

# Safety data sheet

Page: 1/15

BASF Safety data sheet according to UN GHS 4th rev.

Date / Revised: 24.01.2019 Version: 1.0

Product: Delan® 500 SC,10X1 L,II

(ID no. 30664315/SDS\_CPA\_IL/EN)

Date of print 24.01.2019

#### 1. Identification

#### **Product identifier**

# Delan® 500 SC,10X1 L,II

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

Relevant identified uses: crop protection product, fungicide

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

Company:
BASF ITALIA S.p.A.
Via Marconato 8
20811 Cesano Maderno (MB), ITALY

Telephone: +39 0362 512-1

E-mail address: Sicurezzaprodotti.BASF-Italia@basf.com

# **Emergency telephone number**

International emergency number: Telephone: +49 180 2273-112

#### 2. Hazards Identification

### Classification of the substance or mixture

According to UN GHS criteria

Acute Tox. 4 (oral) Acute Tox. 4 (Inhalation - mist) Skin Corr./Irrit. 2 Eye Dam./Irrit. 2A Skin Sens. 1

Date / Revised: 24.01.2019 Version: 1.0

Product: Delan® 500 SC,10X1 L,II

(ID no. 30664315/SDS\_CPA\_IL/EN)

Date of print 24.01.2019

Carc. 2

Aquatic Acute 1 Aquatic Chronic 1

For the classifications not written out in full in this section the full text can be found in section 16.

#### Label elements

#### Globally Harmonized System (GHS)

#### Pictogram:



# Signal Word: Warning

#### Hazard Statement:

H319 Causes serious eye irritation.

H315 Causes skin irritation. H332 Harmful if inhaled. H302 Harmful if swallowed.

H317 May cause an allergic skin reaction.
 H351 Suspected of causing cancer.
 H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

#### Precautionary Statements (Prevention):

P271 Use only outdoors or in a well-ventilated area.

P260 Do not breathe mist or vapour.

P201 Obtain special instructions before use.

P261 Avoid breathing mist.

P202 Do not handle until all safety precautions have been read and

understood.

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

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/clothing.

P264 Wash contaminated body parts thoroughly after handling.

#### Precautionary Statements (Response):

Date / Revised: 24.01.2019 Version: 1.0

Product: Delan® 500 SC,10X1 L,II

# (ID no. 30664315/SDS\_CPA\_IL/EN)

Date of print 24.01.2019

	24.0 0. 5 2.1020
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P308 + P311	IF exposed or concerned: Call a POISON CENTER or doctor/physician.
P303 + P352	IF ON SKIN (or hair): Wash with plenty of soap and water.
P333 + P311	If skin irritation or rash occurs: Call a POISON CENTER or doctor/physician.
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P330	Rinse mouth.
P391	Collect spillage.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P337 + P311	If eye irritation persists: Call a POISON CENTER or doctor/physician.

Precautionary Statements (Storage): P405 Store locked up.

Precautionary Statements (Disposal):

P501 Dispose of contents/container to hazardous or special waste collection

point.

# According to UN GHS criteria

Hazard determining component(s) for labelling: Dithianon

#### Other hazards

#### According to UN GHS criteria

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.

# 3. Composition/Information on Ingredients

#### **Substances**

Not applicable

# **Mixtures**

### Chemical nature

crop protection product, fungicide, suspension concentrate (SC)

Date / Revised: 24.01.2019 Version: 1.0

Product: Delan® 500 SC,10X1 L,II

(ID no. 30664315/SDS\_CPA\_IL/EN)

Date of print 24.01.2019

#### <u>Hazardous ingredients (GHS)</u> According to UN GHS criteria

Dithianon

Content (W/W): 41,8 % Acute Tox. 2 (Inhalation - dust)

CAS Number: 3347-22-6 Acute Tox. 4 (oral) EC-Number: 222-098-6 Eye Dam./Irrit. 1 NDEX-Number: 613-021-00-0 Skin Sens. 1A

Carc. 2

Aquatic Acute 1 Aquatic Chronic 1

H318, H330, H302, H317, H351, H400, H410

Sulfonated aromatic polymer, sodium salt

Content (W/W): < 3 % Skin Corr./Irrit. 2

Eye Dam./Irrit. 2A H319, H315

Propane-1,2-diol

Content (W/W): < 10 % CAS Number: 57-55-6 EC-Number: 200-338-0

For the classifications not written out in full in this section the full text can be found in section 16.

# 4. First-Aid Measures

#### **Description of first aid measures**

Remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention.

On skin contact:

Wash thoroughly with soap and water.

On contact with eyes:

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

Date / Revised: 24.01.2019 Version: 1.0

Product: Delan® 500 SC,10X1 L,II

(ID no. 30664315/SDS\_CPA\_IL/EN)

Date of print 24.01.2019

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

#### Indication of any immediate medical attention and special treatment needed

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

# 5. Fire-Fighting Measures

#### Extinguishing media

Suitable extinguishing media:

water spray, dry powder, foam, carbon dioxide

#### Special hazards arising from the substance or mixture

Carbon monoxide, Carbon dioxide, nitrogen oxides

The substances/groups of substances mentioned can be released in case of fire.

#### Advice for fire-fighters

Special protective equipment:

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

#### Further information:

Keep containers cool by spraying with water if exposed to fire. In case of fire and/or explosion do not breathe fumes. 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.

#### 6. Accidental Release Measures

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

Do not breathe vapour/spray. Use personal protective clothing. Avoid contact with the skin, eyes and clothing.

#### **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: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr).

For large amounts: Dike spillage. Pump off product.

Dispose of absorbed material in accordance with regulations. Collect waste in suitable containers, which can be labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations. Wear suitable protective equipment. Cleaning operations should be carried out only while wearing breathing apparatus.

Date / Revised: 24.01.2019 Version: 1.0

Product: Delan® 500 SC,10X1 L,II

(ID no. 30664315/SDS\_CPA\_IL/EN)

Date of print 24.01.2019

# 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.

Protection against fire and explosion:

No special precautions necessary. The substance/product is non-combustible. Product is not explosive.

# Conditions for safe storage, including any incompatibilities

Segregate from foods and animal feeds.

Further information on storage conditions: Keep away from heat. Protect from direct sunlight.

Protect from temperatures below: 0 °C

Changes in the properties of the product may occur if substance/product is stored below indicated temperature for extended periods of time.

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.

#### 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.

# 8. Exposure Controls/Personal Protection

#### **Control parameters**

Components with occupational exposure limits

No occupational exposure limits known.

#### **Exposure controls**

Personal protective equipment

Respiratory protection:

Suitable respiratory protection for higher concentrations or long-term effect: Combination filter for gases/vapours of organic, inorganic, acid inorganic and alkaline compounds (e.g. EN 14387 Type ABEK).

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:

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Date / Revised: 24.01.2019 Version: 1.0

Product: Delan® 500 SC,10X1 L,II

(ID no. 30664315/SDS\_CPA\_IL/EN)

Date of print 24.01.2019

#### 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.

# 9. Physical and Chemical Properties

#### Information on basic physical and chemical properties

Form: liquid
Colour: brown
Odour: faint odour

Odour threshold:

Not determined since harmful by

inhalation.

pH value: approx. 2,5 - 4,5 (pH Meter)

(CIPAC standard water D, 1 %(m),

23 °C)

Melting temperature:

The product has not been tested.

Boiling point: approx. 90 °C

(995,8 hPa)

Flash point: (Regulation 440/2008/EC, A.9)
No flash point - Measurement made

up to the boiling point.

Evaporation rate:

not applicable not applicable

Flammability: 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.

Date / Revised: 24.01.2019 Version: 1.0

Product: Delan® 500 SC,10X1 L,II

(ID no. 30664315/SDS\_CPA\_IL/EN)

Date of print 24.01.2019

Ignition temperature: 280 °C (Regulation 440/2008/EC,

A.15)

Vapour pressure: approx. 23 hPa

(20 °C)

Information applies to the solvent.

Density: approx. 1,20 g/cm3 (OECD Guideline 109)

(20 °C)

Relative vapour density (air):

not applicable

Solubility in water: dispersible

Partitioning coefficient n-octanol/water (log Kow):

not applicable

Thermal decomposition: 160 °C, 1.090 kJ/kg (DSC (OECD 113))

(onset temperature)

Not a substance liable to self-decomposition according to UN transport

regulations, class 4.1.

Viscosity, dynamic: approx. 103 mPa.s (OECD 114)

(20 °C, 100 1/s)

Explosion hazard: not explosive (Regulation 440/2008/EC,

A.14)

Fire promoting properties: not fire-propagating (Regulation 440/2008/EC,

A.21)

#### Other information

Other Information:

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

# 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 MSDS section 7 - Handling and storage.

#### Incompatible materials

Substances to avoid:

strong acids, strong bases, strong oxidizing agents

#### Hazardous decomposition products

Date / Revised: 24.01.2019 Version: 1.0

Product: Delan® 500 SC,10X1 L,II

(ID no. 30664315/SDS\_CPA\_IL/EN)

Date of print 24.01.2019

Hazardous decomposition products:

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

# 11. Toxicological Information

#### Information on toxicological effects

#### Acute toxicity

Assessment of acute toxicity:

Of moderate toxicity after single ingestion. Of moderate toxicity after short-term inhalation. Virtually nontoxic after a single skin contact.

Experimental/calculated data:

LD50 rat (oral): > 300 - < 2.000 mg/kg (OECD Guideline 423)

LC50 rat (by inhalation): 2,225 mg/l 4 h (OECD Guideline 403)

An aerosol was tested.

LD50 rat (dermal): > 2.000 mg/kg (OECD Guideline 402)

No mortality was observed. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

#### **Irritation**

Assessment of irritating effects:

Eye contact causes irritation. Skin contact causes irritation. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Experimental/calculated data:

Skin corrosion/irritation rabbit: Irritant. (OECD Guideline 404)

Serious eye damage/irritation rabbit: Irritant. (OECD Guideline 405)

# Respiratory/Skin sensitization

Assessment of sensitization:

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

Information on: Dithianon Experimental/calculated data:

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

An aqueous solution was tested.

.

#### Germ cell mutagenicity

Date / Revised: 24.01.2019 Version: 1.0

Product: Delan® 500 SC,10X1 L,II

(ID no. 30664315/SDS\_CPA\_IL/EN)

Date of print 24.01.2019

#### 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
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 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.

\_\_\_\_\_

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

Assessment of STOT single:

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

# 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

Assessment of repeated dose toxicity:

Repeated exposure may affect certain organs. Damages the kidneys.

-----

Date / Revised: 24.01.2019 Version: 1.0

Product: Delan® 500 SC,10X1 L,II

(ID no. 30664315/SDS\_CPA\_IL/EN)

Date of print 24.01.2019

#### Aspiration hazard

No aspiration hazard expected.

Other relevant toxicity information

Misuse can be harmful to health.

# 12. Ecological Information

#### **Toxicity**

Assessment of aquatic toxicity:

Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment. 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

Toxicity to fish:

LC50 (96 h) 0,044 mg/l, Oncorhynchus mykiss (Directive 84/449/EEC, C.1)

-----

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

Aquatic invertebrates:

EC50 (48 h) 0,26 mg/l, Daphnia magna (OECD Guideline 202, part 1)

-----

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

Aquatic plants:

EC50 (72 h) 0,298 mg/l (growth rate), Selenastrum capricornutum (Guideline 92/69/EEC, C.3)

No observed effect concentration (72 h) 0,025 mg/l (growth rate), Pseudokirchneriella subcapitata (Guideline 92/69/EEC, C.3)

.

# 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

Assessment biodegradation and elimination (H2O):

Not readily biodegradable (by OECD criteria).

-----

Date / Revised: 24.01.2019 Version: 1.0

Product: Delan® 500 SC,10X1 L,II

(ID no. 30664315/SDS\_CPA\_IL/EN)

Date of print 24.01.2019

# 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.

\_\_\_\_\_

# 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); 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.

-----

#### 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

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

#### **Additional information**

Other ecotoxicological advice:

Do not discharge product into the environment without control.

# 13. Disposal Considerations

#### Waste treatment methods

Must be sent to a suitable incineration plant, observing local regulations.

Date / Revised: 24.01.2019 Version: 1.0

Product: Delan® 500 SC,10X1 L,II

(ID no. 30664315/SDS\_CPA\_IL/EN)

Date of print 24.01.2019

Contaminated packaging:

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

# 14. Transport Information

#### **Land transport**

ADR

UN number UN3082

UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (contains DITHIANON)

Transport hazard class(es): 9, EHSM

Packing group: III Environmental hazards: yes

Special precautions for

user: None known

RID

UN number UN3082

UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (contains DITHIANON)

Transport hazard class(es): 9, EHSM

Packing group: III Environmental hazards: yes

Special precautions for None known

user:

#### **Inland waterway transport**

ADN

UN number UN3082

UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (contains DITHIANON)

Transport hazard class(es): 9, EHSM

Packing group: III Environmental hazards: yes

Special precautions for None known

user:

Transport in inland waterway vessel

Not evaluated

Date / Revised: 24.01.2019 Version: 1.0

Product: Delan® 500 SC,10X1 L,II

(ID no. 30664315/SDS\_CPA\_IL/EN)

Date of print 24.01.2019

#### Sea transport

**IMDG** 

UN number: UN 3082

UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (contains DITHIANON)

Transport hazard class(es): 9, EHSM

Packing group: III Environmental hazards: yes

Marine pollutant: YES

Special precautions for

user:

None known

#### Air transport

IATA/ICAO

UN number: UN 3082

UN proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,

N.O.S. (contains DITHIANON)

Transport hazard class(es): 9, EHSM

Packing group: III Environmental hazards: yes

Special precautions for None known

user:

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

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

# 15. Regulatory Information

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

For the user of this plant-protective product applies: 'To avoid risks to man and the environment, comply with the instructions for use.' (Directive 1999/45/EC, Article 10, No. 1.2)

#### 16. Other Information

Full text of classifications, hazard symbols and hazard statements, if mentioned in section 2 or 3:

Page: 15/15

BASF Safety data sheet according to UN GHS 4th rev.

Date / Revised: 24.01.2019 Version: 1.0

Product: Delan® 500 SC,10X1 L,II

(ID no. 30664315/SDS\_CPA\_IL/EN)

Date of print 24.01.2019

Acute Tox. Acute toxicity

Skin Corr./Irrit. Skin corrosion/irritation

Eye Dam./Irrit. Serious eye damage/eye irritation

Skin Sens. Skin sensitization Carc. Carcinogenicity

Aquatic Acute Hazardous to the aquatic environment - acute Aquatic Chronic Hazardous to the aquatic environment - chronic

H318 Causes serious eye damage.

H330 Fatal if inhaled. H302 Harmful if swallowed.

H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H319 Causes serious eye irritation.

H315 Causes skin irritation.

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.

Vertical lines in the left hand margin indicate an amendment from the previous version.