Molecular Sieve SDS

Updated 2018

Section 1: CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Product Name: mSORB 3A, 4A, 5A, 13X
Synonym: Synthetic Zeolite
Recommended Use: Adsorbent/Desiccant
Emergency Assistance: 1.847.292.8600
Producer: Interra Global Corporation 800 Busse Highway, Suite 101 Park Ridge, IL 60068

Section 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
GHS classification in accordance with 29 CFR 1910 (OSHA HCS)
Skin irritation (Category 3), H316
Eye irritant (Category 2B), H320
Specific organ toxicity – single exposure (Category 3), Respiratory system, H335

2.2 GHS label elements, including precautionary statements

Pictogram:

Signal word: Warning

Hazard statement(s)
H316 Causes mild skin irritation
H320 Causes eye irritation
H335 May cause respiratory irritation

Precautionary statement(s)
P261 Avoid breathing dust
P264 Wash hands thoroughly after handling
P267 Use only outdoors or in a well-ventilated area
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing
P305 + P351 + P338 IF in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P312 Call a POISON CENTER if you feel unwell P332 + P313 If skin irritation occurs: Get medical advice P227 + P313 If eye irritation persists: Get medical advice
P403 + P233 Store in well-ventilated place. Keep container tightly closed P501 Dispose of contents/container in accordance with local regulation(s)

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS: None
Section 3: COMPOSITION & INFORMATION ON INGREDIENTS

Chemical identity: Molecular Sieve; 3a,4a,5a,13x
Common name: Zeolite, synthetic
Numbers of identity:
- CAS-Nr.:1318-02-1 (mSorb 3a)
- CAS-Nr.: 1344-00-9 (mSorb 4a)
- CAS Nr.: 69912-79-4 (mSorb 5a)
- CAS Nr.: 63231-69-6 (mSorb 13X)

Section 4: FIRST AID MEASURES

General advice
Consult a qualified medical professional. Show this data sheet to the doctor in attendance. Move out of the dangerous area.

If ingested
Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, get medical attention immediately. Loosen tight clothing such as a collar, tie, or belt.

Skin contact
Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.

Eye contact
Flush eyes with plenty of water. Check for and remove any contact lenses if possible. Continue flushing eyes with water for at least 15 minutes. Get medical attention if irritation occurs.

Inhalation
Move individual to fresh air.

4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or section 11.

4.3 Indication of any immediate medical attention and special treatment needed
No data available

Section 5: FIREFIGHTING MEASURES

5.1 Extinguishing media
Product is non-flammable

5.2 Special hazards arising from the substance or mixture
Spent or used product may contain adsorbed flammable or otherwise hazardous substances upon exposure to heat or water. Product user must identify adsorbed substances and inform fire-fighters of potential hazards.

5.3 Advice for firefighters
Special protective equipment – standard PPE and equipment. Active product gives off heat when exposed to water and can burn tissue. Flush with water to dissipate the heat. If dusty conditions prevail, a dust mask is recommended.

5.4 Further information
Specific methods – no special methods required

<table>
<thead>
<tr>
<th></th>
<th>HMIS</th>
<th>NFPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Flammability</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

Section 6: ACCIDENTAL RELEASE MEASURES
6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid breathing dust. Ensure adequate ventilation. For personal protection see section 8.

6.2 Environmental precautions
Not applicable.

6.3 Methods and materials for containment and cleaning up
Use appropriate tools to put the spilled solid in a convenient waste disposal container. Dispose of material according to local and regional requirements.

Section 7: PRECAUTIONS FOR SAFE HANDLING

7.1 Precautions for safe handling
Avoid contact with skin and eyes. Do not breathe dust. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities
Suitable for any general chemical storage area. Keep container tightly closed.

7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2, no other specific uses are stipulated.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters/exposure limits
Component ACGIH TLV ACGIH STEL OSHA PEL OSHA STEL
Zeolite (CAS No. 1318-02-1) 10 mg/m³ (TWA) 3 mg/m³ (TWA) 15 mg/m³ (TWA) 5 mg/m³ (TWA)

<table>
<thead>
<tr>
<th>Component</th>
<th>ACGIH TLV</th>
<th>ACGIH STEL</th>
<th>OSHA PEL</th>
<th>OSHA STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zeolite (CAS No. 1318-02-1)</td>
<td>10 mg/m³ (TWA)</td>
<td>3 mg/m³ (TWA)</td>
<td>15 mg/m³ (TWA)</td>
<td>5 mg/m³ (TWA)</td>
</tr>
</tbody>
</table>

8.2 Appropriate engineering controls
Use process enclosures, local exhaust ventilation, or other engineering controls to limit airborne levels. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.3 Personal protective equipment
Safety glasses, lab coat, and dust respirator. Be sure to use an NIOSH approved certified respirator or equivalent.

Section 9: PHYSICAL & CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties
Physical state : Solid (Beads)
Color: White, Grey, Beige
Odor: Odorless
Odor threshold: No data available
pH-value: No data available
Melting point: No data available
Freezing Point: No data available
Initial boiling point: No data available
Flash point: No data available
Evaporation rate: No data available
Flammability (solid, gas): Non-flammable
Explosion limits: No data available
Vapor pressure: No data available
Vapor density: No data available
Relative density: 550-850g/L
Solubility: No data available
Partition coefficient: No data available
Auto-ignition temp: No data available
Decomposition temp: No data available
Viscosity: No data available
Section 10: STABILITY & REACTIVITY

10.2 Chemical stability
The product is stable under normal ambient and anticipated storage and handling conditions of temperature and storage.

10.3 Possibility of hazardous reactions
Used product may release adsorbed hazardous materials upon exposure to heat, humid air, or water.

10.4 Conditions to avoid
See section 10.3.

10.5 Incompatible materials
Prevent unintentional contact with water or moisture.

10.6 Hazardous decomposition products
Not applicable.

Section 11: TOXICOLOGICAL INFORMATION

Acute and Chronic Toxicity
Inhalation: LC50 rat > 18.3 mg/L
Ingestion: LD50 rat > 10,000 mg/kg
Dermal: LD50 rabbit > 2000 mg/kg
Short term single exposure unlikely to cause skin irritation. Ingestion, inhalation, or contact with eyes or mucous membranes may cause irritation or thermal burns. Asthma and chronic respiratory conditions may be aggravated by exposure to this product.

Skin corrosion/irritation
No data available

Serious eye damage/eye irritation
No data available

Respiratory or skin sensitization
No data available

Germ cell mutagenicity
No data available

Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by OSHA.

Reproductive toxicity: No data available

Specific target organ toxicity following single exposure: Inhalation – May cause respiratory irritation

Specific target organ toxicity following repeated exposure: No data available

Aspiration hazard: Dust may irritate lungs.

Section 12: ECOLOGICAL INFORMATION

12.1 Toxicity
No data available.

12.2 Persistence and degradability
Possibly hazardous short-term degradation products are not likely. However, long term degradation products may arise.
12.3 Bioaccumulative potential
No data available.

12.4 Mobility in soil
No data available.

12.5 Results of PBT and vPvB assessment
No data available.

12.6 Other adverse effects
No data available.

Section 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Product: Dispose of in accordance with federal, state, and local environmental control regulations.
Contaminated packaging: Packaging may contain residual dust. Dispose of in accordance with federal, state, and local environmental control regulations.

Section 14: TRANSPORT INFORMATION

DOT (U.S.A.)
Not a dangerous good.

IMDG
Not a dangerous good.

Transport hazard classes
Not applicable.

Packing group
Not applicable.

Environmental hazards
See section 12.

Transport in bulk
Not applicable.

Special precautions for users
Not applicable.

Section 15: REGULATORY INFORMATION

15.1 Federal and state regulations: SARA 302 Components
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313
This material does not contain any chemical components with known CAS numbers that exceed the threshold (de Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards
Acute health hazard

Massachusetts Right to Know Components
No components are subject to the Massachusetts Right to Know Act.
Pennsylvania Right to Know Components
Molecular Sieve 3A, 4A, 5A, 13X
CAS-No.: not available
Revision date: not available

New Jersey Right to Know Components
Molecular Sieve 3A, 4A, 5A, 13X
CAS-No.: not available
Revision date: not available

California Proposition 65 Components
This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

DOT Classification
Not a DOT controlled material (United States)

15.2 Other classifications
WHMIS (Canada)
Not controlled.

DSCL (EEC)
This product is not classifiable according to the EU regulations.

HMIS (U.S.A.)
Health hazard 1
Fire hazard 0
Reactivity 0
Personal protection E

National Fire Protection Association (U.S.A.)
Health 1
Flammability 0
Reactivity 1

Toxic Control Substances Act (TSCA)
This product complies with all applicable rules or orders under the Toxic Control Substances Act (TSCA).

Section 16: OTHER INFORMATION

References: Not available.
Other Special Considerations: Not available.

The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The information above is believed to be accurate and represents the best information currently available to us. However, we make no warrant of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Delta Enterprises, Inc. be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Delta Enterprises, Inc has been advised of the possibility of such damages.