Safety Data Sheet

Section 1 - Chemical Product and Company Identification

Sample Name: LithiumX Molecular Sieve
Company ID: Molecular Tek, Inc.
Address: 350 W Brazos Avenue, #1343, West Columbia, TX 77486 USA

Emergency Phone Number: 504-517-6223

Manufacturing Passed ISO9001 *Certification*
Manufacturing Passed ISO14001 *Environmental Management Systems*

Section 2 – Hazard(s) Identification

(a) Classification of the Chemical: This product is not classified as hazardous.
(b) Label Elements: This product is not classified as hazardous.
Pictogram(s): No pictogram.
Signal word: No signal word.
Hazard statements: No hazard statement.
Precautionary statements: No precautionary statement.
(c) Description of Any Hazards Not Otherwise Classified: No information available.
(d) Ingredients with Unknown Acute Toxicity: No information available.

Section 3 – Composition / Information on Ingredients

Chemical Name	Percent (by weight)	CAS Number
Silicon Oxide (Synthetic)	< 55%	7631-86-9
Lithium Oxide	< 15%	1313-59-3
Aluminum Oxide	< 50%	1344-28-1

Section 4 – First Aid Measures

(a) Important Symptoms/Effects - Acute or Delayed:
Inhalation: Cough.
If product gets in eyes: Redness, pain.
If ingested: Abdominal pain.

(b) Description of First Aid Measures:
Eye contact: Immediately flush eyes with water for at least 15 minutes, seek medical attention.
Skin contact: Wash exposed skin with soap and water. If skin irritation develops, seek medical attention.
Ingestion: If the material is swallowed, get immediate medical attention or advice. If the person who ingested the material is conscious and alert, have them consume several glasses of water or milk. NEVER give anything by mouth to an unconscious person.
Inhalation: Leave the exposed area and move to fresh air immediately. If breathing is difficult, administer oxygen. If someone is not breathing due to inhalation, administer artificial respiration, seek immediate medical attention.

(c) Immediate Medical Attention and Special Treatment:
Attending physician should treat exposed patients symptomatically.

Section 5 – Firefighting Measures

(a) Extinguishing Media:
Suitable extinguishing media: Use fire extinguishing methods suitable for the surrounding conditions.
Unsuitable extinguishing media: Water with full jet.

(b) Special Hazards Arising from the Material: No particular hazards known.

(c) Special Protective Equipment and Precautions for Firefighters:
Firefighters must wear fire-resistant protective equipment and a self-contained breathing apparatus.

Section 6 – Accidental Release Measures

(a) Personal Precautions, Protective Equipment, and Emergency Procedures:
Refer to **SECTION 8** for personal protective equipment. Prevent and avoid skin and eye contact with material. Ensure adequate ventilation and minimize dust formation.

(b) Methods and Materials for Containment and Cleaning Up:
Sweep the spill area, avoid stirring up dust, and provide ventilation.

Section 7 – Handling and Storage

(a) Precautions for Safe Handling:

- Wash hands and other exposed areas with mild soap and water before eating, drinking, smoking, and upon leaving work.
- Minimize the formation of dust and/or fine particles and minimize inhalation exposure.
- Remove contaminated clothing and shoes. Wash clothing before re-using.
- Any unavoidable deposit of dust must be regularly removed.

(b) Conditions for Safe Storage, Including Incompatibilities:

- Keep packaging closed and tightly sealed when not in use.
- Store in a dry, climate-controlled location to prevent moisture and contaminant exposure.
- *Incompatible materials*: Strong acids and strong bases.

Section 8 – Exposure Controls / Personal Protection

(a) Permissible Exposure Limits (PELs):

CAS# 1344-28-1

- PEL-TWA 15mg/m^3 (OSHA, total); 5mg/m^3 (OSHA, resp)

CAS# 7631-86-9

- PEL-TWA 15mg/m^3 (OSHA, total); 5mg/m^3 (OSHA, resp); 5mg/m^3 (OSHA, fume)
- TLV-TWA 6mg/m^3 (ACGIH)

(b) Monitoring Methods: No information found.

(c) Appropriate Engineering Controls:

Provide adequate exhaust ventilation, general or local, to keep airborne concentrations below the permissible exposure limits. Safety showers and eyes wash stations should be accessible.

(d) Personal Protective Equipment (PPE):

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Thick, work appropriate clothing is recommended. Clothing should not be too loose.

Respirators: It is suggested to use an appropriate respirator if there is dust in the air or if irritation or other symptoms are experienced.

Section 9 – Physical and Chemical Properties

Form: Solid
Color: Tan
Odor: None
pH: 8~11 (AS)
Boiling Point/Range: N/A
Melting Point/Range: N/A
Decomposition Temperature: N/A
Density: 0.5~0.8 g/mL
Ignition Temperature: N/A
Solubility: Soluble in acid or soda, insoluble in water

Section 10 – Stability and Reactivity

Chemical stability: Stable under normal conditions.

Reactivity: Stable under recommended storage and handling conditions (see **SECTION 7**, handling and storage).

Conditions to avoid: The exposure of the water to the material can cause a rise in temperature from an exothermic reaction and the heat of adsorption, which may cause burns when in contact with skin, eyes, lungs, or stomach.

Incompatible materials: Sudden contact with high concentrations of chemicals having high heats of adsorption such as olefins, HCl, etc.

Section 11 – Toxicological Information

(a) Information on the Likely Routes of Exposure:

Inhalation: Cough.

Ingestion: Abdominal pain.

Eye contact: Redness, irritation, and/or pain.

(b) Information on toxicological characteristics

CAS# 1344-28-1

- LD50: >5000 mg/Kg (oral, rat)

CAS# 7631-86-9

- LD50: >5510 mg/Kg (oral, rat)
- LD50: >5000 mg/Kg (dermal, rabbit)

Carcinogenicity: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Sensitization rate: Not available.

Teratogenicity: Not available.

Section 12 – Ecological Information

Ecological toxicity: Not available.
Ecological degradation: Not available.
Abiology degradation: Not available.
Aquatic toxicity: Not available.

Section 13 – Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification and to ensure that disposal methods are compliant with governmental and environmental regulations.

Section 14 – Transport Information

Not Regulated as a Hazardous Material for Transportation: D.O.T; TDG; IMDG; IATA; DGR.
UN: N/A
Classification: N/A
Packaging sign: N/A
Shipping name: N/A
Packaging category: N/A
Packaging method: N/A
Shipping notice: N/A

Section 15 – Regulatory Information

Regulatory Information: Reference to the local, national and EU / international regulations.

Safety, Health and Environmental Regulations specific for the product in question					
CAS Number	**USA TSCA**	**EU EINECS**	**Korea ECL**	**China IECSC**	**Canada DSL**
1318-02-1	Listed	Listed	Listed	Listed	Not Listed
Remark: The above-mentioned search results are based on the Non-Confidential Inventory					
EU REACH: The substance has been registered under REACH Regulation.					

Section 16 – Other Information

(a) Preparation and Revision Information:

Issue time: 2015-5-19

Issue department: Technical Department.

(b) Abbreviations and Acronyms:

TSCA	Toxic Substances Control Act, The American chemical inventory
DSL	Domestic Substances List
EINECS	European Inventory of Existing Commercial chemical Substances
ECL	Existing Chemicals List, the Korean chemical inventory
IECSC	Inventory of existing chemical substances in China

(c) **DISCLAIMER**

The information provided in this SDS is all relevant data fully and truthfully. However, the information is provided without any warranty on absolute extensiveness and accuracy. This SDS was prepared to provide preventive safety measures for material users and for professional training. The user who obtained this SDS is responsible for independent judgment for the applicability and accuracy of this SDS. We do NOT assume responsibility for incidents or damages, whether intentional or accidental.

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