

# Safety Data Sheet

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BASF Safety Data Sheet

Date / Revised: 31.08.2023

Version: 6.0

Product: **DELAN® WG**

(Ref. 30131393/SDS\_CPA\_NZ/EN)

## 1. Identification

### Product identifier

**DELAN® WG**

### Recommended uses and restrictions on use (if any)

#### Recommended use:

crop protection product, fungicide.

#### Restricted use:

not applicable

### Manufacturer / Supplier

BASF New Zealand Limited  
5E City Works Depot,  
77 Cook Street  
Auckland 1010  
NEW ZEALANDPhone: + 64 9 255 4300  
0800 932 273

E-mail address: reception@basf-nz.co.nz

### Emergency telephone number

National Poisons Centre: 0800 764 766

BASF Emergency Advice Number: 0800 944 955 (24 hour advice in an emergency only)

## 2. Hazard Identification

### Classification of the substance or mixture

Acute toxicity (oral)	:	Category 3
Acute toxicity (inhalation)	:	Category 4
Eye irritation	:	Category 2
Skin sensitization	:	Category 1
Specific target organ toxicity - repeat exposure	:	Category 1
Aquatic environment – acute and chronic	:	Category 1
Hazardous to terrestrial vertebrates	:	

### GHS Label Elements, including Precautionary Statements:

Signal Word:

DANGER.

Pictograms:



GHS Hazard Statements

H301	: Toxic if swallowed
H332	: Harmful if inhaled.
H319	: Causes serious eye irritation.
H317	: May cause an allergic skin reaction.
H372	: Causes damage to kidneys through prolonged or repeated exposure.
H400	: Very toxic to aquatic life.
H410	: Very toxic to aquatic life with long lasting effects.
	: Hazardous to terrestrial vertebrates.

GHS Precautionary Statements (Prevention)

P102	: Keep out of reach of children.
P103	: Read label before use.
P260	: Do not breath mist, vapours and spray.
P261	: Avoid breathing dust or spray.
P264	: Wash hands and face thoroughly after handling.
P270	: Do not eat, drink or smoke when using this product.
P271	: Use only outdoors or in a well-ventilated area.
P272	: Contaminated clothing should not be allowed out of the workplace.
P280	: Wear protective gloves, protective clothing, eye/face protection.

GHS Precautionary Statements (Response)

P101	: If medical advice is needed, have product container or label at hand.
P301 + P310	: IF SWALLOWED: immediately call a POISON CENTRE or doctor.
P330	: Rinse mouth.
P302 + P352	: IF ON SKIN: Wash with plenty of soap and water.
P312	: Call a POISON CENTER or doctor/physician if you feel unwell.
P321	: Specific treatment see supplemental first aid instructions.
P304 + P340	: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P312	: Call a POISON CENTER or doctor/physician if you feel unwell.
P314	: Get medical advice if you feel unwell.
P333 + P313	: If skin irritation or rash occurs: Get medical advice/attention.
P305 + P351 + P338:	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313	: If eye irritation persists: Get medical advice/ attention.
P363	: Wash contaminated clothing before reuse.
P391	: Collect spillage.

GHS Precautionary Statements (Storage)

P405	: Store locked up.
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GHS Precautionary Statements (Disposal):

P501	: Dispose of contents/container to hazardous or special waste collection point. Information regarding disposal considerations can be found in section 13.
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**According to UN GHS criteria**

Hazard determining component(s) for labelling: dithianon

**Other hazards**

No other hazards known.

See section 12 - Results of PBT and vPvB assessment.

To avoid risks to human health and the environment, comply with the instructions for use.

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### 3. Composition/Information on Ingredients

**Substances**

Not applicable

**Mixtures**Hazardous ingredients (GHS)

According to UN GHS criteria

Dithianon: *5,10-dihydro-5,10-dioxonaphtho(2,3-b)(1,4)dithiazine-2,3-dicarbonitrile*

Content (W/W): 70 %  
CAS Number: 3347-22-6

Ammonium sulphate

Content (W/W): < 10%  
CAS Number: 7783-20-2

Kaolin

Content (W/W): < 5 %  
CAS Number: 1332-58-7

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### 4. First-Aid Measures

**Description of necessary first aid measures**General advice:

First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Immediately remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention. Immediately administer a corticosteroid from a controlled/metered dose inhaler.

On skin contact:

Immediately wash thoroughly with soap and water, apply sterile dressings, consult a skin specialist.

On contact with eyes:

Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

On ingestion:

Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

**Most important symptoms and effects, both acute and delayed**Symptoms:

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11. Further important symptoms and effects are so far not known.

**Indication of any immediate medical attention and special treatment needed**Treatment:

Treat according to symptoms (decontamination, vital functions), no known specific antidote.

Medical advice:

Contact the National Poisons and Hazardous Chemicals Information centre.  
Phone 0800 POISON (0800 764 766).

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**5. Fire-Fighting Measures****Suitable extinguishing media**

Water spray, foam, dry powder

**Unsuitable extinguishing media for safety reasons**

Carbon dioxide, water jet

**Specific hazards**

carbon monoxide, carbon dioxide, nitrogen oxides, sulfur oxides, silicon oxides, cyanides.  
The substances/groups of substances mentioned can be released in case of fire.

Dust can form an explosive mixture with air. Avoid dust formation. Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.

**Special protective equipment for fire-fighters**

Wear self-contained breathing apparatus and chemical-protective clothing.

**Precautions for fire-fighters**

In case of fire and/or explosion do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

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**6. Accidental Release Measures****Personal precautions, Protective equipment and Emergency procedures**

Use personal protective clothing.

Do not breathe vapour/spray.

Avoid contact with the skin, eyes and clothing. Avoid dust formation.

**Environmental precautions**

Do not discharge into the subsoil/soil.

Do not discharge into drains/surface waters/groundwater.

**Methods and material for containment and cleaning up**

For small amounts: Contain with dust binding material and dispose of.

For large amounts: Sweep/shovel up. Avoid raising dust.

Dispose of absorbed material in accordance with regulations. Collect waste in suitable containers, which can be labelled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations. Wear suitable protective equipment.

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## 7. Handling and Storage

### Precautions for safe handling

No special measures necessary if stored and handled correctly. Ensure thorough ventilation of stores and work areas. When using do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. Remove contaminated clothing and protective equipment before entering eating areas.

### Conditions for safe storage, including any incompatibilities

Store locked up. Segregate from foods and animal feeds.

### Further information on storage conditions:

Keep away from heat. Protect against moisture. Protect from direct sunlight.

Protect from temperatures above 40°C. Changes in the properties of the product may occur if substance / product is stored above indicated temperature for extended periods of time.

Keep only in the original container. Keep container tightly closed and dry; store in a cool place.

Storage stability: 60 months

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## 8. Exposure Controls/Personal Protection

### Control parameters

#### Occupational exposure limits

Component: Kaolin

CAS Number: 1332-58-7

TWA Value: 2 mg/m<sup>3</sup> (ACGIHTLV), respirable fraction

The value is for particulate matter containing no asbestos and <1% crystalline silica.

TWA Value: 10 mg/m<sup>3</sup> [2(r)] (source: WES 2022)

TWA Value: 2 mg/m<sup>3</sup> (OEL (NZ)), Respirable dust

TWA Value: 10 mg/m<sup>3</sup> (OEL (NZ)), Inhalable dust

### Engineering controls

Maintain air concentrations below occupational exposure standards.

### Personal protective equipment

#### Respiratory protection:

Suitable respiratory protection for higher concentrations or long-term effect: Particle filter with medium efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P3 or FFP3).

#### Hand protection:

Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) etc.

Eye protection:

Tightly fitting safety goggles (splash goggles), (e.g. EN 166)

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures

The statements on personal protective equipment in the instructions for use apply when handling crop-protection agents in final-consumer packing. Wearing of closed work clothing is recommended. Store work clothing separately. Keep away from food, drink and animal feeding stuffs.

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## 9. Physical and Chemical Properties

Form:	Solid
Colour:	Brown
Odour:	Characteristic
Odour threshold:	Not determined due to potential health hazard by inhalation.
pH value:	approx. 3 - 5 (1 %(m), approx. 20°C) (as suspension)
Melting point:	> 20°C The statements are based on the properties of the individual components.
Boiling point:	The product is a non-volatile solid.
Flash point:	Not applicable
Evaporation rate:	Not applicable
Flammability:	not highly flammable
Lower explosion limit:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.
Upper explosion limit:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.
Thermal decomposition:	150°C, 550 kJ/kg, (DSC) (onset temperature) 375°C, > 250 kJ/kg, (DSC) (onset temperature) Not a substance liable to self-decomposition according to UN transport regulations, class 4.1.
Self ignition:	not self-igniting
Self heating ability:	It is not a substance capable of spontaneous heating.
Explosion hazard:	not explosive
Fire promoting properties:	not fire-propagating
Vapour pressure:	The value has not been determined because of the high melting point.
Bulk density:	528 – 600 kg/m <sup>3</sup> (20°C)
Relative vapour density (air):	Not applicable
Solubility in water:	dispersible
Partitioning coefficient n-octanol/water (log Kow):	Not applicable
Viscosity, dynamic:	Not applicable, the product is a solid

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## 10. Stability and Reactivity

### Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

### Chemical stability

The product is stable if stored and handled as prescribed/indicated.

### Possibility of hazardous reactions

No hazardous reactions if stored and handled as prescribed/indicated.

### Conditions to avoid

See SDS section 7 - Handling and storage.

### Incompatible materials / Substances to avoid

Strong acids, strong bases, strong oxidizing agents.

### Hazardous decomposition products

No hazardous decomposition products if stored and handled as prescribed/indicated.

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## 11. Toxicological Information

### Acute toxicity

#### Assessment of acute toxicity:

Virtually nontoxic after a single skin contact. Virtually nontoxic by inhalation. Of high toxicity after single ingestion.

#### Experimental/calculated data:

LD50 rat (oral): 273 mg/kg

LC50 rat (by inhalation): Not inhalable due to the physico-chemical properties of the product.

LD50 rat (dermal): > 4,000 mg/kg  
No mortality was observed.

### Skin Corrosion / Irritation

#### Assessment of irritating effects:

Not irritating to the skin.

#### Experimental/calculated data:

non-irritant.

### Serious Eye Damage / Irritation

#### Assessment of irritating effects:

May cause severe damage to the eyes.

#### Experimental/calculated data:

Serious eye damage/irritation rabbit: Risk of serious damage to eyes.

### Respiratory or Skin sensitization

#### Assessment of sensitization:

The product has not been tested. The statement has been derived from the properties of the individual components. Sensitization after skin contact possible.

Information on: dithianon (ISO)  
Experimental/calculated data:  
Guinea pig maximization test guinea pig: skin sensitizing  
An aqueous solution was tested.

### **Germ cell mutagenicity**

#### Assessment of mutagenicity:

The product has not been tested. The statement has been derived from the properties of the individual components. Mutagenicity tests revealed no genotoxic potential.

### **Carcinogenicity**

#### Assessment of carcinogenicity:

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: dithianon (ISO)

#### Assessment of carcinogenicity:

Long term administration of organotoxic doses revealed a carcinogenic effect. In long-term studies in mice in which the substance was given by feed, a carcinogenic effect was not observed.

### **Reproductive toxicity**

#### Assessment of reproduction toxicity:

The product has not been tested. The statement has been derived from the properties of the individual components. The results of animal studies gave no indication of a fertility impairing effect.

### **Developmental toxicity**

#### Assessment of teratogenicity:

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: dithianon (ISO)

#### Assessment of teratogenicity:

The substance did not cause malformations in animal studies; however, toxicity to development was observed at high doses which impaired body weight gain in parental animals.

#### Experiences in humans:

Information on: dithianon (ISO)

Experimental/calculated data:

skin irritation, itching, erythema: Experiences in use

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### **Specific target organ toxicity (single exposure)**

#### Assessment of STOT single:

The available information is not sufficient for evaluation of specific target organ toxicity.

Remarks: The product has not been tested. The statement has been derived from the properties of the individual components.

### **Repeated dose toxicity and Specific target organ toxicity (repeated exposure)**

#### Assessment of repeated dose toxicity:

The product has not been tested. The statement has been derived from the properties of the individual components.



Information on: dithianon (ISO)

Assessment of repeated dose toxicity:

Repeated exposure may affect certain organs. Damages the kidneys.

Information on: Kaolin

Assessment of repeated dose toxicity:

Repeated inhalative uptake of particles/dust reaching the alveoli may cause damage to the lungs.

### Aspiration hazard

No aspiration hazard expected.

The product has not been tested. The statement has been derived from the properties of the individual components.

### Other relevant toxicity information

Misuse can be harmful to health.

## 12. Ecological Information

### Ecotoxicity - Aquatic

Assessment of aquatic toxicity:

Very toxic to aquatic life with long lasting effects.

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Toxicity to fish:

LC50 (96 h): 0.033 mg/l, *Oncorhynchus mykiss*

Aquatic invertebrates:

EC50 (48 h) 0.157 mg/l, *Daphnia magna*

Aquatic plants:

EC50 (72 h) 0.091 mg/l, *Chlorella vulgaris*

Chronic toxicity to fish:

LC50 (28 d): 0.002 mg/l, *Oncorhynchus mykiss*

### Ecotoxicity - Terrestrial

Assessment of terrestrial toxicity:

Hazardous to terrestrial vertebrates. The product has not been tested. The statement has been derived from the properties of the active ingredient.

Toxicity to birds:

Acute LD50: 309 mg ai/l, *Colinus virginianus*, (Dithianon)

Toxicity to soil organisms:

Acute LC50 (14d) 578 mg ai/kg, *Eisenia fetida*, (Dithianon)

Toxicity to Pollinators:

LD50 (oral): >25.4 µg/bee, *Apis mellifera*, (Dithianon)

LD50 (contact): >100 µg ai/bee, *Apis mellifera*, (Dithianon)

**Persistence and degradability**Assessment biodegradation and elimination (H<sub>2</sub>O):

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: dithianon (ISO)

Assessment biodegradation and elimination (H<sub>2</sub>O):

According to OECD criteria the product is not readily biodegradable but inherently biodegradable.

**Bioaccumulative potential**Assessment bioaccumulation potential:

The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: dithianon (ISO)

Bioaccumulation potential:

Bioconcentration factor: 28 (3 d), *Oncorhynchus mykiss*

Does not accumulate in organisms.

**Mobility in soil**Assessment transport between environmental compartments:

Adsorption in soil: The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: dithianon (ISO)

Assessment transport between environmental compartments:

Adsorption in soil: Following exposure to soil, adsorption to solid soil particles is probable, therefore contamination of groundwater is not expected.

**Results of PBT and vPvB assessment**

The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

**Other adverse effects**Other ecotoxicological advice:

Do not discharge product into the environment without control.

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**13. Disposal Considerations****Container:**

Triple rinse empty container and add rinsate to the spray tank. Recycle through Agrecovery (0800 247 326, [www.agrecovery.co.nz](http://www.agrecovery.co.nz)). Do not use container for any other purpose.

**Product:**

Dispose of this product only by using according to the label or at an approved facility. Do NOT burn product. Do NOT contaminate water with product or used container.

**Contaminated Packaging:**

Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance / product.

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## 14. Transport Information

### Commercial transport:

Not classified as Dangerous Goods for Land/rail (ADR/RID), sea (IMDG/GGVSee) and air transport (ICAO/IATA):

UN number:	UN 2588
UN proper shipping name:	PESTICIDE, SOLID, TOXIC, N.O.S. (contains DITHIANON)
Transport hazard class(es):	6.1, EHSM
Packing group:	III
Environmental hazards:	Yes
Marine pollutant:	Yes
HAZCHEM:	2X
Special precautions when transporting the substance:	Not applicable

## 15. Regulatory Information

### HSNO Approval Number

HSR000662.

See [www.epa.govt.nz](http://www.epa.govt.nz) for approval conditions.

### Tolerable Exposure Limit or Environmental Exposure Limit

TEL:	Not applicable
EEL:	Not applicable

### Relevant Regulatory Requirements

Qualifications:	Required. Refer to label.
Certified Handler:	Not required
Tracking:	Not required
Record Keeping:	Required. Refer to label.
Restricted to workplace:	Yes.
Controlled substance licence:	Not required

### ACVM Registration

P003507

See [www.foodsafety.govt.nz/acvm](http://www.foodsafety.govt.nz/acvm) for registration conditions.

### International Agreements related to the substance such as Montreal Protocol, the Stockholm Convention or Rotterdam Convention

not applicable

## 16. Other Information

### Date of preparation of the SDS

31 August 2023

### Key or legend to abbreviations and acronyms used

ACGIH	The American Conference of Governmental Industrial Hygienists
ACVM	Agricultural Compounds and Veterinary Medicines
ADN	International Carriage of Dangerous Goods by Inland Waterways (EU)
ADR/RID	Dangerous Goods for Road / Rail
DG	Dangerous Goods
EC50	Median effective concentration
EEL	Environmental Exposure Limit
EHSM	Environmental Health and Safety Management
EPA	Environmental Protection Authority
EU	European Union
GHS	Globally Harmonised System
ICAO	International Civil Aviation Organisation
IATA	International Air Transport Association
IERG	International Emergency Response Guide
IMDG	International Maritime Dangerous Goods
LD50	Lethal concentration to 50% of the test population
NOEC	No Observed Effect Concentration
N.O.S.	Not Otherwise Specified
OEL	Operator Exposure Limits
PBT or vPvP	Persistent / Bioaccumulative / Toxic or very Persistent / very Bioaccumulative
SDS	Safety Data Sheet
STOT	Specific Target Organ Toxicity
TDG	Transportation of Dangerous Goods
TEL	Tolerable Exposure Limit
TLVs	Threshold Limit Values
UN GHS	United Nations Globally Harmonised System
WES	Workplace Exposure Standards
49CFR	Code of Federal Regulations Title 49 for Transportation

For proper and safe use of this product, please refer to the approval conditions laid down on the product label.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.