

# SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending  
Regulation (EC) No 1907/2006



## Benalaxyl 10 % + Mancozeb 48 % WP

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	12.07.2022	50000904	Date of first issue: 12.07.2022

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

#### 1.1 Product identifier

**Product name** Benalaxyl 10 % + Mancozeb 48 % WP

#### Other means of identification

**Product code** 50000904

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

<b>Use of the Sub- stance/Mixture</b>	Fungicide
<b>Recommended restrictions on use</b>	Use as recommended by the label.

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

**Supplier Address** FMC Agricultural Solutions A/S  
Thyborønvej 78  
DK-7673 Harbøre  
Denmark

Telephone: +45 9690 9690  
Telefax: +45 9690 9691  
E-mail address: SDS-Info@fmc.com (E-Mail General Infor-  
mation)

#### 1.4 Emergency telephone number

For leak, fire, spill or accident emergencies, call:  
Denmark: 45-69918573 (CHEMTREC)

Medical emergency:  
Denmark: +45 82 12 12 12

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### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### **Classification (REGULATION (EC) No 1272/2008)**

Skin sensitisation, Category 1 H317: May cause an allergic skin reaction.

Carcinogenicity, Category 2 H351: Suspected of causing cancer.

# SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending Regulation (EC) No 1907/2006



## Benalaxyl 10 % + Mancozeb 48 % WP

Version 1.0	Revision Date: 12.07.2022	SDS Number: 50000904	Date of last issue: - Date of first issue: 12.07.2022
----------------	------------------------------	-------------------------	--

Reproductive toxicity, Category 1B	H360D: May damage the unborn child.
Specific target organ toxicity - repeated exposure, Category 2	H373: May cause damage to organs through prolonged or repeated exposure.
Short-term (acute) aquatic hazard, Category 1	H400: Very toxic to aquatic life.
Long-term (chronic) aquatic hazard, Category 1	H410: Very toxic to aquatic life with long lasting effects.

### 2.2 Label elements

#### Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Danger

Hazard statements :  
H317 May cause an allergic skin reaction.  
H351 Suspected of causing cancer.  
H360D May damage the unborn child.  
H373 May cause damage to organs through prolonged or repeated exposure.  
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**  
P201 Obtain special instructions before use.  
P260 Do not breathe dust or spray.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
**Response:**  
P308 + P313 IF exposed or concerned: Get medical advice/ attention.  
P391 Collect spillage.  
**Disposal:**  
P501 Dispose of contents/container in accordance with local regulation.

#### Hazardous components which must be listed on the label:

mancozeb (ISO)

#### Additional Labelling

EUH401 To avoid risks to human health and the environment, comply with the instructions for use.

# SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending  
Regulation (EC) No 1907/2006



## Benalaxyl 10 % + Mancozeb 48 % WP

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	12.07.2022	50000904	Date of first issue: 12.07.2022

### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

## SECTION 3: Composition/information on ingredients

### 3.2 Mixtures

#### Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
mancozeb (ISO)	8018-01-7  006-076-00-1	Skin Sens. 1; H317 Carc. 2; H351 Repr. 1B; H360D STOT RE 2; H373 (Nervous system, Thyroid) Aquatic Acute 1; H400 Aquatic Chronic 1; H410  M-Factor (Acute aquatic toxicity): 10 M-Factor (Chronic aquatic toxicity): 10	>= 30 - < 50
benalaxyl (ISO)	71626-11-4 275-728-7 616-104-00-X	Aquatic Acute 1; H400 Aquatic Chronic 1; H410  M-Factor (Acute aquatic toxicity): 1 M-Factor (Chronic aquatic toxicity): 1	>= 2,5 - < 11
Benzenesulfonic acid, hydroxy-, polymer with formaldehyde, phe- nol and urea, sodium salt	102980-04-1	Eye Irrit. 2; H319 Aquatic Chronic 3; H412	>= 1 - < 2,5
Substances with a workplace exposure limit :			

# SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending  
Regulation (EC) No 1907/2006



## Benalaxyl 10 % + Mancozeb 48 % WP

Version 1.0	Revision Date: 12.07.2022	SDS Number: 50000904	Date of last issue: - Date of first issue: 12.07.2022
----------------	------------------------------	-------------------------	--

kaolin	1332-58-7 310-194-1		>= 20 - < 30
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For explanation of abbreviations see section 16.

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

- |                         |   |
|-------------------------|---|
| General advice          | : Move out of dangerous area.<br>Show this safety data sheet to the doctor in attendance.<br>Do not leave the victim unattended.  |
| If inhaled              | : If unconscious, place in recovery position and seek medical advice.<br>If symptoms persist, call a physician.   |
| In case of skin contact | : If on clothes, remove clothes.<br>If on skin, rinse well with water.<br>Wash off with soap and plenty of water.<br>Get medical attention immediately if irritation develops and persists.   |
| In case of eye contact  | : Flush eyes with water as a precaution.<br>Remove contact lenses.<br>Protect unharmed eye.<br>Keep eye wide open while rinsing.<br>If eye irritation persists, consult a specialist.   |
| If swallowed            | : Keep respiratory tract clear.<br>Do not give milk or alcoholic beverages.<br>Never give anything by mouth to an unconscious person.<br>If symptoms persist, call a physician.<br>Take victim immediately to hospital.<br>Do not induce vomiting without medical advice. |

#### 4.2 Most important symptoms and effects, both acute and delayed

- |       |  |
|-------|--|
| Risks | : May cause an allergic skin reaction.<br>Suspected of causing cancer.<br>May damage the unborn child.<br>May cause damage to organs through prolonged or repeated exposure. |
|-------|--|

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

- |           |                          |
|-----------|--------------------------|
| Treatment | : Treat symptomatically. |
|-----------|--------------------------|

# SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending  
Regulation (EC) No 1907/2006



## Benalaxyl 10 % + Mancozeb 48 % WP

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	12.07.2022	50000904	Date of first issue: 12.07.2022

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

Suitable extinguishing media : Dry chemical, CO<sub>2</sub>, water spray or regular foam.

Unsuitable extinguishing media : High volume water jet

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

Specific hazards during fire-fighting : Do not allow run-off from fire fighting to enter drains or water courses.

Hazardous combustion products : Sulphur oxides  
Nitrogen oxides (NO<sub>x</sub>)  
Carbon oxides  
Thermal decomposition can lead to release of irritating gases and vapours.

#### 5.3 Advice for firefighters

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.  
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

### SECTION 6: Accidental release measures

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

Personal precautions : Use personal protective equipment.  
Avoid dust formation.  
Avoid breathing dust.

#### 6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.  
Prevent further leakage or spillage if safe to do so.  
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 : Keep in suitable, closed containers for disposal.

#### 6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

# SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending  
Regulation (EC) No 1907/2006



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Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	12.07.2022	50000904	Date of first issue: 12.07.2022

### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

- Advice on safe handling : Avoid formation of respirable particles.  
Do not breathe vapours/dust.  
Avoid exposure - obtain special instructions before use.  
Avoid contact with skin and eyes.  
For personal protection see section 8.  
Smoking, eating and drinking should be prohibited in the application area.  
Dispose of rinse water in accordance with local and national regulations.  
Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.
- Advice on protection against fire and explosion : Avoid dust formation. Provide appropriate exhaust ventilation at places where dust is formed.
- Hygiene measures : Wash hands before breaks and at the end of workday.

#### 7.2 Conditions for safe storage, including any incompatibilities

- Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully re-sealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.
- Further information on storage stability : Keep in a dry place.  
No decomposition if stored and applied as directed.

#### 7.3 Specific end use(s)

- Specific use(s) : Registered pesticide to be used in accordance with a label approved by country-specific regulatory authorities.

### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

##### Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
kaolin	1332-58-7	GV (Respirable dust)	2 mg/m <sup>3</sup>	DK OEL
		TWA (Respirable dust)	0,1 mg/m <sup>3</sup>	2004/37/EC
Further information	Carcinogens or mutagens			

# SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending Regulation (EC) No 1907/2006



## Benalaxyl 10 % + Mancozeb 48 % WP

Version 1.0      Revision Date: 12.07.2022      SDS Number: 50000904      Date of last issue: -  
Date of first issue: 12.07.2022

silica gel	112926-00-8	GV (total)	0,3 mg/m <sup>3</sup> (Silica)	DK OEL
		GV (respirable)	0,1 mg/m <sup>3</sup> (Silica)	DK OEL
Further information	Means that the substance is included in the list of substances considered carcinogenic.			

### Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
silica gel	Workers	Inhalation	Long-term systemic effects	4 mg/m <sup>3</sup>

### Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
mancozeb (ISO)	Water	0,000146 mg/l

## 8.2 Exposure controls

### Personal protective equipment

- Eye protection : Eye wash bottle with pure water  
Tightly fitting safety goggles
- Hand protection  
Material : Wear chemical resistant gloves, such as barrier laminate, butyl rubber or nitrile rubber.
- Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.
- Skin and body protection : Dust impervious protective suit  
Choose body protection according to the amount and concentration of the dangerous substance at the work place.
- Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.  
Equipment should conform to EN 143
- Filter type : Particulates type (P)
- Protective measures : Plan first aid action before beginning work with this product.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

- Appearance : powder
- Colour : light yellow
- Odour : No data available

# SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending  
Regulation (EC) No 1907/2006



## Benalaxyl 10 % + Mancozeb 48 % WP

Version 1.0	Revision Date: 12.07.2022	SDS Number: 50000904	Date of last issue: - Date of first issue: 12.07.2022
----------------	------------------------------	-------------------------	--

Melting point/freezing point	:	not determined
Boiling point/boiling range	:	not determined
Flammability	:	Not highly flammable
Upper explosion limit / Upper flammability limit	:	not determined
Lower explosion limit / Lower flammability limit	:	not determined
Flash point	:	not determined
Decomposition temperature	:	not determined
pH	:	7,26
Viscosity		
Viscosity, dynamic	:	not determined
Viscosity, kinematic	:	Not applicable
Solubility(ies)		
Water solubility	:	dispersible
Partition coefficient: n-octanol/water	:	Not available for this mixture.
Vapour pressure	:	not determined
Relative vapour density	:	not determined
Particle characteristics		
Particle size	:	not determined
Particle Size Distribution	:	No data available
Shape	:	No data available

### 9.2 Other information

Explosives	:	Not explosive
Oxidizing properties	:	Non-oxidizing
Self-ignition	:	155 °C
Evaporation rate	:	not determined



# SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending  
Regulation (EC) No 1907/2006



## Benalaxyl 10 % + Mancozeb 48 % WP

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	12.07.2022	50000904	Date of first issue: 12.07.2022

### SECTION 10: Stability and reactivity

#### 10.1 Reactivity

No decomposition if stored and applied as directed.

#### 10.2 Chemical stability

No decomposition if stored and applied as directed.

#### 10.3 Possibility of hazardous reactions

Hazardous reactions : No decomposition if stored and applied as directed.

Dust may form explosive mixture in air.

#### 10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

#### 10.5 Incompatible materials

Materials to avoid : Avoid strong acids, bases, and oxidizers

#### 10.6 Hazardous decomposition products

Stable under recommended storage conditions.

### SECTION 11: Toxicological information

#### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

##### Acute toxicity

Not classified based on available information.

##### Product:

Acute oral toxicity : LD50 (Rat): 4.500 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 5,148 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Remarks: Based on data from similar materials

Acute dermal toxicity : LD50 (Rat): > 4.000 mg/kg

##### Components:

##### **mancozeb (ISO):**

Acute oral toxicity : LD50 (Rat): > 2.000 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 5,14 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rat): > 2.000 mg/kg

# SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending  
Regulation (EC) No 1907/2006



## Benalaxyl 10 % + Mancozeb 48 % WP

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	12.07.2022	50000904	Date of first issue: 12.07.2022

---

### **benalaxyl (ISO):**

Acute oral toxicity	: LD50 (Rat): 4.200 mg/kg
Acute inhalation toxicity	: LC50 (Rat): > 10 mg/l Exposure time: 4 h Test atmosphere: dust/mist
Acute dermal toxicity	: LD50 (Rat): > 5.000 mg/kg

### **Benzenesulfonic acid, hydroxy-, polymer with formaldehyde, phenol and urea, sodium salt:**

Acute oral toxicity	: LD50 (Rat): > 2.000 mg/kg Remarks: no mortality
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### **kaolin:**

Acute oral toxicity	: LD50 (Rat): > 5.000 mg/kg Method: OECD Test Guideline 401  LD50: > 2.000 mg/kg Method: OECD Test Guideline 420 Assessment: The substance or mixture has no acute oral toxicity
Acute inhalation toxicity	: LD50: 5,07 mg/l Method: OECD Test Guideline 436
Acute dermal toxicity	: LD50 (Rat): > 5.000 mg/kg  LD50: > 2.000 mg/kg Method: OECD Test Guideline 402 Assessment: The substance or mixture has no acute dermal toxicity

### **Skin corrosion/irritation**

Not classified based on available information.

### **Product:**

Assessment	: Not classified as irritant
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### **Components:**

#### **mancozeb (ISO):**

Assessment	: No skin irritation
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#### **benalaxyl (ISO):**

Species	: Rabbit
Assessment	: No skin irritation

# SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending  
Regulation (EC) No 1907/2006



## Benalaxyl 10 % + Mancozeb 48 % WP

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	12.07.2022	50000904	Date of first issue: 12.07.2022

### **Benzenesulfonic acid, hydroxy-, polymer with formaldehyde, phenol and urea, sodium salt:**

Species	:	Rabbit
Result	:	No skin irritation

### **kaolin:**

Method	:	OECD Test Guideline 404
Result	:	No skin irritation

### **Serious eye damage/eye irritation**

Not classified based on available information.

### **Product:**

Assessment	:	Not classified as irritant
Remarks	:	Product dust may be irritating to eyes, skin and respiratory system.

### **Components:**

#### **mancozeb (ISO):**

Assessment	:	No eye irritation
Remarks	:	Minimal effects that do not meet the threshold for classification.

#### **benalaxyl (ISO):**

Species	:	Rabbit
Assessment	:	No eye irritation
Method	:	OECD Test Guideline 405

### **Benzenesulfonic acid, hydroxy-, polymer with formaldehyde, phenol and urea, sodium salt:**

Species	:	Rabbit
Method	:	OECD Test Guideline 405
Result	:	Moderate eye irritation

### **kaolin:**

Method	:	OECD Test Guideline 405
Result	:	No eye irritation

### **Respiratory or skin sensitisation**

#### **Skin sensitisation**

May cause an allergic skin reaction.

#### **Respiratory sensitisation**

Not classified based on available information.

### **Product:**

Assessment	:	May cause sensitisation by skin contact.
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# SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending  
Regulation (EC) No 1907/2006



## Benalaxyl 10 % + Mancozeb 48 % WP

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	12.07.2022	50000904	Date of first issue: 12.07.2022

### Components:

#### **mancozeb (ISO):**

Test Type	: Maximisation Test
Exposure routes	: Skin contact
Species	: Guinea pig
Method	: OECD Test Guideline 406
Result	: May cause sensitisation by skin contact.

#### **benalaxyl (ISO):**

Exposure routes	: Skin contact
Species	: Guinea pig
Result	: Not a skin sensitizer.

#### **Benzenesulfonic acid, hydroxy-, polymer with formaldehyde, phenol and urea, sodium salt:**

Test Type	: Maximisation Test
Species	: Guinea pig
Method	: OECD Test Guideline 406
Result	: Does not cause skin sensitisation.

#### **kaolin:**

Method	: OECD Test Guideline 429
Result	: Does not cause skin sensitisation.

### **Germ cell mutagenicity**

Not classified based on available information.

### Components:

#### **Benzenesulfonic acid, hydroxy-, polymer with formaldehyde, phenol and urea, sodium salt:**

Genotoxicity in vitro	: Remarks: No data available
Genotoxicity in vivo	: Remarks: No data available

#### **kaolin:**

Genotoxicity in vitro	: Test Type: Ames test Method: OECD Test Guideline 471 Result: negative
Genotoxicity in vivo	: Remarks: No data available

### **Carcinogenicity**

Suspected of causing cancer.

### **Reproductive toxicity**

May damage the unborn child.

### Product:

Reproductive toxicity - As-	: Clear evidence of adverse effects on development, based on
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# SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending  
Regulation (EC) No 1907/2006



## Benalaxyl 10 % + Mancozeb 48 % WP

Version 1.0	Revision Date: 12.07.2022	SDS Number: 50000904	Date of last issue: - Date of first issue: 12.07.2022
----------------	------------------------------	-------------------------	--

assessment

animal experiments.

### Components:

#### **mancozeb (ISO):**

Reproductive toxicity - Assessment : Some evidence of adverse effects on sexual function and fertility, and/or on development, based on animal experiments.  
Remarks: Based on EU Harmonised classification - Annex VI of Regulation (EC) No 1272/2008 (CLP Regulation)

#### **benalaxyl (ISO):**

Effects on fertility : Remarks: No data available

#### **Benzenesulfonic acid, hydroxy-, polymer with formaldehyde, phenol and urea, sodium salt:**

Effects on fertility : Remarks: No data available

Effects on foetal development : Remarks: No data available

#### **kaolin:**

Effects on fertility : Remarks: No data available

Effects on foetal development : Remarks: No data available

### **STOT - single exposure**

Not classified based on available information.

### Components:

#### **kaolin:**

Remarks : No significant adverse effects were reported

### **STOT - repeated exposure**

May cause damage to organs through prolonged or repeated exposure.

### Components:

#### **kaolin:**

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

### **Repeated dose toxicity**

### Components:

#### **benalaxyl (ISO):**

Remarks : No data available

# SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending  
Regulation (EC) No 1907/2006



## Benalaxyl 10 % + Mancozeb 48 % WP

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	12.07.2022	50000904	Date of first issue: 12.07.2022

### kaolin:

Remarks : No data available

### Aspiration toxicity

Not classified based on available information.

## 11.2 Information on other hazards

### Endocrine disrupting properties

#### Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

### Further information

#### Product:

Remarks : No data available

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Components:

#### **mancozeb (ISO):**

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 1 mg/l  
Exposure time: 48 h

LC50 (Cyprinus carpio (Carp)): 2,57 mg/l  
Exposure time: 96 h

LC50 (Oncorhynchus mykiss (rainbow trout)): 0,074 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia (water flea)): 0,01 mg/l  
Exposure time: 24 h

EC50 (Daphnia magna (Water flea)): 0,073 mg/l  
Exposure time: 48 h

M-Factor (Acute aquatic toxicity) : 10

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 0,0073 mg/l  
Exposure time: 21 d  
Species: Daphnia magna (Water flea)

# SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending  
Regulation (EC) No 1907/2006



## Benalaxyl 10 % + Mancozeb 48 % WP

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	12.07.2022	50000904	Date of first issue: 12.07.2022

M-Factor (Chronic aquatic toxicity) : 10

Toxicity to terrestrial organisms : 0,1868 mg/kg  
Exposure time: 24 h  
Species: Apis mellifera (bees)

0,1652 mg/kg  
Exposure time: 48 h  
Species: Apis mellifera (bees)

0,1406 mg/kg  
Exposure time: 72 h  
Species: Apis mellifera (bees)

### benalaxyl (ISO):

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 5,94 mg/l  
Exposure time: 96 h

LC50 (Cyprinus carpio (Carp)): 6 mg/l  
Exposure time: 96 h

LC50 (Salmo trutta (brown trout)): 3,75 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): 0,59 mg/l  
Exposure time: 48 h

Toxicity to algae/aquatic plants : EC50 (Selenastrum capricornutum (green algae)): 2,4 mg/l  
Exposure time: 96 h

M-Factor (Acute aquatic toxicity) : 1

M-Factor (Chronic aquatic toxicity) : 1

### Benzenesulfonic acid, hydroxy-, polymer with formaldehyde, phenol and urea, sodium salt:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 10 - 100 mg/l  
Exposure time: 96 h  
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : Remarks: No data available

Toxicity to microorganisms : Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : Remarks: No data available

# SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending  
Regulation (EC) No 1907/2006



## Benalaxyl 10 % + Mancozeb 48 % WP

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	12.07.2022	50000904	Date of first issue: 12.07.2022

### kaolin:

- |  |   |   |
|--|---|---|
| Toxicity to fish   | : | LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l<br>Exposure time: 96 h<br>Method: OECD Test Guideline 203              |
| Toxicity to daphnia and other aquatic invertebrates                    | : | EC50 (Daphnia magna (Water flea)): > 1.000 mg/l<br>Exposure time: 48 h<br>Method: OECD Test Guideline 202                     |
| Toxicity to algae/aquatic plants                                       | : | EC50 (Raphidocelis subcapitata (freshwater green alga)): > 100 mg/l<br>Exposure time: 72 h<br>Method: OECD Test Guideline 201 |
| Toxicity to microorganisms   | : | Remarks: No data available  |
| Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) | : | Remarks: No data available  |

## 12.2 Persistence and degradability

### Product:

- |                  |   |   |
|------------------|---|---|
| Biodegradability | : | Remarks: Product contains minor amounts of not readily biodegradable components, which may not be degradable in waste water treatment plants. |
|------------------|---|---|

### Components:

#### **mancozeb (ISO):**

- |                  |   |                                |
|------------------|---|--------------------------------|
| Biodegradability | : | Result: Readily biodegradable. |
|------------------|---|--------------------------------|

#### **benalaxyl (ISO):**

- |                  |   |   |
|------------------|---|---|
| Biodegradability | : | Remarks: Primary degradation half-lives are usually several months in aerobic soil and water.<br><br>Not readily biodegradable. |
|------------------|---|---|

#### **Benzenesulfonic acid, hydroxy-, polymer with formaldehyde, phenol and urea, sodium salt:**

- |                  |   |  |
|------------------|---|--|
| Biodegradability | : | Result: Not readily biodegradable.<br>Biodegradation: 20 - 70 %<br>Exposure time: 28 d<br>Method: OECD Test Guideline 302B |
|------------------|---|--|

### **kaolin:**

- |                  |   |   |
|------------------|---|---|
| Biodegradability | : | Remarks: The methods for determining biodegradability are not applicable to inorganic substances. |
|------------------|---|---|



# SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending  
Regulation (EC) No 1907/2006



## Benalaxyl 10 % + Mancozeb 48 % WP

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	12.07.2022	50000904	Date of first issue: 12.07.2022

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### 12.3 Bioaccumulative potential

#### **Product:**

Bioaccumulation : Remarks: No data is available on the product itself.

#### **Components:**

##### **mancozeb (ISO):**

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

##### **benalaxyl (ISO):**

Bioaccumulation : Remarks: The product may be accumulated in organisms.

Partition coefficient: n-octanol/water : log Pow: 3,54

##### **Benzenesulfonic acid, hydroxy-, polymer with formaldehyde, phenol and urea, sodium salt:**

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

##### **kaolin:**

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

Partition coefficient: n-octanol/water : Remarks: Not applicable

### 12.4 Mobility in soil

#### **Product:**

Distribution among environmental compartments : Medium: Soil  
Remarks: No data is available on the product itself.

#### **Components:**

##### **mancozeb (ISO):**

Distribution among environmental compartments : Medium: Soil  
Remarks: Moderately mobile in soils

##### **benalaxyl (ISO):**

Distribution among environmental compartments : Medium: Soil  
Remarks: immobile

##### **kaolin:**

Distribution among environmental compartments : Remarks: Low mobility in soil

# SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending  
Regulation (EC) No 1907/2006



## Benalaxyl 10 % + Mancozeb 48 % WP

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	12.07.2022	50000904	Date of first issue: 12.07.2022

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### 12.5 Results of PBT and vPvB assessment

**Product:**

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 12.6 Endocrine disrupting properties

**Product:**

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

### 12.7 Other adverse effects

**Product:**

Additional ecological information : An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.  
Toxic to aquatic life with long lasting effects.

---

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Product	: The product should not be allowed to enter drains, water courses or the soil. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.  Waste, residues, etc. must be collected, stored and disposed of in tightly closed container labeled: "Contains a substance that is covered by the Danish health and safety regulation in terms of cancer risk."
Contaminated packaging	: Empty remaining contents. Do not re-use empty containers. Packaging that is not properly emptied must be disposed of as the unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal.

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## SECTION 14: Transport information

### 14.1 UN number or ID number

# SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending  
Regulation (EC) No 1907/2006



## Benalaxyl 10 % + Mancozeb 48 % WP

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	12.07.2022	50000904	Date of first issue: 12.07.2022

ADN	:	UN 3077
ADR	:	UN 3077
RID	:	UN 3077
IMDG	:	UN 3077
IATA	:	UN 3077

### 14.2 UN proper shipping name

ADN	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Mancozeb, Benalaxyl)
ADR	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Mancozeb, Benalaxyl)
RID	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Mancozeb, Benalaxyl)
IMDG	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Mancozeb, Benalaxyl)
IATA	:	Environmentally hazardous substance, solid, n.o.s. (Mancozeb, Benalaxyl)

### 14.3 Transport hazard class(es)

	Class	Subsidiary risks
ADN	:	9
ADR	:	9
RID	:	9
IMDG	:	9
IATA	:	9

### 14.4 Packing group

ADN		
Packing group	:	III
Classification Code	:	M7
Hazard Identification Number	:	90
Labels	:	9
ADR		
Packing group	:	III
Classification Code	:	M7
Hazard Identification Number	:	90
Labels	:	9
Tunnel restriction code	:	(-)
RID		
Packing group	:	III

# SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending  
Regulation (EC) No 1907/2006



## Benalaxyl 10 % + Mancozeb 48 % WP

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	12.07.2022	50000904	Date of first issue: 12.07.2022

Classification Code : M7  
Hazard Identification Number : 90  
Labels : 9

### IMDG

Packing group : III  
Labels : 9  
EmS Code : F-A, S-F

### IATA (Cargo)

Packing instruction (cargo aircraft) : 956  
Packing instruction (LQ) : Y956  
Packing group : III  
Labels : Miscellaneous

### IATA (Passenger)

Packing instruction (passenger aircraft) : 956  
Packing instruction (LQ) : Y956  
Packing group : III  
Labels : Miscellaneous

## 14.5 Environmental hazards

### ADN

Environmentally hazardous : yes

### ADR

Environmentally hazardous : yes

### RID

Environmentally hazardous : yes

### IMDG

Marine pollutant : yes

### IATA (Passenger)

Environmentally hazardous : yes

### IATA (Cargo)

Environmentally hazardous : yes

## 14.6 Special precautions for user

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.

## 14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

## SECTION 15: Regulatory information

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

# SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending  
Regulation (EC) No 1907/2006



## Benalaxyl 10 % + Mancozeb 48 % WP

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	12.07.2022	50000904	Date of first issue: 12.07.2022

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) : Not applicable

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59). : Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

Regulation (EU) 2019/1021 on persistent organic pollutants (recast) : Not applicable

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals : Not applicable

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. E1 ENVIRONMENTAL HAZARDS

### Other regulations:

When evaluating a workplace, measures must be taken to ensure that employees are not exposed to conditions that may pose a risk during pregnancy or breastfeeding (cf. The Danish Working Environment Authority's Executive Order on The Performance of Work)

Young people under the age of 18 are not allowed to use or be exposed to the product professionally. Young people above the age of 15 are, however, except from this rule if the product is a necessary part of their education.

The substance/mixture is subject to the provisions of BEK nr. 1795 of 18/12/2015 (as amended) "Executive order on Measures to Protect Workers from the Risks related to Exposure to Carcinogenic Substances and Materials at Work". The work with this substance/mixture may pose a cancer risk. : mancozeb (ISO) titanium dioxide

### The components of this product are reported in the following inventories:

TCSI : On the inventory, or in compliance with the inventory

TSCA : Product contains substance(s) not listed on TSCA inventory.

AIIC : Not in compliance with the inventory

DSL : This product contains the following components that are not on the Canadian DSL nor NDSL.

# SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending  
Regulation (EC) No 1907/2006



## Benalaxyl 10 % + Mancozeb 48 % WP

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	12.07.2022	50000904	Date of first issue: 12.07.2022

benalaxyl (ISO)  
mancozeb (ISO)

ENCS	:	Not in compliance with the inventory
ISHL	:	Not in compliance with the inventory
KECI	:	Not in compliance with the inventory
PICCS	:	Not in compliance with the inventory
IECSC	:	Not in compliance with the inventory
NZIoC	:	Not in compliance with the inventory
TECI	:	Not in compliance with the inventory

### 15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this mixture.

## SECTION 16: Other information

### Full text of H-Statements

H317	:	May cause an allergic skin reaction.
H319	:	Causes serious eye irritation.
H351	:	Suspected of causing cancer.
H360D	:	May damage the unborn child.
H373	:	May cause damage to organs through prolonged or repeated exposure.
H400	:	Very toxic to aquatic life.
H410	:	Very toxic to aquatic life with long lasting effects.
H412	:	Harmful to aquatic life with long lasting effects.

### Full text of other abbreviations

Aquatic Acute	:	Short-term (acute) aquatic hazard
Aquatic Chronic	:	Long-term (chronic) aquatic hazard
Carc.	:	Carcinogenicity
Eye Irrit.	:	Eye irritation
Repr.	:	Reproductive toxicity
Skin Sens.	:	Skin sensitisation
STOT RE	:	Specific target organ toxicity - repeated exposure
2004/37/EC	:	Europe. Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens or mutagens at work
DK OEL	:	Denmark. Occupational Exposure Limits
2004/37/EC / TWA	:	Long term exposure limit
DK OEL / GV	:	Long term exposure limit

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Test-

# SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending  
Regulation (EC) No 1907/2006



## Benalaxyl 10 % + Mancozeb 48 % WP

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	12.07.2022	50000904	Date of first issue: 12.07.2022

ing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; 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; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; 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; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; 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; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

### Further information

#### Classification of the mixture:

Skin Sens. 1	H317
Carc. 2	H351
Repr. 1B	H360D
STOT RE 2	H373
Aquatic Acute 1	H400
Aquatic Chronic 1	H410

#### Classification procedure:

Based on product data or assessment
Calculation method
Based on product data or assessment
Calculation method
Calculation method
Calculation method

### Disclaimer

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# SAFETY DATA SHEET

According to Commission Regulation (EU) 2020/878 of amending  
Regulation (EC) No 1907/2006



## Benalaxyl 10 % + Mancozeb 48 % WP

Version	Revision Date:	SDS Number:	Date of last issue: -
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