According to Regulation (EC) No. 1907/2006

Date: 05-05-2015

Version: 1

Product Name: MicroAktiv®-ZECAMAG



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

1.1 Product Identifier

Product Name : MicroAktiv® - ZECAMAG Animal feed additive

Product form : Granular powder

Product code : 9012

Product description : zeolitic volcanic tuff + dolomite

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

Relevant identified uses: Animal feed additive

Uses advised against: -

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
Specific target organ toxicity - single	3	H335	May cause respiratory
exposure, respiratory tract irritation			irritation

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Hazard Pictogram :

Signal Word : Warning

Hazard Statement(s) : H335 - May cause respiratory irritation

P Phrases	Code	Explanatory notes	
Droventies	P102	Keep out of reach of children	
Prevention	P261	Avoid breathing dust/fume/gas/mist/vapours/spray	
	P271	Use only outdoors or in a well-ventilated area	
	P302 + P352	IF ON SKIN: Wash with soap and water.	
Response	P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a	
precautionary	F304 + F340	position comfortable for breathing	
statements	P312	Call a POISON CENTER or doctor/physician if you feel unwell.	
Storage precautionary statements	P403 + P233	Store in a well ventilated place. Keep container tightly closed.	
Disposal precautionary statements	P501	Dispose of contents/container to licensed waste processor	

2.3 Other Hazards

There is no risk to the environment under the recommended conditions of use.

Suitable Extinguishing Media

Dry Chemical, carbon dioxide, water spray or foam

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)
Zeolite tuff clinoptilolite	≤ 80	12173-10-3	687-562-6	Skin Irrit. 2 – H315 Eye Irrit. 2 – H319 Acute Tox. 4 – H332 STOT. SE 3- H335
Dolomite (CaCo3 * MgCo3)	≥ 20	16389-88-1	240-440-2	Eye Irrit. 2 - H319



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SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

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. Do not induce vomiting. If symptoms persist consult a physician.

SELF PROTECTION

OF THE FIRST AIDER : Prevent breathing dust

4.2 Most important symptoms and effects, both acute and delayed

None known

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. Packaging material can burn.

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SECTION 6. ACCIDENTIAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

The legal limit values for dust concentration must be observed in the workplace. If this is temporarily not possible, the personnel must use special work equipment (dust inhalation mask, safety goggles, gloves, etc.). After finishing work, hands and face should be washed with soap and water.

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

The product does not contaminate soil or water. It is not hazardous waste. It can be combined with permeable soil.

6.3 Methods and materials for containment and cleaning up

Mechanical removal by sweeping up.

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

Handling Employees receive adequate information about safe material handling and first aid procedures. The environment and working methods are arranged in such a way that direct contact with the substance is avoided or minimized. Avoid breathing dust. Avoid contact with skin and eyes. Provide adequate ventilation. Appropriate personal protective equipment is used.

Protective measures : Avoid creating dust. Adequately ventilate when

handling this product. Provide eyewash

capability.

Measures to prevent fire : No special requirements

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Measures to prevent

aerosol and dust generation : Keep product confined in closed bag/container.

When working with powder prevent dust formation gentle interaction with the product.

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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

Keep only in the original packaging in a dry, cool and well-ventilated place. Keep containers tightly closed and properly labeled. Avoid moisture and direct sunlight. Keep away from incompatible materials.

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)
Zeolite tuff clinoptilolite	12173-10-3	687-562-6	≤ 80	No limit values known.
Dolomite (CaCo3 * MgCo3)	16389-88-1	240-440-2	≥ 20	5 mg/m3 respirable fraction (TWA - 8h) 10 mg/m3 inhalable fraction (TWA - 8h) The limit value expired on 01-01-2007

8.2 Exposure controls

8.2.1. Appropriate engineering controls

The product is used in animal feeding operations. Exposure of workers is possible to a limited extent. Employees 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 if insufficient ventilation is present



Skin Protection

Wear gloves



Eye Protection

Safety goggles, avoid eye contact



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

Fysical/Chemical Properties	Value
Appreance	White gray to green granular powder
Odor	odorless
Odor threshold	None
рН	7 – 7,6
Melting point (°C)	1300 °C
Initial boiling point and boiling range (°C)	N.v.t.
Flash point	N/A
Evaporation rate	N/A
Flammability (solidt, gas)	N/A
Flammability upper limit	N/A
Flammability lower limit	N/A
Explosion limits	N/A
Vapor pressure	N/A
Vapor density	N/A
Relative density (@25°C)	2,4 g/cm ³ , 2400 Kg/m ³
Solubility in water	Not soluble in water
Partition Coefficient: n-octanol/water	N/A
Auto-ignition temperature	N/A
Decomposition temperature	N/A

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Viscosity	N/A
Explosion Properties	Not explosive
Oxidizing properties	N/A

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

10.3Possibility of hazardous reactions:none known10.4Conditions to avoid:none known

10.5 Incompatible materials : none known

10.6 Hazardous decomposition products : none known

SECTION 11. TOXOLOGICAL INFORMATION

11.1 Information on toxological effects

11.1.1. Substances N/A **11.1.2. Mixtures**

no
Zeolite
LD50 / oral / rat > 5000 mg / kg.
LD50 / dermal / rabbit > 2000 mg / kg.
LC50 / inhalation / rat > 15 mg / l.
No side effects (NOAEL) were observed: 250 - 300 mg/kg (rat, oral).
Dolomite
LD50 / oral / rat > 2000 mg / kg
Dermal - no data available
Inhalation - no data available
mild skin irritation
mild eye irritation
No information available
No information available
Animal tests showed no mutagenic effects
Animal tests showed no carcinogenic effect.
Animal tests showed no harmful effects

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Specific Target Organ Toxicity – Single Exposure	Information Not Available
Specific Organ Toxicity – Repeated Exposure	Information Not Available
Aspiration Hazard	Irritating to mucous membranes. May cause respiratory irritation
General Remarks	-

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

SECTION 12. ECOLOGICAL INFORMATION

Application of product to potential drinking water sources shall not exceed residual aluminum concentrating of $2mg/m^3$

12.1 Toxicity

Zeolite EC50/48h/shellfish > 100 mg/l.

LC50/96h/fish > 680 mg/l. EC50 / 96h / algae = 300 mg / l.

Calcium and Magnesium Carbonate - CaCO3 * MgCO3 (Dolomite)

LC50 (96h) for freshwater fish: 50.6 mg/l LC50 (96h) for marine fish: 457 mg/l

EC50 (48h) for freshwater invertebrates: 49.1 mg/l LC50 (96h) for marine invertebrates: 158 mg/l EC50 (72h) for freshwater algae: 184.57 mg/l NOEC (72h) for freshwater algae: 48 mg/l

12.2	Persistence and degradability	No information available
12.3	Bioaccumulative potential	It is not bioaccumulative. Accumulation in aquatic and terrestrial organisms is unlikely.
12.4	Mobility in soil	No mobility expected
12.5	Results of PBT and vPvB assessment	This preparation does not contain any substances considered to be persistent, bioaccumulative or toxic (PBT).
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

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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

In accordance with Regulation (EC) No 1272/2008 of the Parliament and of the Council of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, as well as amending Regulation (EC) No 1907/2006

15.1.2 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.

SECTION 16. OTHER INORMATION

16.1. Key or abbreviation used in the safety data sheet:

CLP: Classification according to Regulation (EC) No. 1272/2008 (GHS)

16.2. List of relevant H phrases mentioned in Section 3

H335 May cause respiratory irritation.

16.3. References technical literature

Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU

Regulation (EC) No. 1272/2008 (CLP)

The information contained in this safety data sheet, as of the date of issue, is believed to be true and correct. The information in this safety data sheet is based on the data available at the time of writing and has been prepared in accordance with the applicable legal provisions: REACH Regulation No. 1907/2006 amended by Regulation No. 830/2015/EC and Regulation 1272 /2008 (CLP). The user assumes all risks related to the use, handling and storage of this product. In case of improper handling, transport and storage, there are no warranty conditions for the product. The information in this sheet does not contain analytical specifications; for this information please contact QM Environmental International B.V.

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