symptomatically. |

## SECTION 5. FIRE-FIGHTING MEASURES

| | | |
|---|---|---|
| Suitable extinguishing media | : | Extinguishing media - small fires<br>Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.<br>Extinguishing media - large fires<br>Alcohol-resistant foam<br>or<br>Water spray |
| Unsuitable extinguishing media | : | Do not use a solid water stream as it may scatter and spread fire. |
| Specific hazards during fire fighting | : | Fire will spread by smoldering or slow decomposition.<br>As the product contains combustible organic ingredients, fire will produce dense black smoke containing hazardous products of combustion (see section 10).<br>Exposure to decomposition products may be a hazard to health. |
| Further information | : | Do not allow run-off from fire fighting to enter drains or water courses.<br>Cool closed containers exposed to fire with water spray. |
| Special protective equipment for fire-fighters | : | Wear full protective clothing and self-contained breathing apparatus. |

## SECTION 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

| | | |
|---|---|---|
| Personal precautions | : | Refer to protective measures listed in sections 7 and 8.<br>Avoid dust formation. |

### 6.2 Environmental precautions

| | | |
|---|---|---|
| Environmental precautions | : | Do not flush into surface water or sanitary sewer system.<br>If the product contaminates rivers and lakes or drains inform respective authorities. |

### 6.3 Methods and material for containment and cleaning up

| | | |
|---|---|---|
| Methods for cleaning up | : | Contain spillage, pick up with an electrically protected vacuum cleaner or by wet-brushing and transfer to a container for |

disposal according to local regulations (see section 13).
Do not create a powder cloud by using a brush or compressed air.
Clean contaminated surface thoroughly.
Clean with detergents. Avoid solvents.
Retain and dispose of contaminated wash water.

### 6.4 Reference to other sections

For disposal considerations see section 13., Refer to protective measures listed in sections 7 and 8.

## SECTION 7. HANDLING AND STORAGE

| | | |
|---|---|---|
| Advice on safe handling | : | This material is capable of forming flammable dust clouds in air, which, if ignited, can produce a dust cloud explosion.<br>Flames, hot surfaces, mechanical sparks and electrostatic discharges can serve as ignition sources for this material.<br>Electrical equipment should be compatible with the flammability characteristics of this material. The flammability characteristics will be made worse if the material contains traces of flammable solvents or is handled in the presence of flammable solvents.<br>This material can become readily charged in most operations.<br>Avoid contact with skin and eyes.<br>When using do not eat, drink or smoke.<br>For personal protection see section 8. |
| Conditions for safe storage | : | Keep containers tightly closed in a dry, cool and well-ventilated place.<br>Keep out of the reach of children.<br>Keep away from food, drink and animal feedingstuffs. |

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Ingredients with workplace control parameters**

| | |
|---|---|
| inert or nuisance dust | 50 Million particles per cubic foot<br>Value type (Form of exposure): TWA (total dust)<br>Basis: OSHA Z-3<br><br>15 mg/m3<br>Value type (Form of exposure): TWA (total dust)<br>Basis: OSHA Z-3<br><br>5 mg/m3<br>Value type (Form of exposure): TWA (respirable fraction)<br>Basis: OSHA Z-3<br><br>15 Million particles per cubic foot<br>Value type (Form of exposure): TWA (respirable fraction)<br>Basis: OSHA Z-3 |
| Dust, nuisance dust and particulates | 10 mg/m3<br>Value type (Form of exposure): PEL (Total dust)<br>Basis: CAL PEL<br><br>5 mg/m3 |

Value type (Form of exposure): PEL (respirable dust fraction)
Basis: CAL PEL

| Components | CAS-No. | Value type (Form of exposure) | Control parameters / Permissible concentration | Basis |
|---|---|---|---|---|
| talc | 14807-96-6 | TWA (Dust) | 20 Million particles per cubic foot | OSHA Z-3 |
| | | TWA (respirable dust fraction) | 2 mg/m3 | OSHA P0 |
| | | TWA (Respirable particulate matter) | 2 mg/m3 | ACGIH |
| | | TWA (Respirable) | 2 mg/m3 | NIOSH REL |
| | | TWA | 0.1 fibres per cubic centimeter | ACGIH |
| wood dust particles | Not Assigned | TWA (inhalable dust) | 1 mg/m3 | ACGIH |
| | | TWA (Dust) | 1 mg/m3 | NIOSH REL |
| sulfuric acid, calcium salt (1:1), dihydrate | 10101-41-4 | TWA (Respirable) | 5 mg/m3 | NIOSH REL |
| | | TWA (total) | 10 mg/m3 | NIOSH REL |
| | | TWA (total dust) | 15 mg/m3 | OSHA Z-1 |
| | | TWA (respirable fraction) | 5 mg/m3 | OSHA Z-1 |
| | | TWA (Total dust) | 15 mg/m3 | OSHA P0 |
| | | TWA (respirable dust fraction) | 5 mg/m3 | OSHA P0 |
| | | TWA (Inhalable particulate matter) | 10 mg/m3 (Calcium) | ACGIH |
| mancozeb | 8018-01-7 | TWA | 1 mg/m3 | Supplier |
| | | C | 5 mg/m3 (Manganese) | OSHA Z-1 |
| | | C | 5 mg/m3 (Manganese) | OSHA P0 |
| | | TWA | 1 mg/m3 (Manganese) | NIOSH REL |
| | | ST | 3 mg/m3 (Manganese) | NIOSH REL |
| | | TWA (Total) | 1 mg/m3 | US WEEL |
| fludioxonil | 131341-86-1 | TWA | 5 mg/m3 | Syngenta |
| | | TWA (Inhalable particulate matter) | 1 mg/m3 | ACGIH |
| dioxosilane | 14808-60-7 | TWA (respir- | 10 mg/m3 | OSHA Z-3 |

| | | | | |
|---|---|---|---|---|
| | | able) | / %SiO2+2 | |
| | | TWA (respirable) | 250 mppcf / %SiO2+5 | OSHA Z-3 |
| | | TWA (Respirable particulate matter) | 0.025 mg/m3 (Silica) | ACGIH |
| | | TWA (Respirable dust) | 0.05 mg/m3 (Silica) | NIOSH REL |
| | | TWA (Respirable dust) | 0.05 mg/m3 | OSHA Z-1 |

**Engineering measures** : THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION AND PACKAGING OF THE PRODUCT. FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated.
The extent of these protection measures depends on the actual risks in use.
Maintain air concentrations below occupational exposure standards.
Where necessary, seek additional occupational hygiene advice.

**Personal protective equipment**

Respiratory protection : No personal respiratory protective equipment normally required.
When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hand protection

Remarks : Wear protective gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. The break through time depends amongst other things from the material, the thickness and the type of glove and therefore has to be measured for each case. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Eye protection : No special protective equipment required.

Skin and body protection : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.
Remove and wash contaminated clothing before re-use.
Wear as appropriate:
Dust impervious protective suit

| | | |
|---|---|---|
| Protective measures | : | The use of technical measures should always have priority over the use of personal protective equipment.<br>When selecting personal protective equipment, seek appropriate professional advice. |

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

| | | |
|---|---|---|
| Appearance | : | powder |
| Color | : | beige |
| Odor | : | No data available |
| Odor Threshold | : | No data available |
| pH | : | No data available |
| Melting point/freezing point | : | No data available |
| Initial boiling point and boiling range | : | No data available |
| Flash point | : | No data available |
| Evaporation rate | : | No data available |
| Flammability (solid, gas) | : | May form combustible dust concentrations in air. |
| Burning number | : | 4 (68 °F / 20 °C) |
| | | 4 (212 °F / 100 °C) |
| Upper explosion limit / Upper flammability limit | : | No data available |
| Lower explosion limit / Lower flammability limit | : | No data available |
| Vapor pressure | : | No data available |
| Relative vapor density | : | No data available |
| Density | : | 0.48 g/cm3 |
| Solubility(ies) | | |
| Water solubility | : | No data available |
| Solubility in other solvents | : | No data available |
| Partition coefficient: n-octanol/water | : | No data available |
| Autoignition temperature | : | No data available |
| Decomposition temperature | : | No data available |

Minimum ignition temperature : 500 °C

Viscosity
Viscosity, kinematic : No data available

Explosive properties : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Minimum ignition energy : > 1,000 mJ

Particle characteristics
Particle size : No data available

## SECTION 10. STABILITY AND REACTIVITY

| | | |
|---|---|---|
| Reactivity | : | None reasonably foreseeable. |
| Chemical stability | : | Stable under normal conditions. |
| Possibility of hazardous reactions | : | No dangerous reaction known under conditions of normal use. |
| Conditions to avoid | : | No decomposition if used as directed. |
| Incompatible materials | : | None known. |
| Hazardous decomposition products | : | No hazardous decomposition products are known. |

## SECTION 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

Ingestion
Inhalation
Skin contact
Eye contact

**Acute toxicity**

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

**Product:**

Acute oral toxicity : LD50 (Rat, male and female): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat, male and female): > 2.64 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 (Rat, male and female): > 5,000 mg/kg

**Components:**

**mancozeb:**

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50 (Rat): > 5,000 mg/kg |
| Acute inhalation toxicity | : | LC50 (Rat): > 5.14 mg/l<br>Exposure time: 4 h<br>Test atmosphere: dust/mist<br>Assessment: The substance or mixture has no acute inhalation toxicity |
| Acute dermal toxicity | : | LD50 (Rat): > 5,000 mg/kg |

**fludioxonil:**

| | | |
|---|---|---|
| Acute oral toxicity | : | LD50 (Rat, male and female): > 5,000 mg/kg |
| Acute inhalation toxicity | : | LC50 (Rat, male and female): > 2.6 mg/l<br>Exposure time: 4 h<br>Test atmosphere: dust/mist<br>Assessment: The substance or mixture has no acute inhalation toxicity |
| Acute dermal toxicity | : | LD50 (Rat, male and female): > 2,000 mg/kg<br>Assessment: The substance or mixture has no acute dermal toxicity |

**Skin corrosion/irritation**

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

**Product:**

| | | |
|---|---|---|
| Species | : | Rabbit |
| Result | : | No skin irritation |

**Components:**

**mancozeb:**

| | | |
|---|---|---|
| Species | : | Rabbit |
| Result | : | No skin irritation |

**fludioxonil:**

| | | |
|---|---|---|
| Species | : | Rabbit |
| Result | : | No skin irritation |

**Serious eye damage/eye irritation**

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

**Product:**

| | | |
|---|---|---|
| Species | : | Rabbit |
| Result | : | No eye irritation |

**Components:**

**mancozeb:**

| | | |
|---|---|---|
| Species | : | Rabbit |

Result : No eye irritation

**fludioxonil:**

Species : Rabbit
Result : No eye irritation

**Respiratory or skin sensitization**

**Skin sensitization**

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

**Respiratory sensitization**

Not classified due to lack of data.

**Product:**

Species : Guinea pig
Result : Does not cause skin sensitization.

**Components:**

**mancozeb:**

Species : Guinea pig
Result : May cause sensitization by skin contact.

**fludioxonil:**

Species : Guinea pig
Result : Does not cause skin sensitization.

**Germ cell mutagenicity**

Not classified due to lack of data.

**Components:**

**mancozeb:**

Germ cell mutagenicity - Assessment : Animal testing did not show any mutagenic effects.

**fludioxonil:**

Germ cell mutagenicity - Assessment : Animal testing did not show any mutagenic effects.

**Carcinogenicity**

Suspected of causing cancer.

**Components:**

**wood dust particles:**

Carcinogenicity - Assessment : Weight of evidence does not support classification as a carcinogen

IARC (1995) has concluded that there is sufficient evidence in humans for the carcinogenicity of wood dust. There is inadequate evidence in experimental animals for the carcinogenicity

of wood dust. The sufficient evidence in humans refers to woodworkers who have high exposure to wood dust. Since this exposure scenario is not relevant to our product use pattern, the weight of scientific evidence concludes that there is no causative link between potential carcinogenicity of wood dust and the use of our products when following good working practices.

**mancozeb:**

Carcinogenicity - Assessment : Limited evidence of carcinogenicity in animal studies

**fludioxonil:**

Carcinogenicity - Assessment : No evidence of carcinogenicity in animal studies.

**dioxosilane:**

Carcinogenicity - Assessment : Weight of evidence does not support classification as a carcinogen

IARC has concluded that there is sufficient evidence in humans for the carcinogenicity of inhaled crystalline silica in the form of quartz or cristobalite from occupational sources and in experimental animals from quartz and cristobalite (Group 1). It was noted however, that carcinogenicity was not detected in all industrial circumstances and may be dependent on inherent characteristics of the crystalline silica or external factors affecting its biological activity.

| | | |
|---|---|---|
| **IARC** | Group 1: Carcinogenic to humans<br>talc | 14807-96-6 |
| | Group 1: Carcinogenic to humans<br>wood dust particles<br>(wood dust) | Not Assigned |
| | Group 1: Carcinogenic to humans<br>dioxosilane<br>(Silica dust, crystalline) | 14808-60-7 |
| **OSHA** | No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens. | |
| **NTP** | Known to be human carcinogen<br>talc<br>(Silica, Crystalline (Respirable Size)) | 14807-96-6 |
| | Known to be human carcinogen<br>wood dust particles<br>(Wood Dust) | Not Assigned |
| | Known to be human carcinogen<br>dioxosilane<br>(Silica, Crystalline (Respirable Size)) | 14808-60-7 |

**Reproductive toxicity**

May damage the unborn child.

**Components:**

**mancozeb:**

Reproductive toxicity - Assessment : Clear evidence of adverse effects on development, based on animal experiments.

**fludioxonil:**

Reproductive toxicity - Assessment : No toxicity to reproduction

**STOT-single exposure**

Not classified due to lack of data.

**STOT-repeated exposure**

May cause damage to organs (Thyroid, Nervous system) through prolonged or repeated exposure.

**Components:**

**mancozeb:**

Target Organs : Thyroid, Nervous system
Assessment : The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.

**fludioxonil:**

Assessment : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

**dioxosilane:**

Routes of exposure : Inhalation
Target Organs : Lungs
Assessment : The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 1.

**Aspiration toxicity**

Not classified due to lack of data.

## SECTION 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

**Components:**

**mancozeb:**

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.088 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.073 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants : ErC50 (Raphidocelis subcapitata (freshwater green alga)): 0.032 mg/l
Exposure time: 120 h

EC10 (Raphidocelis subcapitata (freshwater green alga)): 0.009 mg/l
End point: Growth rate
Exposure time: 120 h

Toxicity to fish (Chronic toxicity) : EC10 (Pimephales promelas (fathead minnow)): 0.00127 mg/l
Exposure time: 215 d

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : EC10 (Daphnia magna (Water flea)): 0.0109 mg/l
Exposure time: 21 d

**fludioxonil:**

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.23 mg/l
Exposure time: 96 h

LC50 (Pimephales promelas (fathead minnow)): 0.7 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0.4 mg/l
Exposure time: 48 h

EC50 (Americamysis): 0.27 mg/l
Exposure time: 96 h

Toxicity to algae/aquatic plants : ErC50 (Raphidocelis subcapitata (freshwater green alga)): 0.259 mg/l
Exposure time: 96 h

EC10 (Raphidocelis subcapitata (freshwater green alga)): 0.077 mg/l
End point: Growth rate
Exposure time: 96 h

ErC50 (Skeletonema costatum (marine diatom)): 0.43 mg/l
Exposure time: 96 h

NOEC (Skeletonema costatum (marine diatom)): 0.14 mg/l
End point: Growth rate
Exposure time: 96 h

Toxicity to fish (Chronic toxicity) : NOEC (Oncorhynchus mykiss (rainbow trout)): 0.04 mg/l
Exposure time: 28 d

EC10 (Pimephales promelas (fathead minnow)): 0.018 mg/l
Exposure time: 116 d

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC (Daphnia magna (Water flea)): 0.035 mg/l
Exposure time: 21 d

NOEC (Americamysis): 0.018 mg/l
Exposure time: 28 d

Toxicity to microorganisms : EC50 (activated sludge): > 1,000 mg/l

Exposure time: 3 h

**Persistence and degradability**

**Components:**

**mancozeb:**

Biodegradability : Result: Not readily biodegradable.

Stability in water : Degradation half life: 5.8 - 55 h
Remarks: Product is not persistent.

**fludioxonil:**

Biodegradability : Result: Not readily biodegradable.

Stability in water : Degradation half life: 450 - 700 d
Remarks: Persistent in water.

**Bioaccumulative potential**

**Components:**

**mancozeb:**

Bioaccumulation : Bioconcentration factor (BCF): < 100
Remarks: Low bioaccumulation potential.

Partition coefficient: n-octanol/water : log Pow: 1.38

**fludioxonil:**

Bioaccumulation : Remarks: Does not bioaccumulate.

Partition coefficient: n-octanol/water : log Pow: 4.12 (77 °F / 25 °C)

**Mobility in soil**

**Components:**

**mancozeb:**

Distribution among environmental compartments : Remarks: Low mobility in soil.

Stability in soil : Dissipation time: 6 - 15 h
Percentage dissipation: 50 % (DT50)
Remarks: Product is not persistent.

**fludioxonil:**

Distribution among environmental compartments : Remarks: immobile

Stability in soil : Dissipation time: 14 d
Percentage dissipation: 50 % (DT50)
Remarks: Product is not persistent.

**Other adverse effects**

**Components:**

**mancozeb:**

Results of PBT and vPvB assessment : Substance is not persistent, bioaccumulative, and toxic (PBT). Substance is not very persistent and very bioaccumulative (vPvB).

**fludioxonil:**

Results of PBT and vPvB assessment : Substance is not persistent, bioaccumulative, and toxic (PBT). Substance is not very persistent and very bioaccumulative (vPvB).

## SECTION 13. DISPOSAL CONSIDERATIONS

**Disposal methods**

Waste from residues : Do not contaminate ponds, waterways or ditches with chemical or used container.
Do not dispose of waste into sewer.
Where possible recycling is preferred to disposal or incineration.
If recycling is not practicable, dispose of in compliance with local regulations.
This product will not be classified as a RCRA characteristic hazardous waste when discarded.

Contaminated packaging : Empty remaining contents.
Triple rinse containers.
Empty containers should be taken to an approved waste handling site for recycling or disposal.
Do not re-use empty containers.

## SECTION 14. TRANSPORT INFORMATION

**International Regulations**

**UNRTDG**

UN number : UN 3077
Proper shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
(MANCOZEB, FLUDIOXONIL)
Class : 9
Packing group : III
Labels : 9
Environmentally hazardous : yes
Remarks : This product can be subject to exemptions when packaged in single or combination packagings containing a net quantity per single or inner packaging of 5 L or less for liquids, or having a net mass of 5 kg or less for solids.

**IATA-DGR**

UN/ID No. : UN 3077
Proper shipping name : Environmentally hazardous substance, solid, n.o.s.

(MANCOZEB, FLUDIOXONIL)

| | | |
|---|---|---|
| Class | : | 9 |
| Packing group | : | III |
| Labels | : | Miscellaneous |
| Packing instruction (cargo aircraft) | : | 956 |
| Packing instruction (passenger aircraft) | : | 956 |
| Environmentally hazardous | : | yes |
| Remarks | : | This product can be subject to exemptions when packaged in single or combination packagings containing a net quantity per single or inner packaging of 5 L or less for liquids, or having a net mass of 5 kg or less for solids. |

**IMDG-Code**

| | | |
|---|---|---|
| UN number | : | UN 3077 |
| Proper shipping name | : | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.<br>(MANCOZEB, FLUDIOXONIL) |
| Class | : | 9 |
| Packing group | : | III |
| Labels | : | 9 |
| EmS Code | : | F-A, S-F |
| Marine pollutant | : | yes |
| Remarks | : | This product can be subject to exemptions when packaged in single or combination packagings containing a net quantity per single or inner packaging of 5 L or less for liquids, or having a net mass of 5 kg or less for solids. |

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable for product as supplied.

**Domestic regulation**

**49 CFR**

| | | |
|---|---|---|
| UN/ID/NA number | : | NA 3077 |
| Proper shipping name | : | Other regulated substances, solid, n.o.s.<br>(ETHYLENETHIOUREA) |
| Class | : | 9 |
| Packing group | : | III |
| Labels | : | CLASS 9 |
| ERG Code | : | 171 |
| Marine pollutant | : | yes |
| Remarks | : | Shipment by ground under DOT is non-regulated; however it may be shipped per the applicable hazard classification to facilitate multi-modal transport involving ICAO (IATA) or IMO. THE ABOVE INFORMATION ONLY APPLIES TO PACKAGE SIZES WHERE THE HAZARDOUS SUBSTANCE MEETS THE REPORTABLE QUANTITY. |

**Special precautions for user**

Remarks : 49CFR: no dangerous good in non-bulk packaging

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

## SECTION 15. REGULATORY INFORMATION

This chemical is a pesticide product registered by the Environmental Protection Agency 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. Following is the hazard information as required on the pesticide label:
Caution
Causes moderate eye irritation.
Avoid contact with skin, eyes or clothing.

**CERCLA Reportable Quantity**

| Components | CAS-No. | Component RQ (lbs) | Calculated product RQ (lbs) |
|---|---|---|---|
| imidazolidine-2-thione | 96-45-7 | 10 | 27932 |

**SARA 304 Extremely Hazardous Substances Reportable Quantity**

This material does not contain any components with a section 304 EHS RQ.

**SARA 302 Extremely Hazardous Substances Threshold Planning Quantity**

This material does not contain any components with a section 302 EHS TPQ.

**SARA 311/312 Hazards** : Combustible dust
Reproductive toxicity
Specific target organ toxicity (single or repeated exposure)
Carcinogenicity

**SARA 313** : The following components are subject to reporting levels established by SARA Title III, Section 313:

| | | |
|---|---|---|
| mancozeb | 8018-01-7 | >= 5 - < 10 % |

**California Prop. 65**

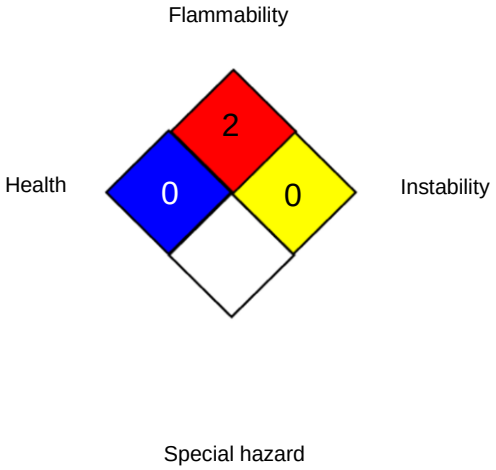
**California Regulated Carcinogens**

| | |
|---|---|
| talc | 14807-96-6 |
| dioxosilane | 14808-60-7 |

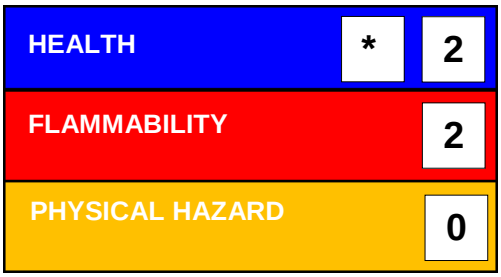
## SECTION 16. OTHER INFORMATION

**Further information**

**NFPA 704:**




**HMIS® IV:**




HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

**Full text of other abbreviations**

| | | |
|---|---|---|
| ACGIH | : | USA. ACGIH Threshold Limit Values (TLV) |
| CAL PEL | : | California permissible exposure limits for chemical contaminants (Title 8, Article 107) |
| NIOSH REL | : | USA. NIOSH Recommended Exposure Limits |
| OSHA P0 | : | USA. Table Z-1-A Limits for Air Contaminants (1989 vacated values) |
| OSHA Z-1 | : | USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants |
| OSHA Z-3 | : | USA. Occupational Exposure Limits (OSHA) - Table Z-3 Mineral Dusts |
| Syngenta | : | Syngenta Occupational Exposure Limits |
| US WEEL | : | USA. Workplace Environmental Exposure Levels (WEEL) |
| ACGIH / TWA | : | 8-hour, time-weighted average |
| CAL PEL / PEL | : | Permissible exposure limit |
| NIOSH REL / TWA | : | Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek |
| NIOSH REL / ST | : | STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday |
| OSHA P0 / TWA | : | 8-hour time weighted average |
| OSHA P0 / C | : | Ceiling limit |
| OSHA Z-1 / TWA | : | 8-hour time weighted average |
| OSHA Z-1 / C | : | Ceiling |
| OSHA Z-3 / TWA | : | 8-hour time weighted average |
| Syngenta / TWA | : | Time weighted average |
| US WEEL / TWA | : | 8-hr TWA |

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x%

growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Revision Date : 07/12/2024

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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