

MATERIAL SAFETY DATA SHEET

Trade name: MOLPACK

rev: 02/2011

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

Identification of the substance or preparation

COMPANY: Desi Kimya & Maden Sanayi, Istanbul, Turkey

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2. Composition/information of ingredients

Chemical characterization : Desiccant Adsorbent

Product Identification : Syhnhthetic Zeolite

Chemical Formula **Na₁₂[(AlO₂)₁₂(SiO₂)₁₂].XH₂O**

| <u>INGREDIENT</u> &CAS NO | <u>%WEIGHT</u> | <u>EC SYMBOL</u> | <u>EC R-PHRASES</u> | <u>EC EXPOSURE LIMIT</u> mg/m ³ |
|------------------------------|----------------|------------------|---------------------|---|
| Zeolites | > 70 | N.E. | N.E. | 10(I) |
| 1318-02-01 | | | | 3(R) |
| Mineral Binder | < 30 | N.E. | N.E. | N.E. |
| 99999-99-4 | | | | |
| Quartz | < 2 | N.E. | N.E.. | 0,1(R) |
| 14808-60-7 | | | | |

3. Hazards identification

No hazard classification.

When first wetted, the product can heat up to the boiling point of water. Flooding will reduce the temperature.

Repeated and proonged inhalation of crystalline silica in the from of quartz from occupational sources may cause cancer.

4. first-aid measures

After inhalation Fresh air
After skin contact Wash off with soap and plenty of water
After eye contact Flush immediately with plenty of water at least for 15 mins.
After ingestion Immadiately give large volume of water to drink.
In all cases if the symptoms persist call a physician.

5. Fire-fighting measures

Suitable extinguishing media This material will not burn.
use media appropriate for surrounding fire.

Unsuitable extinguishing media
Fire & Explosion Hazards

N.A.

The product itself does not burn. The used product can retain material of a hazardous nature. Identify that material and inform firefighters.

Special Protective Equipment

In the case of respirable dust and/or fumes, use self-contained breathing apparatus and dust-impermeable protective suit.

6. Accidental release measures

Personal precautions

See 8.2

Environmental Precautions

No special environmental precautions required.

Clean – UP

Sweep, shovel or vacuum spilled product into appropriate containers (do not use a vacuum if material has contacted a hydrocarbon material). Pick up and arrange disposal without creating dust. Never use a spilled product. Spilled product should be disposed of in accordance with all applicable government regulations.

7. Handling and storage

Precautions for safe handling

Handle and open container with care. Avoid formation of dust particles. Avoid contact with skin and eyes. Provide and maintain electrical ground connection during loading and transfer operations to avoid static discharge in an explosive atmosphere and to prevent handling the product from receiving static shocks.

Storage

Storage in original container. Keep in a dry place.

8. Exposure controls/personal protection

Engineering Measure

Ensure adequate ventilation especially in confined areas.

Personal Protection Equipment

Handle in accordance with good industrial hygiene and safety Practice

Eye Protection

Safety glasses or goggles

Hand Protection

Protective Gloves

Skin & Body Protection

Work uniform and gloves to prevent prolonged contact

Respiratory Protection

In case of sufficient ventilation wear suitable respiratory equipment. Breathing apparatus with filter. NIOSH Class: N-100 or if oil/liquid aerosols are present P-100 (42 CFR 84)

Exposure Limit(s)

International Exposure Limits.

| <u>INGREDIENT &CAS NO</u> | <u>%WEIGHT</u> | <u>UK OES/MEL</u> | <u>GERMANY MAK</u> | <u>NL MAC</u> | <u>FR VME</u> |
|-----------------------------------|----------------|-------------------|--------------------|---------------|---------------|
| Zeolites 1318-02-01 | > 70 | 10(I) 4(R) | 4(I). 1,5(R) | 10(I) 8(R) | 10(I) 5(R) |
| Mineral Binder 99999-99-4 | < 30 | 10(I) 4(R) | 4(I). 1,5(R) | N.D. | 10(I) 5(R) |
| Quartz 14608-60-7 | < 2 | 0,3(R) | 0,15(R) | 0,075(R) | 0,1(R) |

Notes : In case no information on national exposure limits is available, the exposure limit for general dust is presented.

9. Physical and chemical properties

These data donot represent technical or sale specifications.

| | |
|----------------------|---------|
| Form | Pallets |
| Color | Tan |
| Odor | None |
| PH(50g/L water, 20□) | 8-11 |
| Boiling point | N.A. |
| Molting point | N.A. |
| Flash point | N.A. |
| Autoignition Temp | N.A |
| Explosion Limits | N.A |
| Vapor Pressure | N.A |
| Viscosity | N.A |
| Water Solubility | N.A |
| Solubility | N.A |

10. Stability and Reactivity

The product is stable. No decomposition if used as directed. It is reasonable to expect that decomposition products will come from the retained materials of use.

Avoid sudden contact with high concentration of chemicals having high heats of adsrobtion such as olefins, HCl etc. Flood with water to cool the material.

11. Toxicological Information

| | |
|---------------------------|-------------------------------|
| Acute Toxicity | < 32 000 mg/kg |
| LD50/dermal/rabbit | > 2 000 mg/kg |
| LC50/inhalation/rat | No data available |
| Chronic Toxicity | Classification of Ingredients |
| EC Carcinogenic | Not Listed |
| EC Mutagenic | Not Listed |
| EC Toxic for Reproduction | Not Listed |
| Carcinogenety(ACGIH) | A2 (Quartz) |
| IARC Class | Group 1 Quartz |

Group 3 Zeolites

Routes of Exposure

Exposure may occur via inhalation, contact with skin and eyes.

Irritation

Not irritant to eyes and skin.

12. Ecological Information

No ecological hazard data available

13. Disposal considerations

EC Directives 75/442/EC; 91/168/EC; 91/698/ec and 94/31/ec

Can be land filled after chemical and physical treatment. The user of the product must identify the hazards associated with the retained product in order to assess the waste disposal options.

14. Transport information

Not dangerous goods according to the transport regulations

15. Regulatory information

Molecular Sieve is not a dangerous substance according to EEC Council Directive 67/548/EC

The product does not need to be labeled in accordance with EC directives.

16. Other information

For more information , contact either the producer or their agents.

The Safety Data Sheet serves to describe the product only with regard to the safety requirement. These data do not constitute a specification.