

4A Molecular Sieve - Safety Data Sheet

Section 1 - CHEMICAL PRODUCT & COMPANY IDENTIFICATION

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

Supplier Name: **Tranzo-Pharm USA, LLC**

Address: **1301 Skippack Pike, Suite 7A, #329
Blue Bell, PA 19422**

Telephone Number: **(610) 278-9751**

Fax Number: **(610) 278-9761**

Emergency Telephone Number: **(610) 278-9751**

Section 2 - HEALTH HAZARDS IDENTIFICATION

Emergency Overview:

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

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

National Fire Protection (USA)

Classification System	
Health Rating	4- Slight Hazard
Flammability Rating	5 - Minimal Hazard
Physical Hazard	4- Slight Hazard

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

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

Potential Health Effect:

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

Signs and Symptoms of Exposure: **N/A**

Effects of Overexposure:

Acute Exposure: N/A
Chronic Exposure: N/A

Aggravation of Pre-Existing conditions: No information found
Medical Conditions Aggravated by Exposure: Breathing of dust may aggravate asthma

Section 3 - COMPOSITION/ INFORMATION - INGREDIENTS

Material or 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%

Ingredient Name	CAS Registry Number	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

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:	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.
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
General Recommendations:	Avoid breathing dust and direct contact with skin.

Section 5 - FIRE AND EXPLOSION DATA

Flash Point:	N/A
Flammable Limits:	Non-Flammable
LEL:	N/A
UEL:	N/A
Extinguishing Media	Use media appropriate for surrounding fire
Explosion:	Contact with moisture may generate sufficient heat to ignite combustible materials
Specific Hazards:	Used product may contain retained chemicals, inform fire fighters.

Section 6: ACCIDENTAL RELEASE MEASURES

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

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.
Accidental release procedure:	Wear protective clothing, sweep up and remove
Waste Disposal Method:	Comply with local regulations for non-hazardous chemical disposal.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory Equipment:	NIOSH approved dust mask when working with powder
Ventilation:	Dilution ventilation is a satisfactory health hazard control for this substance
Skin Protection:	Wear protective gloves
Eye Protection:	Safety glasses are recommended
Airborne Exposure Limits:	None established
Other Protective Clothing or Equipment:	N/A

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

Section 9: PHYSICAL and CHEMICAL PROPERTIES

Physical Data:

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

Section 10: STABILITY & REACTIVITY

Stability:	Stable under ordinary conditions
Hazardous decomposition:	N/A
Hazardous Polymerization:	Will Not Occur
Conditions to Avoid:	Moisture
Hazardous Decomposition Products:	N/A

Section 11: TOXICOLOGICAL INFORMATION

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.
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/Effects:	Acute eye, skin, and respiratory tract irritation.
Repeated dose toxicity	

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 (single exposure): 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

LC50 Fish: No information available
LC50 Daphnia: No information available

Section 13: DISPOSAL CONSIDERATIONS

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: TRANSPORT INFORMATION

D.O.T. Shipping Name: N/A
D.O.T. Hazard Classification: Non-Hazardous
D.O.T. Labels Required: None
Hazardous Waste: None

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 occurring 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

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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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