

SAFETY DATA SHEET

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Zeochem Adsorbents, powder or granulate (Zeolite, cuboidal, crystalline, synthetic, non-fibrous)

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

1.1. Product identifier

Product name Zeochem Adsorbents, powder or granulate
(Zeolite, cuboidal, crystalline, synthetic, non-fibrous)

CAS-No. 1318-02-1

Synonyms Z3-xx, Z4-xx, Z5-xx, Z10-xx, 4A-xx, ESlxx, HYPxx, Purmol xx, RD-xx, ZEOX xx, XX-GDG, ZA-xx, ZX-xx, ZEOflair 1000

The "xx" in the product names refer to additional alphanumeric codes representing different material grades

Product code None.

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the Substance/Mixture Desiccant
Adsorbent
Molecular sieves

1.3. Details of the supplier of the safety data sheet

Company/Undertaking Identification Zeochem L.L.C.
1600 West Hill Street
Louisville, KY 40210
USA

Phone: +1 502 634 7600
Fax: +1 502 634 8133
E-Mail: info@zeochem.com

1.4. Emergency telephone number +1 800 424 9300 (CHEMTREC US)

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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

according to the Globally Harmonized System Specific target organ toxicity (single exposure, inhalation), Cat. 3, H335

Additional information For the full text of the phrases mentioned in this Section, see Section 16.

2.2. Label elements



Signal Word Warning

Hazard Statements H335: May cause respiratory irritation.

Precautionary statements P261: Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P271: Use only outdoors or in a well-ventilated area.
P304 + P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312: Call a POISON CENTER/doctor if you feel unwell.
P403 + P233: Store in a well-ventilated place. Keep container tightly closed.
P405: Store locked up.
P501: Dispose of contents/ container to an approved waste disposal plant.

Supplemental information All potential hazards are caused by the products's property to adsorb water. Dried product can dehydrate humid body parts (eyes, mucus membranes, lungs) or irritate them by the heat generated by the adsorption, the latter also applies to wetted or sweaty skin. The product saturated with water has no dangerous properties other than mechanical irritation by powder or small particles.

Product identifier Zeolite, CAS-No. 1318-02-1
Clay binder

2.3. Other hazards No dangerous ingredients according to Regulation (EC) No. 1272/2008. The activated product generates much heat in contact with water.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Components		Classification (EU)	Product identifier
Zeolite	75% - 100%		CAS-No.: 1318-02-1
Clay binder	0% - 25%		

For the full text of the phrases mentioned in this Section, see Section 16.

Hazardous impurities None known.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation No special measures required.

Skin contact Wash with water and soap as a precaution.

Eye contact Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist.

Ingestion Clean mouth with water and drink afterwards plenty of water.

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 None known.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media No special measures required.

Extinguishing media which must not be used for safety reasons None.

5.2. Special hazards arising from the substance or mixture No data is available on the product itself.

5.3. Advice for firefighters

Special protective equipment for firefighters Standard procedure for chemical fires.

Specific methods No special measures required.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel No special measures required.

Advice for emergency responders Handle in accordance with good industrial hygiene and safety practice.

6.2. Environmental precautions No special environmental precautions required.

6.3. Methods and material for containment and cleaning up Use mechanical handling equipment. After cleaning, flush away traces with water.

SECTION 7: Handling and storage

7.1. Precautions for safe handling Applies to powders only: Take precautionary measures against electrostatic charging.

7.2. Conditions for safe storage, including any incompatibilities Store at room temperature in the original container.

7.3. Specific end use(s) No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limit(s) Total dust
Permissible exposure limit: 10 mg/m³.
Alveolar dust fraction:
Permissible exposure limit: 3 mg/m³.

8.2. Exposure controls

Appropriate engineering controls General industrial hygiene practice.

Personal protection equipment

Respiratory protection No special protective equipment required.

<i>Hand protection</i>	DRY moleskin gloves.
<i>Eye protection</i>	Avoid contact with eyes.
<i>Skin and body protection</i>	No special measures required.
<i>Thermal hazards</i>	No special measures required.
Environmental exposure controls	No special measures required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Powder or granulate
Colour	Powder: white to cream-colored / Granulated: cream-colored, beige or beige-gray
Odour	Odorless
Odour Threshold	Not determined.
pH:	9-11.5 (5% in H ₂ O)
Melting point/range:	> 1600°C
Boiling point/range:	n.a.
Flash point:	does not flash
Evaporation Rate:	n.a.
Flammability:	n.a.
Explosion limits:	n.a.
Vapour pressure:	n.a.
Vapor density:	n.a.
Relative density:	550-850 g/L
Water solubility:	practically insoluble
Partition coefficient (n-octanol/water):	n.a.
Autoignition temperature:	n.a.
Decomposition temperature:	n.a.
Viscosity:	n.a.
Explosive properties:	not hazardous
Oxidising properties:	None

9.2. Other information

General Product Characteristics	No information available.
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SECTION 10: Stability and reactivity

10.1. Reactivity	No information available.
10.2. Chemical stability	No decomposition if used as directed.

10.3. Possibility of hazardous reactions	No information available.
10.4. Conditions to avoid	Not required.
10.5. Incompatible materials	The activated product generates much heat in contact with water.
10.6. Hazardous decomposition products	None under normal use.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	None. Zeolite (CAS 1318-02-1) LD50/oral/rat > 5000 mg/kg. LD50/dermal/rabbit > 2000 mg/kg. LC50/inhalation/rat > 15 mg/l. No observed adverse effect level (NOAEL): 250 - 300 mg/kg (rat, oral).
Skin corrosion/irritation	Slight skin irritation.
Serious eye damage/eye irritation	Slight eye irritation.
Respiratory / Skin Sensitisation	None.
Carcinogenicity	Animal testing did not show any carcinogenic effects.
Germ cell mutagenicity	Animal testing did not show any mutagenic effects.
Reproductive toxicity	Animal testing did not show any hazardous effects.
Specific target organ toxicity (single exposure)	No data available.
Specific target organ toxicity (repeated exposure)	No data available.
Aspiration hazard	Irritating to mucous membranes. May cause respiratory tract irritation.
Human experience	No data available.

SECTION 12: Ecological information

12.1. Toxicity	Zeolite (CAS 1318-02-1) EC50/48h/daphnia > 100 mg/l . LC50/96h/fish > 680 mg/l. EC50/96h/algae = 300 mg/l.
12.2. Persistence and degradability	No data available.
12.3. Bioaccumulative potential	Does not bioaccumulate. Accumulation in aquatic organisms is unlikely. Accumulation in terrestrial organisms is unlikely.
12.4. Mobility in soil	No data available.
12.5. Results of PBT and vPvB assessment	No information available.
12.6. Other adverse effects	No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods	
Waste from residues / unused products	Dispose of in accordance with local regulations.
Contaminated packaging	Offer rinsed packaging material to local recycling facilities.

SECTION 14: Transport information

ADR/RID	Not regulated.
IMDG	Not regulated.
IATA	Not regulated.
Further Information	Not classified as dangerous in the meaning of transport regulations.

SECTION 15: Regulatory information

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

Regulatory Information None.

15.2. Chemical safety assessment Not required.

SECTION 16: Other information

Key or legend to abbreviations and acronyms CLP: Classification according to Regulation (EC) No. 1272/2008 (GHS)
PEL: Permissible Exposure Limit

Full text of phrases referred to under sections 2 and 3 H335: May cause respiratory irritation.

Further information Information on manufacturers and REACH registration can be found in Appendix 1, V1
Conversion °C=>°F: °F = (°C * 1.8) + 32

Disclaimer The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release. It is not to be considered a warranty or quality specification.