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Material Safety Data Sheet

Molecular Sieve, Type 5A, 8-12 mesh MSDS

Section 1: Chemical Product and Company Identification

Product Name: Molecular Sieve, Type 5A, 8-12 mesh

Catalog Codes: SLM2632

CAS#: Mixture.

RTECS: Not applicable.

TSCA: TSCA 8(b) inventory: Kaolin; Sodium aluminosilicate; Silicic Acid, aluminum calcium sodium salt; Sodium Potassium Aluminum Silicate; Quartz

CI#: Not available.

Synonym: Molecular Sieve, Type 5A, 8-12 mesh

Chemical Name: Not applicable.

Chemical Formula: Not applicable.

Contact Information:

Sciencelab.com, Inc.

14025 Smith Rd.

Houston, Texas 77396

US Sales: **1-800-901-7247**

International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call:

1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Kaolin	1332-58-7	<100
Sodium aluminosilicate	1344-00-9	0-100
Silicic Acid, aluminum calcium sodium salt	1344-01-0	0-100
Sodium Potassium Aluminum Silicate	12736-96-8	0-100
Quartz	14808-60-7	<3
	Quartz	
	LD50: Not available.	
	LC50: Not available.	

Toxicological Data on Ingredients: Kaolin LD50: Not available. LC50: Not available. Sodium aluminosilicate: ORAL (LD50): Acute: >27000 mg/kg [Rat]. >1000 mg/kg [Dog]. DERMAL (LD50): Acute: >2000 mg/kg [Rabbit]. Silicic Acid, aluminum calcium sodium salt LD50: Not available. LC50: Not available. Sodium Potassium Aluminum Silicate LD50: Not available. LC50: Not available.

Section 3: Hazards Identification

Potential Acute Health Effects:

Hazardous in case of inhalation (lung irritant). Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, . Severe over-exposure can result in death.

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Classified A4 (Not classifiable for human or animal.) by ACGIH [Kaolin]. Classified 1 (Proven for human.) by IARC, 1 (Clear evidence.) by NTP, + (Proven.) by OSHA, + (Proven.) by NIOSH [Quartz]. Classified A2 (Suspected for human.) by ACGIH [Quartz]. **MUTAGENIC EFFECTS:** Not available. **TERATOGENIC EFFECTS:** Not available. **DEVELOPMENTAL TOXICITY:** Not available. The substance is toxic to lungs, upper respiratory tract, eye, lens or cornea. The substance may be toxic to stomach. Repeated or prolonged exposure to the substance can produce target organs damage. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

Section 4: First Aid Measures**Eye Contact:**

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

Skin Contact:

In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Serious Skin Contact: Not available.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Serious Inhalation: Not available.

Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: Non-flammable.

Auto-Ignition Temperature: Not applicable.

Flash Points: Not applicable.

Flammable Limits: Not applicable.

Products of Combustion: Not available.

Fire Hazards in Presence of Various Substances: Not applicable.

Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions: Not applicable.

Special Remarks on Fire Hazards: Powerful oxidizers may cause fire. [Quartz]

Special Remarks on Explosion Hazards: Powerful oxidizers or metals may cause explosions. (Quartz)

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 authority requirements.

Large Spill:

Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

Precautions:

Keep locked up.. Do not ingest. Do not breathe dust. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, acids, alkalis.

Storage:

Hygroscopic. Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 23°C (73.4°F).

Section 8: Exposure Controls/Personal Protection

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.

Personal Protection: Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits:

Kaolin TWA: 2 (mg/m³) from ACGIH (TLV) [United States] [1999] Inhalation Respirable. TWA: 15 (mg/m³) from OSHA (PEL) [United States] Inhalation Total. TWA: 5 (mg/m³) from NIOSH Inhalation Respirable. TWA: 10 (mg/m³) from NIOSH [United States] Inhalation Total. TWA: 5 (mg/m³) from OSHA (PEL) [United States] Inhalation Respirable. Quartz TWA: 0.05 (mg/m³) from ACGIH (TLV) [United States] [1999] Inhalation Respirable. TWA: 0.1 (mg/m³) from OSHA (PEL) [United States] Inhalation Respirable. TWA: 0.3 (mg/m³) [United Kingdom (UK)] Inhalation Respirable. TWA: 0.2 (mg/m³) [Australia] Inhalation TWA: 0.1 (mg/m³) [Canada] Inhalation Respirable. Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Solid.

Odor: Odorless.

Taste: Not available.

Molecular Weight: Not applicable.

Color: Beige.

pH (1% soln/water): Not applicable.

Boiling Point: Not available.

Melting Point: 1760°C (3200°F) based on data for: Kaolin. Weighted average: 1755.63°C (3192.1°F)

Critical Temperature: Not available.

Specific Gravity: 2.1 (Water = 1)

Vapor Pressure: Not applicable.

Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: The product is insoluble in water and oil.

Ionicity (in Water): Not available.

Dispersion Properties: Is not dispersed in cold water, hot water.

Solubility: Insoluble in cold water, hot water, methanol, diethyl ether, n-octanol, acetone.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Dust generation, moisture (reacts with water to evolve heat), incompatible materials

Incompatibility with various substances:

Reactive with oxidizing agents, acids, alkalis. Slightly reactive to reactive with moisture.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity:

Absorbs water with evolution of heat. 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. Flood with water to cool material. [Molecular Sieve mixture] Incompatibility with powerful oxidizers: fluorine, chlorine trifluoride, manganese trioxide, oxygen difluoride, hydrogen peroxide, etc.; Incompatible with acetylene and ammonia. This chemical is attacked by Hydrogen Fluoride. Silica will dissolve in Hydrofluoric Acid and produce the corrosive gas Silicon Tetrafluoride (SiF₄). [Quartz]

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Inhalation. Ingestion.

Toxicity to Animals:

Acute oral toxicity (LD₅₀): >1000 mg/kg [Dog]. (Sodium aluminosilicate). Acute dermal toxicity (LD₅₀): >2000 mg/kg [Rabbit]. (Sodium aluminosilicate).

Chronic Effects on Humans:

CARCINOGENIC EFFECTS: Classified A4 (Not classifiable for human or animal.) by ACGIH [Kaolin]. Classified 1 (Proven for human.) by IARC, 1 (Clear evidence.) by NTP, + (Proven.) by OSHA, + (Proven.) by NIOSH [Quartz]. Classified A2 (Suspected for human.) by ACGIH [Quartz]. MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. [Quartz]. May cause damage to the following organs: lungs.

Other Toxic Effects on Humans:

Hazardous in case of inhalation (lung irritant). Slightly hazardous in case of skin contact (irritant), of ingestion, .

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: May contain up to 3% quartz which has been determined to be an IARC class I carcinogen.

Special Remarks on other Toxic Effects on Humans:

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: Not available.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

DOT Classification: Not a DOT controlled material (United States).

Identification: Not applicable.

Special Provisions for Transport: Not applicable.

Section 15: Other Regulatory Information

Federal and State Regulations:

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: Quartz California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: Quartz Rhode Island RTK hazardous substances: Kaolin Pennsylvania RTK: Kaolin; Quartz Florida: Quartz Minnesota: Kaolin; Quartz Massachusetts RTK: Kaolin; Quartz New Jersey: Quartz TSCA 8(b) inventory: Kaolin; Sodium aluminosilicate; Silicic Acid, aluminum calcium sodium salt; Sodium Potassium Aluminum Silicate; Quartz

Other Regulations: OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications:

WHMIS (Canada): Not controlled under WHMIS (Canada).

DSCL (EEC):

R26- Very toxic by inhalation. R36/37/38- Irritating to eyes, respiratory system and skin. R45- May cause cancer. S24/25- Avoid contact with skin and eyes.

HMIS (U.S.A.):

Health Hazard: 1

Fire Hazard: 0

Reactivity: 1

Personal Protection: E

National Fire Protection Association (U.S.A.):

Health: 2

Flammability: 0

Reactivity: 0

Specific hazard:

Protective Equipment:

Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Safety glasses.

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

Created: 10/10/2005 10:51 AM

Last Updated: 11/01/2010 12:00 PM

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