



# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:  
US - OSHA Hazard Communication Standard (29 CFR 1910.1200)

Issuing Date 22-May-2023

Revision Date 22-May-2023

Revision Number 1

## 1. Identification

### Product identifier

**Product Name** Mole Sieve 13X

### Other means of identification

**Synonyms** Molecular Sieve Zeolite

### Recommended use of the chemical and restrictions on use

**Recommended use** To be used as a drying agent that removes moisture for liquids and gases

**Restrictions on use** Avoid contact with high concentration of chemicals having high heats of adsorption

### Details of the supplier of the safety data sheet

#### Manufacturer Address

MATHESON TRI-GAS, INC.  
909 Lake Carolyn Parkway  
Suite 1300  
Irving, TX 75039  
General Information: 1-800-416-2505

### Emergency telephone number

**Emergency telephone** CHEMTREC: +1-703-527-3887 (INTERNATIONAL)  
1-800-424-9300 (NORTH AMERICA)

## 2. Hazard(s) identification

### Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

### Hazards not otherwise classified (HNOC)

Not applicable.

### Label elements

#### **Hazard statements**

Not classified.

### Other information

This product contains crystalline silica (quartz) in a non-respirable form. Inhalation of crystalline silica is unlikely to occur from exposure to this product.

### 3. Composition/information on ingredients

#### Substance

Not applicable.

#### Mixture

Chemical name	CAS No	Weight-%	Trade secret
Zeolite, NaA	1344-00-9	20-30	*
Quartz	14808-60-7	<0.5	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

### 4. First-aid measures

#### Description of first aid measures

<b>General advice</b>	IF exposed or concerned: Get medical advice/attention.
<b>Inhalation</b>	Remove to fresh air.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if symptoms occur.
<b>Skin contact</b>	Wash skin with soap and water. Get medical attention if symptoms occur.
<b>Ingestion</b>	Rinse mouth.

#### Most important symptoms and effects, both acute and delayed

<b>Symptoms</b>	Product dust may be irritating to eyes, skin and respiratory system.
<b>Effects of Exposure</b>	No information available.

#### Indication of any immediate medical attention and special treatment needed

<b>Note to physicians</b>	Treat symptomatically.
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### 5. Fire-fighting measures

<b>Suitable Extinguishing Media</b>	Dry chemical, CO2, alcohol-resistant foam or water spray.
<b>Unsuitable extinguishing media</b>	No information available.
<b>Specific hazards arising from the chemical</b>	Negligible fire hazard. Powerful oxidizers may cause fire.
<b>Explosion data</b>	
<b>Sensitivity to mechanical impact</b>	None.
<b>Sensitivity to static discharge</b>	None.
<b>Special protective equipment and precautions for fire-fighters</b>	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment. Cool containers with flooding quantities of water until well after fire is out.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Ensure adequate ventilation. Do not touch damaged packages or spilled material. Wear personal protective clothing and equipment, see Section 8.

**Other information** Refer to protective measures listed in Sections 7 and 8.

### Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so. Use water spray to reduce vapors or divert vapor cloud drift.

**Methods for cleaning up** Pick up and transfer to properly labeled containers. Prevent product from entering drains. Clean contaminated surface thoroughly. After cleaning, flush away traces with water.

## 7. Handling and storage

### Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Avoid generation of dust. Do not breathe dust. In case of insufficient ventilation, wear suitable respiratory equipment. Wash thoroughly after handling.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Product is hygroscopic, store with desiccant.

## 8. Exposure controls/personal protection

### Control parameters

#### Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Zeolite, NaA 1344-00-9	TWA: 1 mg/m <sup>3</sup> respirable particulate matter	-	-
Quartz 14808-60-7	TWA: 0.025 mg/m <sup>3</sup> respirable particulate matter	TWA: 50 µg/m <sup>3</sup> (vacated) TWA: 0.1 mg/m <sup>3</sup> respirable dust : (250)/(%SiO <sub>2</sub> + 5) mppcf TWA respirable fraction : (10)/(%SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA respirable fraction	IDLH: 50 mg/m <sup>3</sup> respirable dust TWA: 0.05 mg/m <sup>3</sup> respirable dust

### **Biological occupational exposure limits**

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

### Appropriate engineering controls

**Engineering controls** Showers  
Eyewash stations  
Ventilation systems.

**Individual protection measures, such as personal protective equipment**

Eye/face protection	Safety glasses with side shields.
Hand protection	Wear suitable gloves.
Skin and body protection	Wear suitable protective clothing. Lab coat.
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product.

**9. Physical and chemical properties****Information on basic physical and chemical properties**

Appearance	Powder, bead, cake-like powder
Physical state	Solid
Color	Light tan
Odor	Odorless
Odor threshold	No data available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH		No data available
pH (as aqueous solution)		No data available
Melting point / freezing point	> 1600 °C / > 2900 °F	No data available
Initial boiling point and boiling range		No data available
Flash point		No data available
Evaporation rate		No data available
Flammability		No data available
Flammability Limit in Air		
Upper flammability or explosive limits		No data available
Lower flammability or explosive limits		No data available
Vapor pressure		No data available
Relative vapor density		No data available
Relative density		No data available
Water solubility		No data available
Solubility(ies)		No data available
Partition coefficient		No data available
Autoignition temperature		No data available
Decomposition temperature		No data available
Kinematic viscosity		No data available
Dynamic viscosity		No data available

**Other information**

Explosive properties	No information available
Oxidizing properties	No information available
Softening point	No information available
Molecular weight	No information available
VOC content	No information available
Liquid Density	No information available
Bulk density	No information available

**10. Stability and reactivity**

<b>Reactivity</b>	None under normal use conditions.
<b>Chemical stability</b>	Stable under normal conditions. Hygroscopic.
<b>Possibility of hazardous reactions</b>	Contact with water generates heat.
<b>Conditions to avoid</b>	Incompatible materials. Dust formation. Moisture.
<b>Incompatible materials</b>	Oxidizing agent, Acids, Moisture.
<b>Hazardous decomposition products</b>	Sudden contact with high concentrations of chemicals having high heats of adsorption such as elefins, HCl, etc. when first wetted, the product can heat up to the boiling point of water, Silica will dissolve in Hydrofluoric Acid and produce the corrosive gas Silicon Tetrafluoride.

## 11. Toxicological information

### Information on likely routes of exposure

#### Product Information

<b>Inhalation</b>	Specific test data for the substance or mixture is not available. Inhalation of dust in high concentration may cause irritation of respiratory system.
<b>Eye contact</b>	Specific test data for the substance or mixture is not available. Dust contact with the eyes can lead to mechanical irritation.
<b>Skin contact</b>	Specific test data for the substance or mixture is not available. Dust or powder may irritate the skin.
<b>Ingestion</b>	Specific test data for the substance or mixture is not available.

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Symptoms</b>	Product dust may be irritating to eyes, skin and respiratory system.
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### Acute toxicity

#### Numerical measures of toxicity

Based on available data, the classification criteria are not met

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Zeolite, NaA 1344-00-9	> 5000 mg/kg ( Rat )	> 5000 mg/kg ( Rabbit )	> 18.3 mg/L ( Rat ) 1 h

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

<b>Skin corrosion/irritation</b>	No information available.
<b>Serious eye damage/eye irritation</b>	No information available.
<b>Respiratory or skin sensitization</b>	No information available.
<b>Germ cell mutagenicity</b>	No information available.

**Carcinogenicity** This product contains crystalline silica (quartz) in a non-respirable form. Inhalation of crystalline silica is unlikely to occur from exposure to this product.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Quartz 14808-60-7	A2	Group 1	Known	X

#### Legend

**ACGIH (American Conference of Governmental Industrial Hygienists)**

A2 - Suspected Human Carcinogen

**IARC (International Agency for Research on Cancer)**

Group 1 - Carcinogenic to Humans

**NTP (National Toxicology Program)**

Known - Known Carcinogen

**OSHA (Occupational Safety and Health Administration of the US Department of Labor)**

X - Present

**Reproductive toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Target organ effects** Respiratory system. Eyes. Lungs.

**Aspiration hazard** No information available.

**Other adverse effects** No information available.

**Interactive effects** No information available.

## 12. Ecological information

**Ecotoxicity** The environmental impact of this product has not been fully investigated.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Zeolite, NaA 1344-00-9	EC50: =18mg/L (96h, Desmodesmus subspicatus)	LC50: =1800mg/L (96h, Brachydanio rerio) LC50: 3200 - 5600mg/L (96h, Oryzias latipes) LC50: 1800 - 3200mg/L (96h, Poecilia reticulata)	-	EC50: 1000 - 1800mg/L (48h, Daphnia magna)

**Persistence and degradability** No information available.

**Bioaccumulation** No information available.

**Other adverse effects** No information available.

## 13. Disposal considerations

#### Disposal methods

**Waste from residues/unused products** Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable.

**Contaminated packaging** Do not reuse empty containers.

## 14. Transport information

**DOT** Not regulated

**IATA** Not regulated

**IMDG** Not regulated

## 15. Regulatory information

### International Inventories

Contact supplier for inventory compliance status

### US Federal Regulations

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

#### **SARA 311/312 Hazard Categories**

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

#### **CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

#### **CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

### US State Regulations

#### **California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical name	California Proposition 65
Quartz - 14808-60-7	Carcinogen

### U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Quartz 14808-60-7	X	X	X

### U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

**16. Other information**

<b>NFPA</b>	<b>Health hazards</b> 1	<b>Flammability</b> 0	<b>Instability</b> 1	<b>Special hazards</b> -
<b>HMIS</b>	<b>Health hazards</b> 1*	<b>Flammability</b> 0	<b>Physical hazards</b> 1	<b>Personal protection</b> E

*Chronic Hazard Star Legend*      \* = Chronic Health Hazard

**Key or legend to abbreviations and acronyms used in the safety data sheet****Legend Section 8: Exposure controls/personal protection**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)  
 U.S. Environmental Protection Agency ChemView Database  
 European Food Safety Authority (EFSA)  
 EPA (Environmental Protection Agency)  
 Acute Exposure Guideline Level(s) (AELG(s))  
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
 U.S. Environmental Protection Agency High Production Volume Chemicals  
 Food Research Journal  
 Hazardous Substance Database  
 International Uniform Chemical Information Database (IUCLID)  
 Japan GHS Classification  
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
 NIOSH (National Institute for Occupational Safety and Health)  
 National Library of Medicine's ChemID Plus (NLM CIP)  
 National Library of Medicine's PubMed database (NLM PUBMED)  
 National Toxicology Program (NTP)  
 New Zealand's Chemical Classification and Information Database (CCID)  
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
 Organization for Economic Co-operation and Development Screening Information Data Set  
 World Health Organization

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**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**