



SAFETY DATA SHEET

Creation Date 10-APR-2016

Revision Date 05-FEB-2018

Revision Number 2

1. Identification

Product Name: 4A Molecular Sieve – Beads, Pellets, or Powder

Supplier Name: Transo-Pharm USA, LLC

Address: 716 Dekalb Pike, #329
Blue Bell, PA 19422

Telephone Number: (610) 278-9751

Fax Number: (610) 278-9761

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2. Hazard Identification

2.1 GHS classification in accordance with 29 CFR 1910 (OSHA HCS)

Respiratory sensitization	(Category 1), H334
Skin sensitization	(Category 1), H317
Reproductive toxicity	(Category 1B), H360
Acute aquatic toxicity	(Category 2), H401
Carcinogenicity	(Category 2), H351
Chronic aquatic toxicity	(Category 3), H412

2.2 GHS label elements, including precautionary statements

Pictogram:



Signal Word: Danger

Hazard statement(s)

- | | |
|------|---|
| H317 | May cause allergic skin reaction |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled |
| H351 | Suspected of causing cancer |
| H360 | May damage fertility or the unborn child |
| H401 | Toxic to aquatic life |
| H420 | Harmful to aquatic life with long lasting effects |

Precautionary Statements

- | | |
|-----------|---|
| P201 | Obtain special instructions before use |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P261 | Avoid breathing dust |
| P271 | Use only outdoors or in a well-ventilated area |
| P272 | Contaminated work clothing should not be allowed out of the workplace. |
| P273 | Avoid release to the environment |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P285 | In case of inadequate ventilation wear respiratory protection |
| P302+P352 | IF ON SKIN: Wash with plenty of water and soap |
| P304+P341 | IF INHALED: If breathing is difficult, remove person to fresh air and keep at rest in position comfortable for breathing. |
| P308+P313 | IF EXPOSED OR CONCERNED: Get medical advice. |
| P333+P313 | If skin irritation or rash occurs: Get medical advice |
| P363 | Wash contaminated clothing before reuse |
| P501 | Dispose of contents/container to an approved waste disposal plant in accordance with local regulation(s) |

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None

3. Composition/Information – Ingredients

Product Name	4A Molecular Sieve
Chemical Formula	Na ₁₂ [(AlO ₂) ₁₂] H ₂
CAS #	1344-009
Composition	Silicon Dioxide (7631-86-9) <50% Magnesium Oxide (1309-48-4) <5% Aluminum Oxide (1344-28-1) <30% Sodium Oxide (1313-59-3) <30%

Ingredient	CAS Registry Number	Typical %	OSHA
Zeolites	1318-02-1	>90% By Wt.	Y
Kaolin	1332-58-7	0-10% By Wt.	Y
Bentonite Clay	1302-78-9	0-10% By Wt.	Y
Clay, attapulgite	12174-11-7	0-10% By Wt.	Y
Quartz	14808-60-71	<0.2% By Wt.	Y

This substance(s) marked with “Y” in the OSHA column, are identified as hazardous chemicals according to the criteria of the OSHA Hazard Communication Standard (29 CFR 1910.1200).

This material is classified as hazardous under Federal OSHA regulation.

This product complies with TSCA inventory requirements. For chemical identity purposes, TSCA considers Zeolites as crystalline aluminosilicates consisting of a mixture of silicon oxide (CAS # 7931-86-9) and aluminum oxide (CAS# 1344-28-1) in various proportions with metallic oxides.

4. First Aid Measures

4.1 Description of first aid measures

Inhalation: Move the person to fresh air immediately. For breathing difficulties oxygen may be required. If breathing stops, provide artificial respiration. Get medical attention if discomfort continues

Ingestion: Rinse mouth thoroughly, drink plenty of water. Get medical attention if symptoms appear

Skin Contact: Wash skin thoroughly with soap and water for several minutes. Get medical attention if irritation persists after washing

Eye Contact: Immediately flush with water for up to 15 minutes. Remove any contact lenses and open eyes wide. Continue for 15 minutes. Get medical attention if discomfort continues

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labeling (see section 2.2) and/or section 11.

5. Fire Fighting Measures

5.1 Suitable Extinguishing Media The product is nonflammable. Use fire extinguishing media appropriate for surrounding

5.2 Special hazards arising from the substance or mixture

Fire Hazards None known

Explosion Hazard Not Applicable

5.3 Advice for Firefighters Not Applicable

Protective Measures: Self-contained breathing apparatus and full protective clothing should be worn in case of fire

6. Accidental Release Measures

- 6.1 Personal Precautions: Wear protective gloves and proper respiratory equipment. Avoid inhalation of dust
- 6.2 Environmental Precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment to be avoided
- 6.3 Containment & Clean Up: Use Vacuum, shovel, or broom. Avoid formation of dust. Dampen spillage area with water if necessary. Comply with local disposal regulations after clean up.

7. Handling and Storage

- 7.1 Usage Precautions: Avoid spilling, making skin or eye contact, or dust inhalation. Do not eat, drink, or smoke when using product
- 7.2 Storage Precautions: Store in a tightly closed original container cool dry and well-ventilated place.

8. Exposure Controls/Personal Protection

8.1 Exposure Controls / Personal Protection

Silica Gel (SiO₂) 7631-86-9 OSHA PEL – (Vacated) TWA 6 mg/m³

- 8.2 Appropriate Engineering Controls Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume, or mist use ventilation to keep exposure to airborne contaminants below the exposure limit. Handle in accordance with good industrial hygiene and safety practices. Wash hands when handling.
- 8.3 Protective Equipment
- | | |
|-----------------------|---|
| Respiratory Equipment | Provide general and local exhaust ventilation
Proper respiratory equipment should be available to employees handling the product |
| Hand Protection | Gloves should be available to employees handling the product |
| Eye Protection | Safety glasses are recommended but not required |

Hygiene Measures	Wash hands at the end of the work shift and prior to eating, drinking, or smoke breaks
Process Conditions	Provide eyewash station

9. Physical and Chemical Properties

9.1 Physical and Chemical Properties

Boiling Point:	N/A
Vapor Pressure (mm Hg):	N/A
Vapor Density (AIR=1):	N/A
Water Solubility:	Insoluble
Appearance:	Light tan beads or powder
Specific Gravity:	2.10
Melting Point:	N/A
Evaporation Rate (Butyl Acetate = 1):	N/A
Bulk Density (kg/m ³):	N/A
Odor:	Odorless

10. Stability and Reactivity

10.1	Reactivity	No data available
10.2	Stability	Product is stable under normal temperature conditions and recommended use
10.3	Hazardous Reaction	No data available
10.4	Conditions to Avoid	This product is incompatible with powerful, Alkali metals, strong oxidizing agents.
10.5	Incompatible Materials	Water contact with product, steam, or water mixtures
10.6	Hazardous Decomposition Products	No data available

11. Toxicological Information

11.1 Information on toxicological effect

Acute Toxicity

Inhalation Dust may irritate respiratory system or lungs. May have long term dust effects.

Ingestion May cause discomfort if swallowed

Skin Contact May cause skin irritation

Eye Contact May irritate the eyes

Oral LD50 Based on ATE Data, classification criteria are not met, ATE > 2,000 mg/kg

Dermal LD50 Based on ATE Data, classification criteria are not met, ATE > 2,000 mg/kg

Mist LC50 Based on ATE Data, classification criteria are not met, ATE > 5 mg / l

Irritation No data available

Development affects No data available

Sensitization May cause sensitization by inhalation and skin contact

Carcinogenicity Notation below indicates whether each agency
Has listed the ingredient as a carcinogen.

Silicon Dioxide (7631-86-9) IARC (Not Listed), NTP (Not Listed), ACGIH (Not Listed), OSHA (Not Listed), Mexico (Not Listed)

Magnesium Oxide (1309-48-4) IARC (Not Listed), NTP (Not Listed), ACGIH (Not Listed), OSHA (Not Listed), Mexico (Not Listed)

Aluminum Oxide (1344-28-1) IARC (Not Listed), NTP (Not Listed), ACGIH (Not Listed), OSHA (Not Listed), Mexico (Not Listed)

Sodium Oxide (1313-59-3) IARC (Not Listed), NTP (Not Listed), ACGIH (Not Listed), OSHA (Not Listed), Mexico (Not Listed)

Reproductive Toxicity No data available

Developmental affects No data available

STOT – single exposure	No data available
STOT – repeated exposure	No data available
Aspiration Hazard	No data available

12. Ecological Information

12.1 Toxicity	No data available
12.2 Persistence & Degradability	No data available
12.3 Bioaccumulative potential	No data available
12.4 Mobility in soil	No data available
12.5 Results of PBT and vPvB	LC50, 96 Hours Fish mg/l > 10,000 EC50, 48 hours, DAPHNIA mg/l > 10,000
12.6 Other Adverse Affects	Can be harmful to aquatic life – long term affects

13. Disposal Considerations

13.1 Waste Treatment Methods	The material and its container must be disposed of in compliance with local regulations.
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14. Transport Information

DOT (USA)	This product is not covered by international regulation on transport of dangerous goods (IMDG, IATA, ADR, RID)
IMDG	This product is not covered by international regulation on transport of dangerous goods (IMDG, IATA, ADR, RID)
Transport Hazard Class	This product is not covered by international regulation on transport of dangerous goods (IMDG, IATA, ADR, RID)

15. Regulation 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 311/312 Hazards Chronic health hazard

Massachusetts Right to Know Components Silica–Amorphous, precipitated
CAS–No.: 112926–00–8
Revision date: 1993–04–24

Pennsylvania Right to Know Components Silica–Amorphous, precipitated
CAS–No.: 112926–00–8
Revision date: 1993–04–24

New Jersey Right to Know Components Silica–Amorphous, precipitated
CAS–No.: 112926–00–8
Revision date: 1993–04–24

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.

Toxic Control Substances Act (TSCA) Listed on the TSCA Inventory

DOT Classification Not a DOT controlled material (United States)

15.2 Other Classifications

HMIS (U.S.A.)

Health hazard	1
Fire hazard	0
Reactivity	0
Personal protection	E

National Fire Protection Association (U.S.A)

Health	1 – SLIGHT Hazard
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Flammability 0 – Normal Material
Reactivity 1 – SLIGHT Hazard

GHS USA

Classification System

Health Rating: 5 – Minimal Hazard
Flammability Rating: 5 – Minimal Hazard
Reactivity Rating: 5 – Minimal Hazard
Contact Rating: 4 – SLIGHT Hazard
Storage Color Code: Green – Minimal Hazard

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

16. Other Information

16.1 Preparation Date: June 1, 2015

Revision Number: 2

16.2 Warranty: This information contained herein is based upon data considered true and accurate. However, Transo-Pharm USA, LLC makes no warranties, express or implied, as to the accuracy or adequacy of the information contained herein or the results to be obtained from the use thereof. This information is offered solely for the user's consideration, investigation and verification. Since the use and conditions of this information and the material described herein are not within the control of Transo-Pharm USA, LLC., it assumes no responsibility for injury to the user or third persons. The material described herein is sold only pursuant to Transo-Pharm's Terms and Conditions of Sale, including those limiting warranties and remedies contained therein. It is the responsibility of the user to determine whether any use of this data and information is in accordance with applicable federal, state, or local laws and regulations.