

# Safety data sheet

BASF Safety Data Sheet  
Date / Revised: 10.01.2017  
Product: **DELAN® WG**

(Ref. 30131393/SDS\_CPA\_NZ/EN; Version 6.0)

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

**DELAN® WG**

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: crop protection product, fungicide.

### 1.3 Details of the supplier of the safety data sheet

Company:

BASF New Zealand Limited  
Level 1, Quad 7, 6 Leonard Isitt Drive, Auckland Airport, Auckland 2022  
P.O. Box 407, Auckland 1140  
Phone: 0800 932 273

### 1.4 Emergency telephone number

National Poisons Centre: 0800 764 766  
BASF Emergency Advice Number: 0800 944 955 (24 hour advice in an emergency only)  
BASF Emergency Advice Number: +61 3 8855 6666 (If calling from outside New Zealand)

## SECTION 2: Hazards Identification

### 2.1 Classification of the substance or mixture

Hazard Classification (NZ EPA)  
6.1C, 6.1D, 6.4A, 6.5B, 6.9A, 9.1A, 9.1C, 9.3B

### 2.2 Label Elements

Pictogram:



Signal Word: DANGER

Hazard statements:

Toxic if swallowed. Harmful if inhaled. Causes serious eye irritation. May cause an allergic skin reaction. May cause kidney damage from repeated oral exposure at high doses. Very toxic to aquatic life. Toxic to terrestrial vertebrates.

Precautionary Statements (Prevention):

Keep out of reach of children. Wear protective gloves/protective clothing/eye protection/face protection. Wash contaminated body parts thoroughly after handling. Do not eat, drink or smoke while using this product. Avoid breathing dust/fume/gas/mist/vapours/spray. Contaminated work clothing should not be allowed out of the workplace. Do not eat, drink or smoke when using this product.

### 2.3. Other hazards

See section 12 - Results of PBT and vPvB assessment.

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

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## SECTION 3: Composition/Information on Ingredients

### 3.1 Substances

Not applicable.

### 3.2 Mixtures

Chemical nature

Crop protection product, fungicide, water dispersible granules (WG).

Hazardous ingredients

dithianon (ISO); 5,10-dihydro-5,10-dioxonaphtho(2,3-b)(1,4)dithiazine-2,3-dicarbonitrile

Content (W/W): 70 %

CAS Number: 3347-22-6

EC-Number: 222-098-6

INDEX-Number: 613-021-00-0

For the classifications not written out in full in this section, including the hazard classes and the hazard statements, the full text is listed in section 16.

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## SECTION 4: First-Aid Measures

### 4.1 Description of first aid measures

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. Call a POISON CENTER or doctor/physician if patient feels unwell

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 plenty of water, apply sterile dressings. If skin irritation or rash occurs, get medical advice/attention.

On contact with eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

On ingestion:

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

#### **4.2. 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.

#### **4.3. Indication of any immediate medical attention and special treatment needed**

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

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### **SECTION 5: Fire-Fighting Measures**

#### **5.1. Extinguishing media**

Suitable extinguishing media:  
Water spray, foam, dry powder.

Unsuitable extinguishing media for safety reasons:  
carbon dioxide

#### **5.2. Special hazards arising from the substance or mixture**

Carbon monoxide, carbon dioxide, nitrogen oxides, sulphur oxides.  
The substances/groups of substances mentioned can be released in case of fire.

#### **5.3. Advice for fire-fighters**

Special protective equipment:  
Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:

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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### **SECTION 6: Accidental Release Measures**

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

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

#### **6.2 Environmental precautions**

Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater.

#### **6.3 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.

#### **6.4 Reference to other sections**

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

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## SECTION 7: Handling and Storage

### 7.1 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.

#### Qualifications required:

Any person mixing, loading or handling this product must be a qualified person. Refer to the product label for handling precautions and directions for use.

#### Record keeping:

Records of use must be kept if more than 3 kg is applied within 24 hours.

Protection against fire and explosion:

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.

### 7.2 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.

Storage stability:

Storage duration: 60 Months

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.

**AGGREGATE STORAGE VOLUME THRESHOLDS:** When stored with substances of the same hazard the aggregate quantity must be considered. For full details refer to the current standard NZS8409 Management of Agrichemicals or the HSNO Regulations.

Location Certificate*:	Hazardous Atmosphere Zone*:	Fire Extinguishers:	Signage [Hazard Class & Emergency Action]:	Emergency Information:	Emergency Response Plan:	Secondary Containment:
NA	NA	NA	100 kg	0.1 kg	100 kg	100 kg

\* Note: Farms  $\geq$  4 ha are exempt but with controls

#### **DO NOT STORE OR LOAD WITH:**

Class 1 Explosive

#### **SEGREGATE FROM:**

Foodstuffs and Food Containers

**Segregation:** In store separate by at least 5 metres, on transport separate by at least 3 metres, in both cases horizontally. On vehicles a segregation device may be used: Check the Land Transport Rule Dangerous Goods, Rule 45001 for additional information. Sea transport may require additional segregation. Refer to NZS5433 Sea Segregation for details.

NOTE: Storage, application and record keeping must be as described in the current version of the New Zealand Standard for the Management of Agrichemicals NZS8409.

### 7.3 Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

## SECTION 8: Exposure Controls/Personal Protection

### 8.1 Control parameters

#### Components with occupational exposure limits

1332-58-7: Kaolin

7783-20-2: Ammonium sulphate

### 8.2 Exposure controls

### 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 P2 or FFP2).

#### 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.

## **SECTION 9: Physical and Chemical Properties**

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

Form:	granules
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 (Regulation 440/2008/EC, A.10)
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.
Vapour pressure:	The value has not been determined because of the high melting point.
Relative vapour density (air):	not applicable
Solubility in water:	dispersible
Partitioning coefficient n-octanol/water (log Kow):	not applicable

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Self ignition:	not self-igniting (Method: Regulation 440/2008/EC, A.16)
Thermal decomposition:	150 °C, 550 kJ/kg, (DSC (OECD 113)) (onset temperature) 375 °C, > 250 kJ/kg, (DSC (OECD 113)) (onset temperature) Not a substance liable to self-decomposition according to UN transport regulations, class 4.1.
Self heating ability:	It is not a substance capable of spontaneous heating.
Viscosity, dynamic:	not applicable, the product is a solid
Explosion hazard:	not explosive (Directive 92/69/EEC, A.14)
Fire promoting properties:	not fire-propagating (Regulation 440/2008/EC, A.17)

## 9.2 Other information

Bulk density:	528 - 600 kg/m <sup>3</sup> (20 °C)
Grain size distribution	> 50 µm (Counted Distribution) Particles 100 %

Other Information:

If necessary, information on other physical and chemical parameters is indicated in this section.

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## SECTION 10: Stability and Reactivity

### 10.1 Reactivity

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

### 10.2 Chemical stability

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

### 10.3 Possibility of hazardous reactions

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

### 10.4 Conditions to avoid

See SDS section 7 - Handling and storage.

### 10.5 Incompatible materials

Substances to avoid:  
Strong acids, strong bases, strong oxidizing agents.

### 10.6 Hazardous decomposition products

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

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

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## SECTION 11: Toxicological Information

### 11.1 Information on toxicological effects

#### 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 (Directive 84/449/EEC, B.1)

LC50 rat (by inhalation):

Not inhalable due to the physico-chemical properties of the product.

LD50 rat (dermal): > 4,000 mg/kg (OECD Guideline 402)  
No mortality was observed.

#### Irritation

Assessment of irritating effects:

May cause severe damage to the eyes. Not irritating to the skin.

Experimental/calculated data:

Skin corrosion/irritation rabbit: non-irritant (Directive 84/449/EEC, B.4)

Serious eye damage/irritation rabbit: Risk of serious damage to eyes. (Directive 84/449/EEC, B.5)

#### Respiratory/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); 5,10-dihydro-5,10-dioxonaphtho(2,3-b)(1,4)dithiazine-2,3-dicarbonitrile*

*Experimental/calculated data:*

*Guinea pig maximization test guinea pig: skin sensitizing (OECD Guideline 406)*

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

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

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

*Experimental/calculated data:*

*skin irritation, itching, erythema: Experiences in use*

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

Assessment of STOT single:

The available information is not sufficient for evaluation.

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

*Assessment of repeated dose toxicity:*

*Repeated exposure may affect certain organs. Damages the kidneys.*

#### 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.

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## SECTION 12: Ecological Information

### 12.1 Toxicity

Assessment of aquatic toxicity:

Very toxic to aquatic life with long lasting effects.

*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*

### 12.2 Persistence and degradability

Assessment biodegradation and elimination (H2O):

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

*Information on: dithianon (ISO); 5,10-dihydro-5,10-dioxonaphtho(2,3-b)(1,4)dithiazine-2,3-dicarbonitrile*

*Assessment biodegradation and elimination (H2O):*

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

### 12.3 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); 5,10-dihydro-5,10-dioxonaphtho(2,3-b)(1,4)dithiazine-2,3-dicarbonitrile*

*Bioaccumulation potential:*

*Bioconcentration factor: 28 (3 d), Oncorhynchus mykiss (OECD Guideline 305 E)*

*Does not accumulate in organisms.*

#### **12.4 Mobility in soil (and other compartments if available)**

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

*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.*

#### **12.5 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.

#### **12.6 Other adverse effects**

The product does not contain substances that are listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

#### **12.7 Additional information**

Other ecotoxicological advice:

Do not discharge product into the environment without control.

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## **SECTION 13: Disposal Considerations**

### **13.1. Waste treatment methods**

Container:

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

Contaminated packaging:

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

Product:

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

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## SECTION 14: Transport Information

### Commercial transport:

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

### Public transport:

Do NOT carry this product on a passenger service vehicle.

#### **14.1. UN number**

See corresponding entries for "UN number" for the respective regulations in the tables above.

#### **14.2. UN proper shipping name**

See corresponding entries for "UN proper shipping name" for the respective regulations in the tables above.

#### **14.3. Transport hazard class(es)**

See corresponding entries for "Transport hazard class(es)" for the respective regulations in the tables above.

#### **14.4. Packing group**

See corresponding entries for "Packing group" for the respective regulations in the tables above.

#### **14.5. Environmental hazards**

See corresponding entries for "Environmental hazards" for the respective regulations in the tables above.

#### **14.6. Special precautions for user**

See corresponding entries for "Special precautions for user" for the respective regulations in the tables above.

#### **14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code**

Regulation:	Not evaluated
Shipment approved:	Not evaluated
Pollution name:	Not evaluated
Pollution category:	Not evaluated
Ship Type:	Not evaluated

## SECTION 15: Regulatory Information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

For the user of this plant-protective product:

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

#### NZ Regulations

Approved pursuant to the HSNO Act 1996, Code HSR000662.

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

Registered pursuant to the ACVM Act 1997, Nos. P3507.

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

### 15.2 Chemical Safety Assessment

Advice on product handling can be found in sections 7 and 8 of this safety data sheet.

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## SECTION 16: Other Information

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. The data do not describe the products properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

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