Delta Adsorbents Div. of Delta Enterprises, Inc.



28 Congress Circle W. Roselle, IL 60172 Phone: 630.980.5205

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

P271 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. out of the dangerous area. 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

	HMIS	NFPA
Health	1	1
Flammability	0	0
Reactivity	0	1

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)

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

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

Partition coefficient: No data available Auto-ignition temp: No data available Decomposition temp: No data available

Viscosity: No data available

Relative density: 550-850g/L Solubility: 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 container 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 an 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.