

# Safety Data Sheet

(prepared in accordance with Reg. (EC) 1907/2006 as amended - Art. 32)

## ZSC Zeolite Soil Conditioner

Safety Data Sheet dated 5/12/2022, revision 1

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### SECTION 1: Identification of the substance/mixture and of the company/undertaking

- 1.1. Product identifier
  - Identification of the substance: chabasite zeolite
  - Trade name ZSC Zeolite Soil Conditioner
- 1.2. Relevant identified uses of the substance or mixture and uses advised against Recommended use:
  - A soil conditioner, strengthening the plants' natural defences.
- 1.3. Details of the supplier of the safety data sheet:
  - E.Marker A/S, Okslundvej 8, DK-6330 Padborg, Denmark
  - Tel: +45 74 67 08 08 Fax: +45 79 30 41 90
  - Email: info@emarker.dk
- 1.4. Emergency telephone number
  - +45 74 67 08 08

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### SECTION 2: Hazard identification

- 2.1. Classification of the substance or mixture
  - Criteria Regulation EC 1272/2008 (CLP):
    - The product is not considered hazardous according to EC Regulation 1272/2008 (CLP).
  - Physico-chemical effects harmful to human health and environment: No other hazards
- 2.2. Label elements pictograms:
  - None Hazard statements: None
  - Precautionary statements: None
  - Special provisions: None
  - Special provisions according Annex XVII of REACH and subsequent adaptations: None
- 2.3. Other dangers
  - This substance has no PBT, vPvB or endocrine disrupting properties
  - Other hazards: No other hazards

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### SECTION 3: composition/information on ingredients

- 3.1. Substances
  - Identification of the substance: chabasite zeolite.
  
  - The substance is not REACH-registered because it is a substance that occurs in nature as a mineral and is processed using physical separation, e.g. flotation or crystallisation, whereby none of the components of the final isolated substance has undergone a chemical reaction; it therefore fulfils 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.
- 3.2. Mixtures: N.A.

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### SECTION 4: First aid measures

- 4.1. Description of first aid measures
  - After contact with skin: Wash thoroughly with soap and water. In case of contact with the eyes:
    - In case contact with the eyes, wash immediately with plenty of water and consult a doctor.

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In case of ingestion:

Do not induce vomiting under any circumstances. SEEK MEDICAL ATTENTION IMMEDIATELY. In case of inhalation: Remove victim to fresh air and keep warm and at rest.

4.2. Main symptoms and effects, both acute and delayed None

4.3. Indication of any need for immediate medical attention and special treatment

Treatment: None

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### SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media: Water. Carbon dioxide (CO<sub>2</sub>).

Extinguishing media that must not be used for safety reasons: None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale the gases produced by the explosion and combustion. Combustion produces heavy smoke.

5.3. Recommendations for firefighters Use appropriate breathing equipment.

Collect contaminated water used to extinguish the fire separately. Do not discharge into the sewage system.

If feasible from safety point of view, move undamaged containers from the immediate danger area.

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### SECTION 6: Measures in the event of accidental release

6.1. Personal precautions, protective equipment and procedures in case of emergency For those who do not intervene directly:

Wear personal protective equipment. Move people to a safe place.

Refer to the protective measures set out in 7 and 8.

For direct interveners: Wear personal protective equipment.

6.2. Environmental precautions

Prevent penetration into the soil/subsoil. Prevent runoff into surface water or sewage system.

Retain contaminated wash water and dispose of it.

In the event of a gas leak or leakage into watercourses, soil or sewage system, inform the responsible authorities.

Material suitable for collection: absorbent material, organic material, sand

6.3. Methods and materials for containment and cleaning up: Wash with plenty of water.

6.4. Reference to other sections: See also section 8 and 13

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### SECTION 7: Handling and Storage

7.1. Precautions for safe handling

contact with skin and eyes, inhalation of vapours and mists.

Please also refer to section 8 for recommended protective equipment. General recommendations on occupational hygiene:

Do not eat or drink while working.

7.2. Conditions for safe storage, including any incompatibilities Keep away from food, drink and feed.

Incompatible materials: None in particular. Indication for location: Suitably ventilated rooms.

7.3. Particular end uses: No particular use

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### SECTION 8: Exposure controls/personal protection

8.1. Control parameters: No occupational exposure limits available Exposure limit values DNEL: N.A.

Exposure limit values PNEC: N.A.

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### 8.2. Exposure controls Eye protection

Not required normal use. Operate according to good working practices in any case.

Skin protection: No special precautions are required normal use. Hand protection:

In case of prolonged handling of the substance, wear appropriate gloves (e.g. nitrile rubber: thickness >0.35 mm; breakthrough time >480 min) [ref. EN 166].

Respiratory protection:

If there is a risk of exposure to high dust concentrations, wear an FFP1 dust mask [ref. EN 149].

Thermal hazards: None

Environmental exposure controls

Provide localised exhaust ventilation or other devices to keep particle levels in the air below the recommended exposure limits.

Suitable technical controls: None

## SECTION 9: Physical and chemical properties

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

Properties	Value	Method:	Notes
Physical state:	Solid (powder)	–	–
Colour:	yellow/grey	–	–
Smell:	odourless	–	–
Melting point/freezing point	1.200°C	–	–
Boiling point or initial boiling point and boiling range:	Not Relevant	–	–
Flammability:	non-flammable	–	–
Lower and upper explosive limit:	Not Relevant	–	–
Flash point:	Not Relevant	–	–
Self-ignition temperature:	Not Relevant	–	–
Decomposition temperature:	Not Relevant	–	–
pH:	7 (suspension 10%)	–	–
Kinematic viscosity:	Not Relevant	–	–
Water solubility:	insoluble	–	–
Solubility in oil:	insoluble	–	–
Partition coefficient n-octanol/water (logarithmic value):	Not Relevant	–	–
Vapour pressure:	Not Relevant	–	–
Density and/or relative density:	0.7 g/cm <sup>3</sup>	–	–
Relative vapour density:	Not Relevant	–	–

#### Particle characteristics:

Particle size:	N.A.	–	–
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### 9.2. Other information: No other relevant information

## SECTION 10: Stability and reactivity

10.1. Reactivity: Stable under normal conditions

10.2. Chemical stability: Stable under normal conditions

10.3. Possibility of dangerous reactions :None

10.4. Conditions to avoid: Stable under normal conditions.

10.5. Incompatible materials: None in particular.

10.6. Hazardous decomposition products: None.

## SECTION 11: Toxicological information

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

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Toxicological information concerning the substance:

ZEOLITE A CHABASITE

a) acute toxicity

Not classified

Based on the available data, the classification criteria are not met.

b) corrosion/dermal irritation

Not classified

Based on the available data, the classification criteria are not met.

c) serious eye damage/serious eye irritation

Not classified

Based on the available data, the classification criteria are not met.

d) respiratory or skin sensitisation

Not classified

Based on the available data, the classification criteria are not met.

e) germ cell mutagenicity

Not classified

Based on the available data, the classification criteria are not met.

f) carcinogenicity

Not classified

Based on the available data, the classification criteria are not met.

g) reproductive toxicity

Not classified

Based on the available data, the classification criteria are not met.

h) specific target organ toxicity (STOT) - single exposure

Not classified

Based on the available data, the classification criteria are not met.

i) specific target organ toxicity (STOT) - repeated exposure

Not classified

Based on the available data, the classification criteria are not met.

j) danger in case of aspiration

Not classified

Based on the available data, the classification criteria are not met.

11.2. Information on other dangers

Endocrine-disrupting properties:

This substance has no endocrine-disrupting properties

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## SECTION 12: ecological information

12.1. Toxicity

Use according to good working practices, avoiding dispersion of the product in the environment.

CHABASITE ZEOLITE

Not classified environmental hazards

Based on the available data, the classification criteria are not met.

12.2. Persistence and degradability: N.A.

12.3. Bioaccumulative potential: N.A.

12.4. Mobility in soil: N.A.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Endocrine-disrupting properties

No endocrine disruptors present in concentration  $\geq 0.1\%$

12.7. Other adverse effects: None

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## SECTION 13: Disposal considerations

13.1. Waste treatment methods

Recover if possible. Operate according to current local and national regulations.

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### SECTION 14: Transport Information

- 14.1. UN or ID number: Not dangerous goods within the meaning of transport regulations.
- 14.2. UN proper shipping name: N.A.
- 14.3. Transport hazard class(es): N.A.
- 14.4. Packaging group: N.A.
- 14.5. Environmental hazards
  - ADR-Environmental pollutant: No
  - IMDG-Marine pollutant: No
- 14.6. Special precautions for users: N.A.
- 14.7. Maritime transport in bulk according to IMO Acts: N.A.

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### SECTION 15: Regulatory Information

- 15.1. Safety, health and environmental regulations specific to substance or mixture
  - Legislative Decree 9/4/2008 no. 81
  - D.M. Lavoro 26/02/2004 (Occupational Exposure Limits)
  - Regulation (EC) No 1907/2006 (REACH) as amended
  - Regulation (EC) No 1272/2008 (CLP) as amended
- Restrictions on the product or the contained substances according to Annex XVII of Regulation (EC) 1907/2006 (REACH) and subsequent adaptations:
  - Product restrictions: No restrictions.
- Health Checks.

Workers exposed to this chemical agent hazardous to health must be subject to health surveillance carried out in accordance with the provisions of Article 41 of Legislative Decree 81 of 9 April 2008 unless the risk to the worker's health and safety has been assessed as insignificant, in accordance with Article 224(2).
- Where applicable, please refer to the following regulations:
  - Regulation (EU) 2019/1148 (Explosives Precursors)
  - Ministerial Circulars 46 and 61 (Aromatic Amines)
  - Directive 2012/18/EU (Seveso III)
  - Regulation 648/2004/EC (Detergents).
  - D.L. 3/4/2006 no. 152 (Environmental Regulations)
  - Dir. 2004/42/EC (VOC Directive)
- Provisions relating to EU Directive 2012/18 (Seveso III): N.A.
- 15.2. Chemical Safety Assessment
  - A chemical safety assessment has not been carried out for the substance

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### SECTION 16: other information

This document has been prepared by a technician who is competent in SDS and has received appropriate training.

Main bibliographical sources:

- ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities
- SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold
- CCNL - Annex 1
- Istituto Superiore di Sanità - National Inventory of Chemical Substances

The information contained herein is based on our knowledge at the date stated above. They refer only to the product indicated and do not constitute a guarantee of any particular quality.

The user is responsible for ensuring the suitability and completeness of this information in relation to the specific use to be made of it.

This sheet cancels and replaces any previous edition.

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. CAS: Chemical Abstracts Service (division of the American Chemical Society).

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CLP:	Classification, Labelling, Packaging.
DNEL:	Derived no-effect level.
EINECS:	European Inventory of Existing European Chemical Substances on the Market.
GefStoffVO:	Ordinance on hazardous substances in Germany.
GHS:	Globally harmonised system of classification and labelling of chemicals. IATA: Association for International Air Transport.
IATA-DGR:	Dangerous Goods Regulations of the International Air Transport Association (IATA).
ICAO:	International Civil Aviation Organisation.
ICAO-TI:	Technical Instructions of the 'International Civil Aviation Organisation' (ICAO).
IMDG:	International Maritime Dangerous Goods Code. INCI: International nomenclature of cosmetic ingredients. KSt: Explosion coefficient.
LC50:	Lethal concentration for 50 per cent of the test population. LD50: Lethal dose for 50 per cent of the test population.
PNEC:	Predicted no-effect concentration.
RID:	Regulation concerning the International Carriage of Dangerous Goods by Rail.
STA:	Estimation of acute toxicity
STAmix:	Acute Toxicity Estimate (Mixtures)
STEL:	Short-term exposure limit. STOT: Organ-specific toxicity.
TLV:	Threshold limit value.
TWA:	Time-weighted average
WGK:	Water hazard class (Germany).