Safety Data Sheet

4A Molecular Sieve

SDS Revision Date: 6/26/19

Section 1: Chemical Product and Company Identification

1.1 Product Identifier

Product Identity — 4A Molecular Sieve - Beads, Pellets, or Powder

Alternate References — 3003138530

1.2 Details of Supplier of the Safety Data Sheet

Company Name — Transo-Pharm USA, LLC
1301 Skippack Pike, Suite 7A, #329
Blue Bell, PA 19422

Customer Service: (610) 278-9751

Emergency: (610) 278-9751

Section 2: Hazards Identification

2.1 GHS Product Classification

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

2.2 National Fire Protection (USA)

Health Rating: 4 - SLIGHT Hazard
Flammability Rating: 5 - Minimal Hazard
Physical Hazard: 4 - SLIGHT Hazard

2.3 Potential Health Effect

Inhalation: Irritation of upper respiratory tract possible
Skin Absorption: N/A
Skin Contact: Irritation
Eye Contact: Irritation
Ingestion: N/A

Potential Acute Health Effects: Caution - May cause irritation in case of skin contact, of eye contact, of ingestion or inhalation

Signs and Symptoms of Exposure: N/A

Effects of Overexposure: N/A

Aggravation of Pre-Existing Conditions: No information found

Medical Conditions Aggravated by Exposure: Breathing of dust may aggravate asthma

Section 3: Composition/Ingredient Information

3.1 Composition

Material/Component: Sodium Aluminosilicate 4A, Zeolite 4A

Chemical Name: 4A Molecular Sieve
Chemical Formula: Na12[(AlO2)12] H2O
Hazard Data: Non-Hazard
CAS #: 1344-00-9
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%

3.2 Ingredient Information

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

The 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.

Section 4: First Aid Measures

4.1 Description of First Aid Measures

General: Avoid breathing dust and direct contact with skin.
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
Eyes: 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
Skin: Wash skin thoroughly with soap and water for several minutes. Get medical attention if irritation persists after washing
Ingestion: Do not induce vomiting unless directed to do so by medical personal. Never give anything by mouth to an unconscious person. If large quantities of material are swallowed, get medical attention immediately. Loosen tight clothing such as a collar, tie, or belt. Administer plenty of water.

Section 5: Fire Fighting Measures

5.1 Extinguishing Media
Use media appropriate for surrounding fire.

5.2 Special Hazards Arising from the Substance/Mixture
Used product may contain retained chemicals, inform fire fighters

5.3 Explosion
Contact with moisture may generate sufficient heat to ignite combustible materials

Section 6: Accidental Release Measures

6.1 Methods and Materials for Cleanup

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional requirements.
Large Spill: Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through sanitary system.

Section 7: Handling and Storage

7.1 Precautions for Safe Handling

Keep container tightly closed. Suitable for general chemical storage area. Containers of this material may become hazardous since they retain product residues, dusts, solids; observe all warnings and precautions listed for the product.

7.2 Accidental Release Procedure

Wear protective clothing, sweep up and remove.

Section 8: Exposure Controls/Personal Protection

8.1 Exposure Limits

Airborne Exposure Guidelines for Ingredients	Exposure Limit	Value
Kaolin		
ACGIH TWA	Respirable fraction	2 mg/m3
OSHA TWA PEL	Total Dust	15 mg/m3
OSHA TWA PEL	Respirable fraction	5 mg/m3
Cristobalite		
ACGIH TWA	Respirable fraction	0.025 mg/m3
Tridymite		
ACGIH TWA	As Respiable Particles (Insoluable or poorly Soluable) Not otherwise specified	3 mg/m3
ACGIH TWA	As Inhalable Particles (Insoluable or poorly Soluble) Not otherwise specified	10 mg/m3
OSHA TWA PEL	As Silica: Crystalline Tridymite (Total Dust)	0.15 mg/m3
OSHA TWA PEL	As Silica: Crystalline Tridymite (Respirable)	0.5 mg/m3 (1.2 mppcf)

8.2 Exposure Controls

Respiratory: NIOSH approved dust mask when working with powder
Ventilation: Dilution ventilation is a satisfactory health hazard control for this substance
Eyes: Safety glasses are recommended
Skin: Wear protective gloves

Section 9: Chemical and Physical Properties

Appearance:	Light tan beads or powder
Odor:	Odorless
Melting Point/Freezing Point:	N/A
Initial Boiling Point:	N/A
Flash Point:	N/A
Evaporation Rate:	N/A
Flammability:	Non-flammable
Vapor Pressure:	N/A
Vapor Density:	N/A
Bulk Density:	N/A
Specific Gravity:	2.10
Solubility in Water:	Insoluble

Section 10: Stability and Reactivity

10.1 Reactivity
Hazardous Polymerization will not occur

10.2 Chemical Stability
Stable under ordinary conditions

10.3 Conditions to Avoid
Moisture

10.4 Hazardous Decomposition Products
N/A

Section 11: Toxicological Information

11.1 Primary Routes of Exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

11.2 Information on Toxicological Effects

Acute Toxicity General Product Information: The following acute toxicity data has been reported for this product and/or its components
Chronic Toxicity: Acute eye, skin, and respiratory tract irritation.
CMR Effects (Carcinogenicity, Mutagenicity, and Toxicity for Reproduction): Carcinogenicity: Crystalline silica inhaled in the form of quartz is classified as a carcinogenic to humans (Group 1) by the International Agency for Research on Cancer (IARC), and respirable forms of crystalline silica are listed as substance known to be a human carcinogen by the National Toxicology Program. Studies by the IARC give indications of increased risk for lung cancer from inhaled crystalline silica (quartz) resulting from occupational exposure.
Germ Cell Mutagenicity: No information available.
Reproductive Toxicity: No information available.
Specific target organ toxicity (repeated exposure): No information available.
Symptoms/injuries after skin contact: May cause skin irritation.
Symptoms/injuries after eye contact: May irritate the eyes.

Section 12: Ecological Information

12.1 Environmental Toxicity
LC50 Fish: No information available
LC50 Daphnia: No information

Section 13: Disposal Information

Comply with local regulations for non-hazardous chemical disposal.

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use, or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal regulations. Dispose of container and unused contents in accordance with local, state, and federal regulations.

Section 14: Transportation Information

UN Proper Shipping Name: N/A
Transport Hazard Class: Non-Hazardous

Section 15: Regulatory Information

Hazard Categories under Criteria of SARA Title III Rules (40 CFR Part 370):
Immediate (Acute) Health: Y
Delayed (Chronic) Health: Y
Fire: N
Reactive: N
Sudden Release of Pressure: N
TSCA Memo for Product: Clay, attapulgite CAS# 12174-11-7 is naturally occuring component, it is TSCA exempt.
Crystalline silica has the following CAS#'s: Cristobalite: 14464-46-1; Quartz: 14808-60-7; Tripoli: 1317-95-9; Tridymite: 15468-32-3
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# 7631-86-9) and aluminum oxide (CAS# 1344-28-1) in various proportions with metallic oxides.
Ingredient Related Regulatory Information:

SARA Reportable Quantities	CERCLA RQ	SARA TPQ
Kaolin	NE	
Cristobalite	NE	
Clay, attapulgite	NE	
Zeolites	NE	
Sepiolite	NE	NE
Tridymite	NE	NE

California Prop 65 – Carcinogen: This product does contain the following chemical(s), as indicated below, currently on the California list of known Carcinogens. (Cristobalite, Tridymite)
Massachusetts Right to Know: This product does contain the following chemical(s), as indicated below, currently on the Massachusetts Right to Know Substance List. (Cristobalite, Kaolin, Tridymite)
New Jersey Right to Know: This product does contain the following chemical(s), as indicated below, currently on the New Jersey Right to Know Substance List. (Cristobalite, Tridymite, Zeolites)
Pennsylvania Right to Know: This product does contain the following chemical(s), as indicated below, currently on the Pennsylvania Hazardous Substance List. (Cristobalite, Kaolin, Tridymite)

Section 16: Other Information

The information presented herein has been compiled from sources considered to be dependable and is accurate to the best of our knowledge. Since conditions of use are beyond our control, we take no warranties expressed or implied, except those that are contained in a written contract of sale or acknowledgement.

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