

<b>ZEOCEM s.r.o. Bystré</b>	<b>Safety Data Sheet</b> under: - Regulation (EC) No 1907/2012 of the European Parliament and of the Council - Regulation (EC) No 1272/2012 of the European Parliament and of the Council - Commission Regulation (EU) 2020/878
Issue date: 06 August 2001	Preparation: <b>KlinoSorb</b>
Version: 4/EN	
Superseded version: 31/EN (28/12/2022)	
Revision date: 26.10.2025	Page 1 z 10

## 1. Identification of the substance/preparation and of the company/undertaking

1. Product identifier (Trade name of the preparation)	<b>KlinoSorb</b>
1.2 Relevant identified uses of the substance or mixture and uses advised against:	<p>KlinoSorb is universal natural adsorbent of water, oil, diesel oil, gasoline and petroleum emulsion designed for using in garages and beamhouses.</p> <p>KlinoSorb is chemical resistant crushed material, convenient for sorption of aggressive liquid (besides HF, H<sub>2</sub>O<sub>2</sub>) from solid surface. It adsorbes any spilt liquid in household (on the floor, furniture, carpet, etc). It adsorbes odour reliably.</p> <p>Based on the opinion No. E-2406/02 of the National Reference Centre for Desinfection and Sterilization of the UPKM in Bratislava, KlinoSorb is a preparation with indirect bacteriostatic, bactericidal and fungicidal effect, which is conditioned by sorption properties of Clinoptilolite (by reduction of water concentration in the environment, the metabolic activity including reproduction of microorganisms is limited).</p> <p><b>Relevant identified uses:</b>  <i>Professional use</i>  <i>Industrial use</i>  <i>Consumer use (household)</i></p>
1.3 Details of the supplier of the safety data sheet	<p>ZEOCEM s.r.o.  Prešovská 282/1,  094 34 Bystré, Slovak Republic  Tel.: 00421/57/4452414  E-mail: <a href="mailto:zeocem@zeocem.sk">zeocem@zeocem.sk</a>,  <a href="http://www.zeocem.sk">www.zeocem.sk</a></p>
1.4 Emergency telephone number	<p>National Toxicological Information Centre  Limbová 5, 833 05 Bratislava  Tel. +421 2 54774166  Mobile: +421 911 166 066  E-mail: <a href="mailto:ntic@ntic.sk">ntic@ntic.sk</a></p>

## 2. Hazard identification

2.1 Classification of the substance or mixture	<p>KlinoSorb is made of <b>natural zeolite</b> of clinoptilolite type (hydrated aluminosilicate of alkali metals and alkaline earth metals). It is a <b>substance occurring in nature</b>, i.e. a substance covered by Annex V to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) <b>which is subject to exemption from the registration obligation</b> under Article 2(7)(b).</p> <p>The substance is not listed in Table 3.1 of Annex VI to Regulation (EC) No 1272/2008 on the classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 and is not subject to prescribed "harmonised" classification under that Regulation.</p>
2.2 Label elements according to Regulation (EC) No 1272/2008	<p><b>GSH classification:</b>  <b>The substance is not subject to prescribed classification and labelling under Regulation (EC) No 1272/2008.</b></p> <p>Based on the Toxicological Assessment of Zeolit zn 22.2799/87 (1), the manufacturer has labelled the substance as follows:  <b>GSH pictograms:</b> void  <b>Signal word:</b> void</p>

<b>ZEOCEM s.r.o. Bystré</b>	<b>Safety Data Sheet</b> under: - Regulation (EC) No 1907/2012 of the European Parliament and of the Council - Regulation (EC) No 1272/2012 of the European Parliament and of the Council - Commission Regulation (EU) 2020/878
Issue date: 06 August 2001	Preparation: <b>KlinoSorb</b>
Version: 4/EN	
Superseded version: 31/EN (28/12/2022)	
Revision date: 26.10.2025	Page 2 z 10

	<b>Hazard statement:</b> void <b>Precautionary statement prevention:</b> P 280: Wear protective gloves/protective clothing/eye protection <b>Precautionary statement - response:</b> <b>P302+P352 IF ON SKIN:</b> Wash with plenty of soap and water <b>P305+P351+P338 IF IN EYES:</b> Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. <b>Precautionary statement - storage:</b> void <b>Precautionary statement - disposal:</b> void
2.3 Other hazards	Zeolite does not meet the criteria as PTB or vPvB according to Annex XIII to the REACH document (Regulation (EC) No 1907/2006)

### 3. Composition or information on ingredients

<b>3.1 Substances in the mixture</b>	<b>Trade name:</b> KlinoSorb <b>Composition:</b> 100% crushed natural zeolite /clinoptilolite type/ (Hydrated aluminosilicate of alkali metals and alkaline earth metals)  EC Number: 215-283-8 (zeolites) Molar weight: not specified  <b>Registration number (REACH):</b> KlinoSorb is made of natural zeolite of clinoptilolite type (hydrated aluminosilicate of alkali metals and alkaline earth metals). It is a <b>substance occurring in nature</b> , i.e. a substance covered by Annex V to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) <b>which is subject to exemption from the registration obligation</b> under Article 2(7)(b).  The substance is not listed in Table 3.1 of Annex VI to Regulation (EC) No 1272/2008 on the classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 and is not subject to prescribed "harmonised" classification under that Regulation.
<b>3.2 Mixtures</b>	Not applicable

### 4. First aid measures

If health problems occur or in case of doubt, call a doctor and provide them with the information stated in this Safety Data Sheet.

<b>Type of hazards</b>	<b>4.2 Most important symptoms and effects, both acute and delayed - acute hazard</b>	<b>4.1.1 First aid - Instructions</b>	
		<b>4.1.2 First aid - Advice</b>	
		<b>4.3 Indication of any immediate medical attention and special treatment needed</b>	
		<b>Prevention</b>	<b>4.1.2 First aid - Advice</b>

<b>ZEOCEM s.r.o. Bystré</b>	<b>Safety Data Sheet</b> under: - Regulation (EC) No 1907/2012 of the European Parliament and of the Council - Regulation (EC) No 1272/2012 of the European Parliament and of the Council - Commission Regulation (EU) 2020/878
Issue date: 06 August 2001	Preparation: <b>KlinoSorb</b>
Version: 4/EN	
Superseded version: 31/EN (28/12/2022)	
Revision date: 26.10.2025	Page 3 z 10

After inhalation	If breathing is irregular or has stopped, seek medical assistance immediately and begin first aid measures.	Use technical measures to ensure that the maximum exposure limit (MEL) for dust in enclosed (storage) areas does not exceed 5 mg/m <sup>3</sup> . Where it is temporarily impossible to provide such conditions, it is necessary to use an anti-dust respiratory protection device.	Move the person to fresh air and take measures to allow them to breathe comfortably. Consult a doctor in case of respiratory irritation.
After contact with skin	The product does not pose a risk after repeated application to skin and is not absorbed through the skin in harmful amounts (1)	Wear protective gloves and protective clothing.	Brush off loose particles from the skin. Rinse/shower the skin with water. Remove and wash contaminated clothing before re-use. If skin irritation or rash occurs: Get medical advice/attention.
After contact with eyes	Very mild and short-term irritation of the conjunctival mucosa (1)	Wear eye protection.	Do not rub the eyes so as not to damage the cornea by mechanical strain. Remove contact lenses, if present and easy to do. Continue rinsing. Hold the eyelids open and rinse with plenty of clean running water for 10 minutes. Avoid particles entering the unaffected eye. If eye irritation persists: Get medical advice/attention.
Ingestion	Not specified	Do not eat or drink at the workplace. Wash hands after work.	Avoid vomiting. Immediately rinse the mouth and drink plenty of water (0.5 l). Never give anything by mouth to an unconscious person. Get immediate medical advice or contact a poison center.

## 5. Firefighting measures

<b>Fire</b>	According to assessments by the Ministry of Interior of the Slovak Republic, the Fire Engineering and Expertise Institute and the Flammability Testing Laboratory, samples of natural zeolite did not catch fire and did not ignite at temperatures up to 650 °C (8).
5.1 Suitable extinguishing media	To be selected taking regard of materials stored in close proximity
5.2 Special hazards arising from the substance or mixture	Not specified
5.3 Advice for firefighters	Not specified
Additional information:	Not specified

## 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures	<p>Personal precautions (safety measures for personal protection):</p> <p><b>For non-emergency personnel</b></p> <p>Use suitable protective equipment (including the personal protective equipment mentioned in Section 8 of the Safety Data Sheet) to avoid any contamination of skin, eyes and personal clothing. Respect the instructions given in Sections 7 and 8.</p>
---	---

<b>ZEOCEM s.r.o. Bystré</b>	<b>Safety Data Sheet</b> under: - Regulation (EC) No 1907/2012 of the European Parliament and of the Council - Regulation (EC) No 1272/2012 of the European Parliament and of the Council - Commission Regulation (EU) 2020/878
Issue date: 06 August 2001	Preparation: <b>KlinoSorb</b>
Version: 4/EN	
Superseded version: 31/EN (28/12/2022)	
Revision date: 26.10.2025	Page 4 z 10

	<b>For emergency personnel</b> In case of exposure to vapours/dust/aerosols/gases, wear a breathing apparatus. Respect the instructions given in Sections 7 and 8.
6.2 Environmental precautions	<b>Environmental precautions:</b> Pure zeolite (free of other additives) can be incorporated into the soil as zeolite is a certified soil amendment (7). Zeolite also does not contaminate water and can be drained into the sewer system (zeolite is used as a filter medium for the treatment of drinking water and, also, cleaning waste water treatment) (6). Zeolite is not a hazardous waste!
6.3 Methods and material for containment and cleaning up	Mechanical cleaning: zeolite residues (free of other additives) can be incorporated into the soil (zeolite is a certified soil amendment) (7), or flushed into the sewer system (6).  Used product packaging should be thoroughly emptied and delivered to a separated waste collection site or an approved incinerator.
6.4 References to other sections	Hazardous decompositions products: see Section 5. Personal protective equipment: see Section 8. Incompatible materials: see Section 10. Disposal measures: see Section 13.

## 7. Handling and storage

7.1 Precautions for safe handling	- To ensure the protection of health and safety at work, workers must use personal protective equipment during the preparation and application of the product; - Precautions must be taken during the preparation and handling of the product to ensure that the MEL for dust in ambient air is not exceeded;
7.1.1	- Workers must be instructed about and follow the:
7.1.2	- Working environment protection principles (to avoid release into the environment); - Health protection principles (avoid eating, drinking and smoking in work areas; wash the hands after work with the product; remove contaminated clothing and protective equipment before entering eating areas);
7.2 Conditions for safe storage, including any incompatibilities	The (bulk) product must be kept in closed and secured containers that protect the product from contamination, deterioration /mixing with other types of material/ and the absorption of moisture.  The packaged product (sacks, big-bags) must be kept in the original intact and closed packaging in dry and closed storage areas, separately from food and feed. Retail packs must also be kept separately from medicines and disinfectants.
7.3 Specific end use	Not specified

## 8. Exposure controls/personal protection

8.1 Control parameters:			
Ingredients			
Basis	Value	Limit value	Exposure limit value
Not specified	Not specified	Not specified	Not specified
8.2 Exposure controls: Personal protective equipment:			
8.2.1 Adequate technical precautions: use only in well-ventilated areas, provided with an appropriate exhaust system to remove dust.			
Zeolite present in the working environment in the form of dust /an air-dispersion system/ is to be treated as a substance with a predominantly fibrogenic effect /the respirable limit is 5 µm/. The MEL of dust for working environments is 5 mg/m <sup>3</sup> .			

<b>ZEOCEM s.r.o. Bystré</b>	<b>Safety Data Sheet</b> under: - Regulation (EC) No 1907/2012 of the European Parliament and of the Council - Regulation (EC) No 1272/2012 of the European Parliament and of the Council - Commission Regulation (EU) 2020/878
Issue date: 06 August 2001	Preparation: <b>KlinoSorb</b>
Version: 4/EN	
Superseded version: 31/EN (28/12/2022)	
Revision date: 26.10.2025	Page 5 z 10

Workplaces must be dedusted, or ventilated adequately to ensure that the maximum dust concentration limit in air of 5 mg/m<sup>3</sup> is not exceeded. Where it is temporarily impossible to provide such conditions, it is necessary to use personal protective equipment to protect the respiratory tract, skin and eyes.

#### 8.2.2 Individual protection measures, such as personal protective equipment

Apply the common industrial practice: do not eat, drink or smoke while working. After the end of work and before breaks, wash the hands and face thoroughly with soap and water. Assess the exposure risk taking regard of the given situation.

a) Respiratory protection: In case of the formation of dust use a B/P2 filter half-mask.

b) Eye protection: Wear suitable eye protection or face protection.

c) Hand protection: Protective gloves. Choose nitrile gloves with appropriate durability and resistance designed for the given type of work. Follow the manufacturer's recommendations. In any case, protective gloves should be checked for suitability for use at the respective workplace (e.g. for mechanical resistance). Follow the manufacturer's instructions and information regarding the use, storage, care and replacement of gloves. Wash the gloves when contaminated. Remove the gloves whenever they are contaminated inside or not intact, or when outside contamination is impossible to clean. Wash the hands frequently and always before eating, drinking, smoking or using the toilet.

d) Skin protection: Protective work clothing and footwear.

e) Thermal hazards: None assumed.

8.2.3 Environmental exposure controls: Avoid **uncontrolled** release into the environment.

## 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties	
a) Physical state	Solid
b) Colour	Light grey-green
c) Odour	No smell or odour
d) Melting/freezing point	1340 °C
e) Boiling point or initial boiling point and boiling point range	No information available
f) Flammability	No information available
g) Lower and upper explosion limit	Non-explosive
h) Flash point	N/A up to 600 °C
i) Ignition temperature	Settled dust: negative up to 600 °C; stirred-up dust: negative up to 800 °C
j) Decomposition temperature:	No information available
k) pH value (at 20 °C, 1% solution)	6.5-8.5
l) Kinematic viscosity	No information available
m) Solubility	No information available
n) Distribution constant (log value)	No information available
o) Vapour pressure	No information available
p) Density and/or relative density Specific weight (kg/m <sup>3</sup> )	2200-2440
q) Relative vapour density	No information available
r) Properties of particles	The granularity of the products is defined in the corporate standard PNR 02/16 (5) or in the technical sheet of the product KlinoSorb

9.2.1. Information with regard to physical hazard classes	
a) Explosives	Not applicable
sensitivity to shock	Not applicable
effect of heating under confinement	Not applicable
effect of ignition under confinement	Not applicable
sensitivity to impact	Not applicable
sensitivity to friction	Not applicable

<b>ZEOCEM s.r.o. Bystré</b>	<b>Safety Data Sheet</b> under: - Regulation (EC) No 1907/2012 of the European Parliament and of the Council - Regulation (EC) No 1272/2012 of the European Parliament and of the Council - Commission Regulation (EU) 2020/878	
Issue date: 06 August 2001	Preparation: <b>KlinoSorb</b>	
Version: 4/EN		
Superseded version: 31/EN (28/12/2022)		
Revision date: 26.10.2025	Page 6 z 10	
<i>thermal stability</i>	Not applicable	
<i>package (type, size, net weight of the substance or mixture)</i>	Not applicable	
<b>b) Flammable gases</b>	Not applicable	
<i>TCi</i>	Not applicable	
<i>fundamental burning velocity</i>	Not applicable	
<i>flammable gas mixture</i>	Not applicable	
<i>explosion limits</i>	Not applicable	
<i>fundamental burning velocity</i>	Not applicable	
<b>c) Aerosols</b>	Not applicable	
<i>total percentage (by mass) of flammable components</i>	Not applicable	
<b>d) Oxidising gases</b>	Not applicable	
<i>Ci (coefficient of oxygen equivalence)</i>	Not applicable	
<b>e) Gases under pressure</b>	Not applicable	
<i>Critical temperature</i>	Not applicable	
<i>gas mixture</i>	Not applicable	
<i>pseudo-critical temperature</i>	Not applicable	
<b>f) Flammable liquids</b>	Not applicable	
<i>boiling point</i>	Not applicable	
<i>flash point</i>	Not applicable	
<b>g) Flammable solids</b>	Not applicable	
<i>burning rate, or burning time as regards metal powders</i>	Not applicable	
<i>indication of whether the wetted zone has been passed</i>	Not applicable	
<b>h) Self-reactive substances and mixtures</b>	Not applicable	
<i>decomposition temperature</i>	Not applicable	
<i>detonation properties</i>	Not applicable	
<i>deflagration properties</i>	Not applicable	
<i>effect of heating under confinement</i>	Not applicable	
<i>explosive power, if applicable</i>	Not applicable	
<b>i) Self-igniting (pyrophoric) liquids</b>	Not applicable	
<i>occurrence of spontaneous ignition</i>	Not applicable	
<i>or of charring of the filter paper</i>	Not applicable	
<b>j) Self-igniting (pyrophoric) solids</b>	Not applicable	
<i>occurrence of spontaneous ignition when poured</i>	Not applicable	
<i>or within five minutes thereafter</i>	Not applicable	
<i>indication of whether pyrophoric properties could change over time</i>	Not applicable	
<b>k) Self-heating substances and mixtures</b>	Not applicable	
<i>indication of whether spontaneous ignition occurs and the maximum temperature rise obtained</i>	Not applicable	
<i>results of screening tests referred to in section 2.11.4.2 of Annex I to Regulation (EC) No 1272/2008, if relevant and available</i>	Not applicable	
<b>l) Substances and mixtures which emit flammable gases in contact with water</b>	Not applicable	
<i>identity of the emitted gas, if known</i>	Not applicable	
<i>indication of whether the emitted gas ignites spontaneously</i>	Not applicable	
<i>gas evolution rate</i>	Not applicable	
<b>m) Oxidising liquids</b>	Not applicable	
<i>spontaneous ignition occurs when mixed with cellulose</i>	Not applicable	
<b>n) Oxidising solids</b>	Not applicable	
<i>spontaneous ignition occurs when mixed with cellulose</i>	Not applicable	
<b>o) Organic peroxides</b>	Not applicable	
<i>decomposition temperature</i>	Not applicable	
<i>detonation properties</i>	Not applicable	
<i>deflagration properties</i>	Not applicable	
<i>effect of heating under confinement</i>	Not applicable	
<i>explosive power</i>	Not applicable	
<b>p) Substances corrosive to metals</b>	Not applicable	
<i>metals that are corroded by the substance or mixture</i>	Not applicable	
<i>corrosion rate and indication of whether it refers to steel or aluminium</i>	Not applicable	
<i>reference to other Sections of the Safety Data Sheet with regard to compatible or incompatible materials</i>	Not applicable	
<b>q) Desensitised explosives</b>	Not applicable	

<b>ZEOCEM s.r.o. Bystré</b>	<b>Safety Data Sheet</b> under: - Regulation (EC) No 1907/2012 of the European Parliament and of the Council - Regulation (EC) No 1272/2012 of the European Parliament and of the Council - Commission Regulation (EU) 2020/878
Issue date: 06 August 2001	Preparation: <b>KlinoSorb</b>
Version: 4/EN	
Superseded version: 31/EN (28/12/2022)	
Revision date: 26.10.2025	Page 7 z 10
<i>desensitising agent used</i>	Not applicable
<i>exothermic decomposition energy</i>	Not applicable
<i>corrected burning rate (Ac)</i>	Not applicable
<i>explosive properties of the desensitised explosive in that state</i>	Not applicable

<b>9.2.2. Other safety characteristics</b>	
a) Mechanical sensitivity	Not applicable
b) Self-accelerating polymerisation temperature	Not applicable
c) Formation of explosible dust/air mixtures	Not applicable
d) Acid/alkaline reserve	Not applicable
e) Evaporation rate	Not applicable
f) Miscibility	Not applicable
g) Conductivity	Not applicable
h) Corrosiveness	Not applicable
i) Gas group	Not applicable
j) Redox potential	Not applicable
k) Radical formation potential	Not applicable
l) Photocatalytic properties	Not applicable

## 10. Stability and reactivity

<b>10.1 Reactivity</b>	No information available
<b>10.2 Chemical stability</b>	No information available
<b>10.3 Possibility of hazardous reactions</b>	No information available
<b>10.4 Conditions to avoid</b>	No information available
<b>10.5 Incompatible materials</b>	No information available
<b>10.6 Hazardous decomposition products</b>	No information available

## 11. Toxicological information

Acute toxicity for substances in the mixture:	
LD <sub>50</sub>	Acute oral LD <sub>0, rat</sub> > 20,000 mg.kg <sup>-1</sup> The acute oral LD <sub>50</sub> value could not be determined. No animal died after the application of a dose of 20 000 mg/kg. Higher doses cannot be applied.  Acute dermal LD <sub>0, rat</sub> > 5 000 mg/kg <sup>-1</sup> The acute dermal LD <sub>50</sub> value could not be determined. No animal died after the application of a dose of 5 000 mg/kg to the trimmed back skin of the experimental animals. Higher doses cannot be applied. (1)
Eye irritation	Very mild and short-term irritation of the conjunctival mucosa. /Except mild hyperaemia after 2 hours following the application of the product, which disappeared within 24 hours, no inflammatory changes of the conjunctival mucosa were observed/. (1)
Skin irritation	Even several applications of the product do not cause inflammatory changes on intact or broken skin or other signs of toxicity. (1)
Ingestion	No information available
Effects on living organisms	Zeolite can be classified as a little toxic to harmless substance. The product does not pose a risk after repeated application to the skin and is not absorbed through the skin in harmful amounts. Very mild and short-term irritation of the conjunctival mucosa. (1)
Skin corrosion/irritation	Even several applications of the product do not cause inflammatory changes on intact or broken skin or other signs of toxicity.
Serious eye damage/eye irritation	Very mild and short-term irritation of the conjunctival mucosa. /Except mild hyperaemia after 2 hours following the application of the product, which disappeared within 24 hours, no inflammatory changes of the conjunctival mucosa were observed/. (1)
Respiratory or skin sensitisation	No information available
Germ cell mutagenicity	No information available
Carcinogenic	No information available
Reproductive toxicity	No information available

<b>ZEOCEM s.r.o. Bystré</b>	<b>Safety Data Sheet</b> under: - Regulation (EC) No 1907/2012 of the European Parliament and of the Council - Regulation (EC) No 1272/2012 of the European Parliament and of the Council - Commission Regulation (EU) 2020/878
Issue date: 06 August 2001	Preparation: <b>KlinoSorb</b>
Version: 4/EN	
Superseded version: 31/EN (28/12/2022)	
Revision date: 26.10.2025	Page 8 z 10
Specific target organ toxicity (STOT) - single exposure	No information available
Specific target organ toxicity (STOT) - repeated exposure	No information available
Aspiration hazard	No information available
Other information	No information available

## 12. Ecological information

### 12.1 Ecotoxicity:

The results obtained by testing the clinoptilolite type zeolite failed to enable establishing LC 50 for fish and daphnia since the animals tested survived the exposure to a maximum concentrations exceeding the limits for the classification of a product as a substance “almost non-toxic to fish and other animals”.

Based on a 96-hour static acute toxicity tests on fish (*Cyprinus carpio* L., *Poecilia reticulata* Peters) and 24-hour acute immobilisation tests on daphnia (*Daphnia magna* Straus), the natural zeolite was classified as almost non-toxic to fish and daphnia (Final Report No. 53/NRL/T-102). (2)

Based on the Expert Opinion No 265/2004 NRL/P-1219 of the NRL for Pesticides of the University of Veterinary Medicine (UVM) Košice, natural zeolite is “relatively harmless to domestic, farm and wild animals” (Z4), “almost non-toxic to fish and other aquatic animals” (Vo4) and “relatively harmless to birds if the prescribed dose or concentration is not exceeded” (Vt5). (3)

Zeolite (clinoptilolite of sedimentary origin) is a registered feed additive (1g568) (4)

<b>12.2 Persistence and degradability</b>	No information available
<b>12.3 Bioaccumulation potential</b>	The ways of biological degradation of inorganic substances are not established.
<b>12.4 Mobility in soil</b>	No information available
<b>12.5 Results of PBT and vPvB assessment</b>	No information available
<b>12.6 Endocrine disrupting properties</b>	No information available
<b>12.5 Other adverse effects</b>	No information available

## 13. Disposal considerations

### 13.1 Waste treatment methods:

Waste disposal method: Mechanical. Residues of zeolite (free of other additives) can be incorporated into the soil as zeolite is a certified soil amendment (7). Zeolite also does not contaminate water and can be drained into the sewer system (6). Zeolite is not a hazardous waste!

## 14. Transport information

<b>Maritime transport (IMDG):</b> 14.1. UN number or identification number 14.2. UN proper shipping name 14.3. Transport hazard class(es) 14.4. Packing group 14.5. Environmental hazards 14.6. Special precautions for user 14.7. Transport in bulk according to IMO instruments	No information available
<b>Transport by road (ADR):</b> 14.1. UN number or identification number 14.2. UN proper shipping name 14.3. Transport hazard class(es) 14.4. Packing group 14.5. Environmental hazards 14.6. Special precautions for user 14.7. Transport in bulk according to IMO instruments	No information available

<b>ZEOCEM s.r.o. Bystré</b>	<b>Safety Data Sheet</b> under: - Regulation (EC) No 1907/2012 of the European Parliament and of the Council - Regulation (EC) No 1272/2012 of the European Parliament and of the Council - Commission Regulation (EU) 2020/878
Issue date: 06 August 2001	Preparation: <b>KlinoSorb</b>
Version: 4/EN	
Superseded version: 31/EN (28/12/2022)	
Revision date: 26.10.2025	Page 9 z 10
<b>Transport by rail (RID):</b> 14.1. UN number or identification number 14.2. UN proper shipping name 14.3. Transport hazard class(es) 14.4. Packing group 14.5. Environmental hazards 14.6. Special precautions for user 14.7. Transport in bulk according to IMO instruments	No information available
<b>Air transport (ICAO/IATA):</b> 14.1. UN number or identification number 14.2. UN proper shipping name 14.3. Transport hazard class(es) 14.4. Packing group 14.5. Environmental hazards 14.6. Special precautions for user 14.7. Transport in bulk according to IMO instruments	No information available

## 15. Regulatory information

### 15. Regulatory information

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

- Act No 67/2010 on the conditions of marketing chemical substances and chemical mixtures and on amendments to certain laws (Chemical Act)
- Regulation of the Government of the SR No 355/2006 on the protection of employees from risks related to exposure to chemical factors at work, as amended
- Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), as amended
- ***COMMISSION REGULATION (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) of the European Parliament and of the Council No 1907/2006 on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)***
- Regulation (EC) of the European Parliament and of the Council No 1272/2008 on the classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006
- Act No 223/2001 on wastes, as amended, and the decrees by which the Act is implemented

#### 15.2 Chemical safety assessment: not specified

## 16. Other information:

This Safety Data Sheet includes information necessary for ensuring safety and health protection at work and environmental protection. The information provided herein corresponds to the current status of knowledge and experience and is in conformity with the legal regulations in force. However, the specific conditions of use of the product by the consumer are beyond our supervision and control. The customer is responsible for compliance with the safety regulations.

### a. Revision of the SDS:

- Reason for the revision : change in legislation, general update.
- Indication of the amended sections: changes are marked in italics, bold.

### b. Key/legend explaining the acronyms and abbreviations used in the SDS:

- ADR: Accord européen sur le transport des dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
- RID- Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulation concerning the International Transport of Dangerous Goods by Rail)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- IATA- DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
- ICAO: International Civil Aviation Organization
- ICAO-TI: Technical instruction by the "International Civil Aviation Organization"
- GHS: Globally Harmonized System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- CAS: Chemical Abstracts Service
- LD<sub>50</sub>: "Lethal Dose". Mean lethal dose

<b>ZEOCEM s.r.o. Bystré</b>	<b>Safety Data Sheet</b> under: - Regulation (EC) No 1907/2012 of the European Parliament and of the Council - Regulation (EC) No 1272/2012 of the European Parliament and of the Council - Commission Regulation (EU) 2020/878
Issue date: 06 August 2001	Preparation: <b>KlinoSorb</b>
Version: 4/EN	
Superseded version: 31/EN (28/12/2022)	
Revision date: 26.10.2025	Page 10 z 10

LC<sub>50</sub>: "Lethal Concentration". Mean lethal concentration.

COD: Chemical Oxygen Demand

BOD: Biochemical Oxygen Demand

SDS: Safety Data Sheet

c. Main literature references and data sources:

- (1) Toxicological Assessment of Zeolite zn22.2799/87-S by the Research Institute of Preventive Medicine in Bratislava
- (2) Final Report No 53/NRL/T-102: Determination of the acute toxicity of zeolite (clinoptilolite type) on selected aquatic animals by the National Reference Laboratory for Pesticides of the University of Veterinary Medicine (UVM) in Košice
- (3) Expert Opinion No 265/2004 NRL/P-1219 by the NRL for Pesticides of UVM Košice
- (4) COMMISSION IMPLEMENTING REGULATION (EU) No 651/2013 concerning the authorisation of clinoptilolite of sedimentary origin as a feed additive for all animal species and amending Regulation (EC) No 1810/2005
- (5) PNR 14/08 KlinoSorb, Company Standard
- (6) Results of laboratory tests and safety assessment of materials intended for contact with drinking water, Report No 5545-5550/2016 of the National Reference Laboratory for Food Contact Materials in Poprad

d. Method of evaluation of mixtures according to Article 9 of Regulation (EC) No 1272/2008: not specified

e. List of relevant hazard and/or precautionary statements:

P 280: Wear protective gloves/protective clothing/eye protection

P302+P352 IF ON SKIN: Wash with plenty of soap and 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.

f. Recommendations for training: Provide sufficient information, directions and instruction to the operator.

This Safety Data Sheet has been revised and redrafted according to:

- Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), as amended
- Regulation (EC) of the European Parliament and of the Council No 1272/2008 on the classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
- **COMMISSION REGULATION (EU) 2020/878 of 18 June 2020 amending Annex II to Regulation (EC) of the European Parliament and of the Council No 1907/2006 on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)**