According to Regulation (EC) No. 2020/87

Date: 01-03-2000 Revision Date: 30-04-2020

Version: 2.00

Product Name: MicroAktiv®-ALF



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

1.1 Product Identifier

Product Name : MicroAktiv®- ALF Fish Farming Formula

Product form : Granular powder

Product code : 9003

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: Maintaining the clarity in water bodies including lakes, fish farms,

facultative lagoons, polishing ponds, etc.. and in other slow-moving water channels. It's not recommended for controlling slime buildup on surfaces or for controlling plants and weeds in still or stagnant water

bodies.

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

| Hazard Classification | Category | H-code | Description |
|-------------------------------------|----------|--------|---------------------------|
| Serious eye damage / Eye irritation | 1 | H318 | Causes serious eye damage |

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2.2 Label elements

Hazard Pictogram

Signal Word : Danger

Hazard Statement(s) : H318: Causes serious eye damage

EUH208: Contains protease and amylase. May

produce an allergic reaction.

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

Special Risks :

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.



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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) |
|--------------------|-------------|------------|-----------|---|
| Crystalline silica | < 0.2 | 14808-60-7 | 238-878-4 | Carc. 2- H351 STOT. RE 2- H373 |
| Protease | < 1 | 9014-01-1 | 232-752-2 | Skin Irrit. 2- H315 Eye Irrit. 2 - H319 |
| Amylase | < 1 | 9000-90-2 | 232-565-6 | Resp. Sens. 1 - H334 |
| Aluminum sulfate | < 10 | 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"

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.

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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

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.

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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

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

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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) | TLV (ACGIH) |
|---------------------|------------|-----------|----------------|-------------------------------|-----------------------|--|
| Crystalline silica | 14808-60-7 | 238-878-4 | < 0.2 | 0,1 mg/m3 / TGG 8u | 0.1 mg/m ³ | 0,1 mg/m3 |
| 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/m3 / 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.

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 |
| 0 | 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 |

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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 | ~10% is soluble 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 |

9.2 Other information

None

10.4

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 knownConditions to avoid:none known

10.5 Incompatible materials : Strong Acids and Bases

10.6 Hazardous decomposition products : none known

Environmental
International BV

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SECTION 11. TOXOLOGICAL INFORMATION

11.1 Information on toxological effects

11.1.1. Substances N/A

11.1.2. Mixtures

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

| 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 | Product cause serious eye damage |
| Respiratory or Skin Sensitization | Information Not Available |
| Ingestion | 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). |
| | |

SECTION 12. ECOLOGICAL INFORMATION

12.7 Other adverse effects

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 | Endocrine disrupting properties | None known |

None known

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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 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.

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

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SECTION 15. REGULATORY INFORMATION

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

15.1.1. EU-regulations

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"

15.1.2. National regulations

German Water Hazard Class (WGK):

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.

SECTION 16. OTHER INORMATION

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

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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