

## SAFETY DATA SHEET

According to Regulation (EC) No. 2020/878

Date: 20-04-2020

Revision Date: 5-1-2023

Version: 2.00

Product Name: **MicroAktiv®-AG**

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### SECTION 1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

#### 1.1 Product Identifier

Product Name : **MicroAktiv®- AG** Agricultural Bioformula for Soils  
Product form : Granular powder  
Product code : 9001  
Product description : Non-pathenogenic naturally occurring microorganisms absorbed on wheat bran and corn gluten.

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

Identified Uses : For use in agricultural and horticultural soil applications.

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

Company : QM Environmental International B.V.  
Henricuskade 123A  
The Hague, 2497 NB, The Netherlands  
Phone : +31-858 768 862  
Fax : +31-847 466 328  
E-mail : [info@microaktiv.com](mailto:info@microaktiv.com)  
Website : <http://www.microaktiv.com>

#### 1.4 Emergency telephone number

Telephone number : +31-653229465  
(only available from 8:00 a.m. to 11:00 p.m. Central European Time (UTC + 1:00))

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### SECTION 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of substance or mixture

Classification in accordance with Global Harmonization Systems (GHS) and Classification Labeling and Packaging Regulation (EC) No 1272/2008 (CLP)

Health

Mixture classified as not dangerous according to Regulation (EC) 1272/2008

#### 2.2 Label elements

Hazard Pictogram : -  
Signal Word : -  
Hazard Statement(s) : -  
Precautionary statements : -

## SAFETY DATA SHEET

According to Regulation (EC) No. 2020/878

Date: 20-04-2020

Revision Date: 5-1-2023

Version: 2.00

Product Name: **MicroAktiv®-AG**

Further information: Persons who have a compromised immune system or a history of severe allergic response should avoid contact and/or breathing dust or mist from product handling or manufacturing processes. Crystalline silica is a known cause of silicosis (a non-cancerous lung disease). Prolonged and/or repeated inhalation must be avoided.

### 2.3 Other Hazards

Special Risks : None

## SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

### 3.1 Substance

### 3.2 Mixture

<b>Chemical Identity</b>				
<b>Common name</b>				
<b>Synonyms</b>	Non-pathenogenic. Naturally occurring microorganisms and degradation enzymes absorbed on wheat bran and corn gluten.			
<b>Hazardous Components</b>				
<b>Chemical Name (Concentration)</b>	<b>% by weight</b>	<b>CAS-No</b>	<b>EC. No.</b>	<b>Classification according to Regulation (EC) No. 1278/2008 (CLP)</b>
<i>Crystalline silica (&lt; 0.1%)</i>	<0,1	14808-60-7	238-878-4	Carc. 2- H351 STOT. RE 2- H373

The product contains components which are exempt from REACH registration based on EC1907/2006 Art. 6.1 "Less than 1 ton import per year for the substances in the mixture requiring registration"

## SECTION 4. FIRST AID MEASURES

### 4.1 Description of first aid measures

<b>GENERAL NOTES</b>	: The microbes in this product are Class 1 microbes, defined by the EEC directive 2000/54 as not likely to cause disease in healthy humans and animals. However, persons who have a compromised immune system or a history of severe allergic response should avoid contact with open wounds and/or breathing dust or mist from product handling or manufacturing processes.
<b>INHALATION:</b>	: May cause sensitization by inhalation in hypersensitive individuals. Avoid product handling which results in dust generation. If inhaled, remove from contaminated area to fresh air. Report situation. Seek medical attention if allergic response exhibited.
<b>EYE CONTACT</b>	: May cause eye irritation. Direct contact with eyes should be avoided.

## SAFETY DATA SHEET

According to Regulation (EC) No. 2020/878

Date: 20-04-2020

Revision Date: 5-1-2023

Version: 2.00

Product Name: **MicroAktiv®-AG**

	In case of contact with eyes, flush eyes with low pressure water for at least 15 minutes and seek medical attention.
SKIN CONTACT	: Product may cause skin irritation. Direct contact with skin should be avoided. In case of contact with skin, wash skin with soap and water. Remove contaminated clothing and wash.
INGESTION	: Ingestion of material may cause mouth and throat irritation and/or gastric disturbance. If swallowed, rinse mouth and throat with tap water. Drink water.

### SELF PROTECTION

OF THE FIRST AIDER : Wear protective clothing, gloves, breathing apparatus and eye protection when removing subject from the scene.

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

Skin irritation and gastric disturbance.

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

In case of symptoms

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## SECTION 5. FIREFIGHTING MEASURES

### 5.1 Extinguishing Media

Suitable Extinguishing Media : Dry chemical, carbon dioxide, water spray or foam.

Unsuitable extinguishing media : None

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

Hazardous combustion product : No special requirements. This material is not highly combustible but contains organic matter which may be explosive as a dust in very high concentrations. Generally considered a low explosion hazard. Burning may produce sulfur oxides.

### 5.3 Advice for firefighters

Product itself is not flammable. Organic dusts are a weak explosion hazard. Plastic pail will melt under the influence of heat

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## SECTION 6. ACCIDENTIAL RELEASE MEASURES

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

#### 6.1.1 For non-emergency personnel

## SAFETY DATA SHEET

According to Regulation (EC) No. 2020/878

Date: 20-04-2020

Revision Date: 5-1-2023

Version: 2.00

Product Name: **MicroAktiv®-AG**

Protective equipment	:	See section 8 for protective equipment.
Emergency procedures	:	Provide sufficient ventilation, provide eyewash capability. Avoid creating dust.

### 6.1.2 For emergency responders

Protective equipment	:	See section 8 for protective equipment.
Emergency procedures	:	Provide sufficient ventilation, provide eyewash capability. Avoid creating dust.

## 6.2 Environmental precautions

None.

## 6.3 Methods and materials for containment and cleaning up

Spilled product should be removed immediately to avoid formation of dust. Store in suitable container. Wash down with water. Dispose to landfill. Provide sufficient ventilation.

## 6.4 Reference to other sections

Refer to Section 8 for protective equipment and Section 13 for disposal considerations

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## SECTION 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Protective measures	:	Avoid creating dust. Adequately ventilate when handling this product. Provide eyewash capability.
Measures to prevent fire	:	No special requirements
Measures to prevent aerosol and dust generation	:	Keep product confined in closed container. When working with powder prevent dust formation gentle interaction with the product.
Measures to protect the environment	:	N/A
Advice on general occupational hygiene	:	Do not eat, drink and smoke in work areas/ wash hands after use/ remove contaminated clothing and protective equipment before entering eating areas.

## SAFETY DATA SHEET

According to Regulation (EC) No. 2020/878

Date: 20-04-2020

Revision Date: 5-1-2023

Version: 2.00

Product Name: **MicroAktiv®-AG**

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

Store in a suitable container, No special requirements. This material is not highly combustible but contains organic matter which may be explosive as a dust in very high concentrations. Generally considered a low explosion hazard.

### 7.3 Specific end use(s)

Recommendations : None

Industrial sector specific solutions : None

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## SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Control parameters

Name	CAS no.	EC. No.	% by Weight	EU BOEL	PEL (OSHA)
Crystalline silica	14808-60-7	238-878-4	< 0.2	0,1 mg/m <sup>3</sup> / TGG 8u	0.1 mg/m <sup>3</sup>

\* Specific limits not set for these chemicals. Limits are shown for Particles Not Otherwise Regulated (PNOR) or Particles Not Otherwise Classified (PNOC). First number is for total dust, second number { } is for respirable dust.

### 8.2 Exposure controls

#### 8.2.1. Appropriate engineering controls

The product is installed in wastewater treatment systems. Exposure to workers is limited. Workers are required to take the necessary precautions for the safe installation of the product.

#### 8.2.2. Personal Protection Equipment



Respiratory Protection

Dust mask or respirator for particle removal (NIOSH)



Skin Protection

Wear long-sleeve shirt, trousers and/or coveralls and gloves (rubber or vinyl).



Eye Protection

Safety glasses with side shields or face shield



Industrial Hygiene

Maintain good housekeeping. Avoid dusty conditions. Wash hands and exposed skin after contact. Avoid contact with food or food preparation surfaces. If exposure of food surfaces occurs, wash with germicidal detergent or chlorine bleach. Remove and wash contaminated clothing

#### 8.2.3 Environmental Exposure Controls

N/A

## SAFETY DATA SHEET

According to Regulation (EC) No. 2020/878

Date: 20-04-2020

Revision Date: 5-1-2023

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### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

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

Physical/Chemical Property	Value
Physical state	Solid
Colour	Tan
Odour	Fermented bran odor
Odour Threshold	Information not available
Melting point / freezing point (°C)	Information not available
Initial boiling point and boiling range(°C)	Does not apply
Flammability (solid, gas)	Information not available
Lower and Upper Explosion limits	Does not apply
Flash point	Information not available
Auto-ignition temperature	Does not apply
Decomposition temperature	Information not available
pH (1% suspension)	6 - 9 (1% suspension)
Kinematic Viscosity	Does not apply
Solubility in water	< 5% in water
Partition coefficient: n-octanol/water	Does not apply
Vapour pressure	Does not apply
Relative density (@25°C)	Information not available
Relative Vapour density	Does not apply
Particle characteristics	Granular powder

#### 9.2 Other information None

### SECTION 10. STABILITY AND REACTIVITY

10.1	Reactivity	:	Stable under normal conditions
10.2	Chemical stability	:	Stable under normal conditions
10.3	Possibility of hazardous reactions	:	Information not available
10.4	Conditions to avoid	:	Freezing or temperature over 40°C (100°F)
10.5	Incompatible materials	:	Strong acids, bases or oxidizers
10.6	Hazardous decomposition products	:	Information not available

### SECTION 11. TOXOLOGICAL INFORMATION

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

11.1.1. Substances N/A

**SAFETY DATA SHEET**

According to Regulation (EC) No. 2020/878

Date: 20-04-2020

Revision Date: 5-1-2023

Version: 2.00

Product Name: **MicroAktiv®-AG****11.1.2. Mixtures**

Acute Toxicity	Information Not Available
Skin Corrosion/Irritation	May cause skin irritation
Serious Eye Damage/Irritation	May cause eye irritation or redness
Respiratory or Skin Sensitization	May cause respiratory allergy in susceptible individuals: sensitization (shortness of breath, wheezing, and labored coughing) take individual to emergency room
Germ Cell Mutagenicity	Information Not Available
Carcinogenicity	<p>Crystalline silica probably carcinogenic            NTP: no            IARC Monographs: no            OSHA Regulated: no            Product may contain &lt;1% crystalline silica (CS). IARC has classified CS as probably carcinogenic for humans (2A). NTP lists CS as a substance which may reasonably be anticipated to be a carcinogen. CS is a known cause of silicosis (a non-cancerous lung disease).</p> <p>This product contains crystalline silica which is considered a health hazard by inhalation. IARC reviewed the literature (Oct., 1996) for polymorphs of crystalline silica and determined that:</p> <p>There is sufficient evidence in humans for the carcinogenicity of inhaled crystalline silica in the forms of quartz and cristobalite from occupational sources.</p> <p>There is inadequate evidence in humans for the carcinogenicity of amorphous silica.</p> <p>There is sufficient evidence in experimental animals for the carcinogenicity of quartz and cristobalite.</p> <p>There is limited evidence in experimental animals for the carcinogenicity of tridymite.</p> <p>There is inadequate evidence in experimental animals for the carcinogenicity of diatomaceous earth.</p> <p>There is inadequate evidence in experimental animals for the carcinogenicity of synthetic amorphous silica.</p> <p>Overall evaluation: Inhaled crystalline silica in the form of quartz and cristobalite from occupational sources is carcinogenic to humans (Group 1).</p>
Reproductive Toxicity	Information Not Available
STOT – Single Exposure	Information Not Available
STOT – Repeated Exposure	Information Not Available
Aspiration Hazard	Information Not Available
General Remarks	Enzymes in this product are non-toxic (LD 50 >2 g/kg in rats).

**11.2 Information on other hazards:** None

## SAFETY DATA SHEET

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### SECTION 12. ECOLOGICAL INFORMATION

<b>12.1 Toxicity</b>	No eco-toxicity reported for mixture and individual ingredients. Application of product to water sources may stimulate algae growth.
<b>12.2 Persistence and degradability</b>	Product is readily biodegradable.
<b>12.3 Bioaccumulative potential</b>	Information Not Available
<b>12.4 Mobility in soil</b>	Information Not Available
<b>12.5 Results of PBT and vPvB assessment</b>	Not required
<b>12.6 Endocrine disrupting properties</b>	None
<b>12.7 Other adverse effects</b>	None

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### SECTION 13. DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods

##### 13.1.1 Product / Packaging disposal

Waste codes / waste designations according to EURL:

Product: : n/a

Packaging : 150102

##### 13.1.2 Waste treatment – relevant information

Dispose of in accordance with current local, regional or national regulations. Treat as non-hazardous waste. Dispose in non-hazardous permitted facilities.

##### 13.1.3 Sewage disposal-relevant information

N/A

##### 13.1.4 Other disposal recommendations

Treat as non-hazardous waste. Dispose in non-hazardous permitted facilities.

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### SECTION 14. TRANSPORT INFORMATION

<b>14.1 UN Number</b>	Mixture not classified as Hazardous according to Regulation (EC) 1272/2008
<b>14.2 Un Proper shipping name</b>	
- Classification according to ADR/RID/IATA/IMDG	N/A
- Classification Code	N/A
- Label	N/A



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<b>14.3</b>	<b>Transport hazard class (es)</b>	N/A
<b>14.4</b>	<b>Packing group</b>	N/A
<b>14.5</b>	<b>Environmental hazards</b>	N/A
<b>14.6</b>	<b>Special precautions</b>	N/A
<b>14.7</b>	<b>DOT shipping name</b>	Chemicals not otherwise indexed (NOI) non-hazardous

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## SECTION 15. REGULATORY INFORMATION

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

Preparation does not contain ingredients listed as dangerous substances in Annex 1 of the EEC directive 67/548 and pathogenic bacteria as listed in Annex III of the EEC directive 2000/54.

Components not precisely identified are proprietary or non-hazardous. All chemical ingredients appear on the US EPA TSCA inventory.

#### National regulations

German Water Hazard Class (WGK): 1

### 15.2 Chemical Safety Assessment:

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier as it classifies the mixture does not meet the criteria for classification as dangerous.

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## SECTION 16. OTHER INFORMATION

Key: N/A= not applicable

The information contained in this Safety Data Sheet, as of the issue date, is believed to be true and correct. However, the accuracy or completeness of this information and any recommendations or suggestions are made without warranty or guarantee. Since the conditions of use are beyond the control of our company, it is the responsibility of the user to determine the conditions of safe use of this product. The information in this sheet does not represent analytical specifications; for this information contact QM Environmental International B.V., Technical Department.

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