

SAFETY DATA SHEET

According to Regulation (EC) No. 2020/87

Date: 01-03-2000

Revision Date: 30-04-2020

Version: 2.00

Product Name: **MicroAktiv®-AL3**

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

1.1 Product Identifier

Product Name : **MicroAktiv®- AL3** Pond and Lake Treatment

Product form : Granular powder

Product code : 9002

Product description : Inorganic flocculent aids with 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 wastewater treatment plants, surface waters and ponds.

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

Website : <http://www.microaktiv.com>

1.4 Telephone number in case of emergencies

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

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) : EUH208: Contains protease and amylase. May produce an allergic reaction.

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Precautionary Statement(s) :

P261; Avoid breathing dust.

P264; Wash hands thoroughly after handling.

P280; Wear protective gloves, clothing, and eye protection.

P302 + P352; IF ON SKIN: Gently wash area with soap and plenty of water.

P305 + P351 + P338; IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do.

Continue rinsing.

P332 + P313; If skin irritation occurs, get medical attention/advice.

P337 + P313; If eye irritation persists: Get medical attention/advice.

P362 + P364; Take off contaminated clothing and wash it before reuse.

2.3 Other Hazards

These are Class 1 microbes, defined by the EEC directive 2000/54 as not likely to cause disease in a healthy humans and animals. However, persons who have a compromised immune system or a history of severe allergic reactions/response should avoid contact with open wounds and/ or breathing dust or mist from product handling or manufacturing process.

Crystalline silica is a known cause of silicosis (a non-cancerous lung disease). Prolonged and/or repeated inhalation must be avoided.

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substance

3.2 Mixture

Hazardous Components :

| Name | % by weight | CAS-No | EC. No. | Classification according to Regulation (EC) No. 1278/2008 (CLP) |
|---------------------------|-------------|------------|-----------|---|
| <i>Crystalline silica</i> | < 1 | 14808-60-7 | 238-878-4 | Carc. 2- H351 STOT. RE 2- H373 |
| <i>Protease</i> | < 1 | 9014-01-1 | 232-752-2 | Skin Irrit. 2- H315 Eye Irrit. 2 - H319 |
| <i>Amylase</i> | < 1 | 9000-90-2 | 232-565-6 | Resp. Sens. 1 - H334 |
| <i>Aluminum sulfate</i> | < 3 | 10043-01-3 | 233-135-0 | Met. Corr. 1 - H290 Eye Dam. 1 - H318 |

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"

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SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

| | | |
|---------------|---|--|
| GENERAL NOTES | : | The microbes in this product are Class 1 microbes, defined by the 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. |
| INHALATION: | : | Remove individual to fresh air. If allergic response or difficulty breathing is exhibited, seek medical attention. |
| EYE CONTACT | : | Flush eyes with water for at least 15 minutes, seek medical attention. |
| SKIN CONTACT | : | In case of contact with skin, wash skin with soap and water. Remove contaminated clothing and wash. |
| INGESTION | : | If swallowed, rinse mouth and throat with tap water. If symptoms persist consult a physician. |

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 and eye irritation and gastric disturbance.

4.3 Indication of any immediate medical attention and special treatment needed

In case of symptoms

SECTION 5. FIREFIGHTING MEASURES

5.1 Extinguishing Media

Suitable Extinguishing Media : Carbon dioxide, chemical foam, or water (fog or spray)

Unsuitable extinguishing media : None

5.2 Special hazards arising from the substance or mixture

Hazardous combustion product : None known

5.3 Advice for firefighters

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

SECTION 6. ACCIDENTIAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

| | | |
|----------------------|---|---|
| Protective equipment | : | See section 8 for protective equipment. |
| Emergency procedures | : | Provide sufficient ventilation. Spilled product should be removed immediately to avoid formation of dust. |

6.1.2 For emergency responders

| | | |
|----------------------|---|---|
| Protective equipment | : | See section 8 for protective equipment. |
| Emergency procedures | : | Provide sufficient ventilation. Spilled product should be removed immediately to avoid formation of dust. |

6.2 Environmental precautions

None.

6.3 Methods and materials for containment and cleaning up

Wash down with water, dispose to landfill.

6.4 Reference to other sections

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

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 |

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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.

7.2 Conditions for safe storage, including any incompatibilities

No special requirements. Organic dusts are a weak explosion hazard. Not hazardous under normal storage and use conditions.

7.3 Specific end use(s)

Recommendations : None

Industrial sector specific solutions : None

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

| Name | CAS no. | EC. No. | % by Weight | EU BOEL | PEL (OSHA) | TLV (ACGIH) |
|--------------------|------------|-----------|-------------|-------------------------------------|-----------------------|---|
| Crystalline silica | 14808-60-7 | 238-878-4 | < 0.2 | 0,1 mg/m ³ / TGG 8u | 0.1 mg/m ³ | 0,1 mg/m ³ |
| Protease | 9014-01-1 | 232-752-2 | < 1 | - | - | 0,00006 mg/m ³ (as pure protease) |
| Amylase | 9000-90-2 | 232-565-6 | < 1 | 0,000010 mg/m ³ / TGG 8u | - | - |
| Aluminum Sulfate | 10043-01-3 | 233-135-0 | < 10 | - | - | TWA: 2mg/m ³ |

* 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 applied in wastewater treatment systems, open surface waters and ponds. Exposure to workers is limited. Workers are required to take the necessary precautions for the safe use of the product.

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8.2.2. Personal Protection Equipment



Respiratory Protection Dust mask



Skin Protection Wear long-sleeve shirt, trousers, coveralls and safety shoes



Eye Protection Safety goggles



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

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 | Mild odour |
| Odour Threshold | N/A |
| Melting point / freezing point (°C) | N/A |
| Initial boiling point and boiling range(°C) | N/A |
| Flammability (solid, gas) | Not determined |
| Lower and Upper Explosion limits | Not determined |
| Flash point | Not determined |
| Auto-ignition temperature | Not determined |
| Decomposition temperature | Not determined |
| pH (1% suspension) | 6 - 9 (1% suspension) |
| Kinematic Viscosity | Does not apply |
| Solubility in water | < 5% in water |
| Partition coefficient: n-octanol/water | N/A |
| Vapour pressure | Does not apply |
| Relative density (@25°C) | Not determined |
| Relative Vapour density | N/A |
| Particle characteristics | Granular powder |

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9.2 Other information None

SECTION 10. STABILITY AND REACTIVITY

- 10.1 Reactivity** : none known
- 10.2 Chemical stability** : Stable under normal conditions
- 10.3 Possibility of hazardous reactions** : none known
- 10.4 Conditions to avoid** : Freezing or temperature over 40°C (100°F)
- 10.5 Incompatible materials** : Strong Acids and Bases
- 10.6 Hazardous decomposition products** : none known

SECTION 11. TOXOLOGICAL INFORMATION

11.1 Information on toxicological effects

11.1.1. Substances N/A

11.1.2. Mixtures

| | |
|-----------------------------------|---|
| Acute Toxicity | Inhalation of dust resulting from inappropriate handling may cause respiratory allergy in susceptible individuals. |
| Skin Corrosion/Irritation | Information not available |
| Serious Eye Damage/Irritation | Information not available |
| Respiratory or Skin Sensitization | Information not available |
| Germ Cell Mutagenicity | Information Not Available |
| Carcinogenicity | Crystalline silica probably carcinogenic NTP: See below IARC Monographs: See below OSHA Regulated: Yes Product may contain < 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). |
| 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). |

Likely Routes of Exposure: Inhalation, ingestion, eye and skin contact

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SECTION 12. ECOLOGICAL INFORMATION

Application of product to potential drinking water sources shall not exceed residual aluminum concentrating of 2mg/m³

12.1 Toxicity

No eco-toxicity reported for mixture and individual ingredients

12.2 Persistence and degradability

Organic substances in the product are completely biodegradable. Inorganic substances are non-biodegradable.

12.3 Bioaccumulative potential

No data

12.4 Mobility in soil

No mobility expected

12.5 Results of PBT and vPvB assessment

Not required

12.6 Other adverse effects

None known

12.7 Additional information

None

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

13.1.1 Product / Packaging disposal

Waste codes / waste designations according to EURAL:

Product: : N/A

Packaging : 150102

13.1.2 Waste treatment – relevant information

Dispose of in accordance with current Federal, State, and Local 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

- 14.1 UN Number** Mixture not classified as Hazardous according to Regulation (EC) 1272/2008
- 14.2 Un Proper shipping name**
- Classification according to ADR/RID/IATA/IMDG
- Classification Code
- Label
- 14.3 Transport hazard class (es)**
- 14.4 Packing group**
- 14.5 Environmental hazards**
- 14.6 Special precautions**
- 14.7 DOT shipping name** Chemicals not otherwise indexed (NOI)
non-hazardous

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.

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"*

National regulations

None of the components present in this product are at a level that requires identification under: 1) CERCLA, 2) SARA Title III, 3) 40 CFR 372 (for SARA), or 4) TSCA.

Canada WHIMS: toxic class D2B (eye irritant), Controlled product hazard class D2A (respiratory sensitizer)

All ingredients used are listed on the USEPA TSCA Inventory list.

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

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

CDC: Center for Disease Control

n/a: not available

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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