

SAFETY DATA SHEET

According to Article 32 of Regulation (EC) No. 1907/2006

Date: 09-04-2024

Version: 2

Product Name: **MicroAktiv®-ZeoDry**

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

1.1 Product Identifier

Product Name : **MicroAktiv®- ZeoDry**
Product form : Micronised Clinoptilolite powder
Product code : 9020
Product description : Clinoptilolite rock powder

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

Relevant identified uses : CORROBORANT – Plant defence enhancer – Substance of natural origin that improves plant resistance to abiotic stresses.

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
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))

According to Art. 31 and 32 of the REACH Regulation, there is no requirement for a safety data sheet to be drawn up, but only for certain information to be sent along the supply chain to the end user.

1. Registration number of the substance:

Natural rock dusts do not have to be registered according to the REACH Regulation as they are substances occurring in nature as a mineral that is processed by employing physical separation, e.g. flotation or crystallisation, due to which none of the components of the final isolated substance has undergone a chemical reaction; therefore they fulfil the conditions of the exemption granted to naturally occurring substances, if not chemically modified, according to Article 2 (7) (b) of Regulation (EC) 1907/2006 (REACH) - Annex V.

2. Substances subject to authorisation: none

3. Restrictions on contained substances: none

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4. SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

INHALATION:	:	Remove individual to fresh air. When difficult breathing is exhibited, give oxygen and seek medical attention.
EYE CONTACT	:	Flush eyes with water for at least 15 minutes, seek medical attention. May cause redness and irritation
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. Drink 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 : All extinguishing media can be used

Unsuitable extinguishing media : None

5.2 Special hazards arising from the substance or mixture

Hazardous combustion product : If heated to decomposition, may emit fumes containing sulfur oxides

5.3 Advice for firefighters

Product itself is not flammable. Packaging material can burn. Wear suitable breathing apparatus, full protective waterproof overalls, gloves and boots.

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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.
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)
<i>Zeolite tuff clinoptilolite</i>	12173-10-3	687-562-6	> 90	No official EU specific limits. ACGIH recommends a value for inhalable particulate matter of TLV / TWA: 10 mg/m ³ . The risk of exposure to SiO ₂ (quartz alpha) with a TLV/TWA of 0.025 mg/m ³ has been calculated for an 8-hour working day and 40 hours per week, but normal use of the product does not reach this limit.

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

Use approved dust masks (EN 143, 149, filters P1, P2) due to the presence of free crystalline silica.



Skin Protection

Wear rubber gloves and protective overalls



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	Light gray granular powder
Odor	odorless
Odor threshold	None
pH	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)	0,98 g/cm ³ , 980 Kg/m ³
Solubility in water	Not soluble in water
Partition Coefficient: n-octanol/water	N/A

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Auto-ignition temperature	N/A
Decomposition temperature	N/A
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
10.3 Possibility of hazardous reactions	:	none known
10.4 Conditions to avoid	:	Contamination by incompatible materials, proximity to heat sources or fire, heating in confined areas, welding or hot work: at high temperatures
10.5 Incompatible materials	:	none known
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	N/A

SECTION 12. ECOLOGICAL INFORMATION

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

12.1 Toxicity	N/A
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).

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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 EURL:

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 Article 14.4 and Annex XI, Section 3 of EC Regulation 1907/2006 (REACH), as this is a non-hazardous substance, exposure scenarios are not required, nor is detailed information on use

15.1.2 National regulations

German Water Hazard Class (WGK): nwg

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 INFORMATION

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

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

16.2. 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.

ZeoDry 9020

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