



Material Safety Data Sheet
Molecular Sieves

MSDS# 40124

Section 1 - Chemical Product and Company Identification

MSDS Name: Molecular Sieves
Catalog Numbers: M513-5LB, M514-500, M514-5LB, M518-5LB, M542-5LB
Synonyms: None

Company Identification: Fisher Scientific
One Reagent Lane
Fair Lawn, NJ 07410

For information in the US, call: 201-796-7100
Emergency Number US: 201-796-7100
CHEMTREC Phone Number, US: 800-424-9300

Section 2 - Composition, Information on Ingredients

Risk Phrases:

CAS#: 1332-58-7
Chemical Name: Kaolin
%: <100.0
EINECS#: unlisted
Hazard Symbols:

Risk Phrases:

CAS#: 1344-00-9
Chemical Name: Sodium aluminum silicate
%: 0-100.0
EINECS#: 215-684-8
Hazard Symbols:

Risk Phrases:

CAS#: 1344-01-0
Chemical Name: Silicic acid, aluminum calcium sodium salt
%: 0-100.0
EINECS#: 215-685-3
Hazard Symbols:

Risk Phrases:

CAS#: 12736-96-8
Chemical Name: Sodium potassium aluminum silicate
%: 0-100.0
EINECS#: 235-787-1
Hazard Symbols:

Risk Phrases:

CAS#: 14808-60-7
Chemical Name: Quartz
%: <3.0
EINECS#: 238-878-4
Hazard Symbols:

Text for R-phrases: see Section 16

Hazard Symbols: None listed
Risk Phrases: None listed

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Caution! Contains trace amounts of quartz which may lead to fibrotic lung disease, silicosis or cancer. May cause eye, skin, and respiratory tract irritation. Target Organs: Lungs.

Potential Health Effects

Eye: May cause eye irritation.
Skin: May cause skin irritation.
Ingestion: May cause irritation of the digestive tract. Low hazard for usual industrial handling.
Inhalation: Dust is irritating to the respiratory tract.
Chronic: Prolonged exposure to respirable crystalline quartz may cause delayed lung injury/fibrosis (silicosis).

Section 4 - First Aid Measures

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation develops, get medical aid.
Skin: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.
Ingestion: Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.
Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Notes to Physician:

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes.

Extinguishing Media: Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.

Autoignition Temperature: Not applicable.

Flash Point: Not applicable.

Explosion Limits: Lower: Not available

Explosion Limits: Upper: Not available

NFPA Rating: health: 1; flammability: 0; instability: 0;

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately,

Spills/Leaks: observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Use only in a well-ventilated area. Minimize dust generation and accumulation. Avoid ingestion and inhalation.

Storage: Store in a cool, dry place.

Section 8 - Exposure Controls, Personal Protection

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Kaolin	2 mg/m ³ (respirable fraction, particulate matter containing no asbestos and <1% crystalline silica)	10 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable dust)	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)
Sodium aluminum silicate	none listed	none listed	none listed
Silicic acid, aluminum calcium sodium salt	none listed	none listed	none listed
Sodium potassium aluminum silicate	none listed	none listed	none listed
Quartz	0.025 mg/m ³ (respirable fraction)	0.05 mg/m ³ TWA (respirable dust) 50 mg/m ³ IDLH (respirable dust)	none listed

OSHA Vacated PELs: Kaolin: 10 mg/m³ TWA (total dust); 5 mg/m³ TWA (respirable fraction) Sodium aluminum silicate: None listed Silicic acid, aluminum calcium sodium salt: None listed Sodium potassium aluminum silicate: None listed Quartz: 0.1 mg/m³ TWA (respirable dust)

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to minimize contact with skin.

Respirators: A NIOSH/MSHA approved air purifying dust or mist respirator or European Standard EN 149.

Section 9 - Physical and Chemical Properties

Physical State: Solid

Color: white to tan

Odor: odorless

pH: 13.3-10.5 (5% slurry)

Vapor Pressure: Not applicable.

Vapor Density: Not applicable.

Evaporation Rate: Not available

Viscosity: Not applicable.

Boiling Point: Not applicable.

Freezing/Melting Point: Not available

Decomposition Temperature: Not available

Solubility in water: Insoluble in water.

Specific Gravity/Density: 2.1

Molecular Formula: Mixture

Molecular Weight: 0

Section 10 - Stability and Reactivity

Chemical Stability: Stable at room temperature in closed containers under normal storage and handling conditions.

Conditions to Avoid: Dust generation.

Incompatibilities with Other Materials: Not available

Hazardous Decomposition Products: Carbon monoxide, silicon dioxide, aluminum oxide.

Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#: CAS# 1332-58-7: GF1670500
CAS# 1344-00-9: VV8902500
CAS# 1344-01-0: None listed
CAS# 12736-96-8: None listed
CAS# 14808-60-7: VV7330000
RTECS: Not available. RTECS:
CAS# 1344-00-9: Oral, rat: LD50 = >27 gm/kg;

LD50/LC50: RTECS:
CAS# 1344-01-0:
RTECS:
CAS# 12736-96-8:
RTECS:
CAS# 14808-60-7:

Carcinogenicity: Kaolin - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Sodium aluminum silicate - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Silicic acid, aluminum calcium sodium salt - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Sodium potassium aluminum silicate - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.
Quartz - ACGIH: A2 - Suspected Human Carcinogen California: carcinogen, initial date 10/1/88 (airborne particles of respirable size) NTP: Known carcinogen IARC: Group 1 carcinogen

Other: See actual entry in RTECS for complete information.

Section 12 - Ecological Information

Other: No information available.

Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - Transport Information

US DOT

Shipping Name: Not regulated as a hazardous material

Hazard Class:

UN Number:

Packing Group:

Canada TDG

Shipping Name: Not available

Hazard Class:

UN Number:
Packing Group:

Section 15 - Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: Not available

Risk Phrases:

Safety Phrases:

WGK (Water Danger/Protection)

CAS# 1332-58-7: 0

CAS# 1344-00-9: 0

CAS# 1344-01-0: Not available

CAS# 12736-96-8: 0

CAS# 14808-60-7: Not available

Canada

CAS# 1332-58-7 is listed on Canada's DSL List

CAS# 1344-00-9 is listed on Canada's DSL List

CAS# 1344-01-0 is listed on Canada's DSL List

CAS# 12736-96-8 is listed on Canada's DSL List

CAS# 14808-60-7 is listed on Canada's DSL List

Canadian WHMIS Classifications: D2A

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

CAS# 1332-58-7 is not listed on Canada's Ingredient Disclosure List.

CAS# 1344-00-9 is not listed on Canada's Ingredient Disclosure List.

CAS# 1344-01-0 is not listed on Canada's Ingredient Disclosure List.

CAS# 12736-96-8 is not listed on Canada's Ingredient Disclosure List.

CAS# 14808-60-7 is listed on Canada's Ingredient Disclosure List

US Federal

TSCA

CAS# 1332-58-7 is listed on the TSCA Inventory.

CAS# 1344-00-9 is listed on the TSCA Inventory.

CAS# 1344-01-0 is listed on the TSCA Inventory.

CAS# 12736-96-8 is listed on the TSCA Inventory.

CAS# 14808-60-7 is listed on the TSCA Inventory.

Section 16 - Other Information

MSDS Creation Date: 12/12/1997

Revision #6 Date 7/20/2009

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty 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 the company be liable for any 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 the company has been advised of the possibility of such damages.
