

## SPI Supplies Division

Structure Probe, Inc.

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Manufacturer's CAGE: 1P573

## Safety Data Sheet

Date Effective: October 4, 2017

SPI Catalog # 02017-MB, 02017-RA

SPI-Chem™ Molecular Sieve Type 4A

### Section 1.1: Identification

Chemical Name/Synonyms ..... Molecular Sieves Type 4A; synthetic zeolite; Aluminum sodium silicate

Product or Trade Name ..... SPI-Chem™ Molecular Sieve Type 4A,

CAS #'s ..... 1344-00-9

### Section 1.2: Relevant Uses/Restrictions

Adsorbent / Desiccant

### Section 1.3: Supplier of the Safety Data Sheet

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### Section 1.4: Emergency telephone number

Emergencies

Contacting CHEMTREC:

24 Hour Emergency Use Only #'s...

Worldwide phone: 1-(703)-741-5970

Toll-free phone: 1-(800)-424-9300 USA + Canada only

### Section 2: Hazard Identification

2.1 Classification of the substance

**GHS classification in accordance with 29 CFR 1910 (OSHA HCS)**

Skin irritation (category 3)

Eye irritant (category 2B)

Specific organ toxicity – single exposure (category 3)

2.2 GHS Label elements

## Pictogram



**Signal Word:** Warning

### Hazard statements:

- H316 Causes mild skin irritation.
- H320 Causes eye irritation.
- H335 May cause respiratory irritation.

### Precautionary statements:

- P261 Avoid breathing dust.
- P264 Wash hands thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.
- P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
- P312 CALL A POISON CENTER if you feel unwell.
- P332 + P313 If skin irritation occurs: Get medical advice.
- P227 + P313 If eye irritation persists: Get medical advice.
- P403 + P233 Store in well-ventilated place. Keep container tightly closed.
- P501 Dispose of contents / container in accordance with local regulation(s).

**Unknown percentage statements (if needed):** None.

### 2.3 Other Hazards:

#### Hazardous Material Information System USA

Health ..... 1  
Fire Hazard ..... 0  
Reactivity ..... 0  
Personal Protection .....

#### NFPA Rating (estimated)

Health ..... 1  
Flammability ..... 0  
Reactivity ..... 1

Hazard scale: 0=Minimal; 1=Slight; 2=Moderate; 3=Serious; 4=Severe

## **Section 3: Composition**

### 3.1 Substances:

Molecular Sieves type 4A  
CAS # 1344-00-9

## **Section 4: First Aid Measures**

### **4.1 Description of first aid measures:**

#### **General advice:**

Consult a qualified medical professional. Show this data sheet to the doctor in attendance. Move out of the dangerous area.

#### **Inhalation:**

Move individual to fresh air.

#### **Skin Contact:**

Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.

#### **Eye Contact:**

Flush eyes with plenty of water. Check for and remove any contact lenses if possible. Continue flushing for at least 15 minutes. Get medical attention if irritation occurs.

#### **Ingestion:**

Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, get medical attention immediately. Loosen tight clothing such as a collar, tie, or belt.

**Self-protection of the first aider:** No additional information available.

### **4.2 Most important symptoms and effects, both acute and delayed:**

The most important known symptoms and effects are described in the labelling (see Section 2.2) and/or Section 11.

### **4.3 Indication of any immediate medical attention and special treatment needed:**

No data available.

## **Section 5: Fire Fighting Measures**

### **5.1 Extinguishing media:**

Product is non-flammable.

### **5.2 Special hazards arising from the substance or mixture:**

Spent or used product may contain adsorbed flammable or otherwise hazardous substances upon exposure to heat or water. Product user must identify adsorbed substances and inform fire-fighters of potential hazards.

### **5.3 Advice for firefighters:**

Special protective equipment – standard PPE and equipment. Active product gives off heat when exposed to water and can burn tissue. Flush with water to dissipate the heat. If dusty conditions prevail, a dust mask is recommended.

## **Section 6: Accidental Release Measures**

### **6.1 Personal precautions:**

Use personal protective equipment.  
Avoid breathing dust.  
Ensure adequate ventilation.

For personal protection, see Section 8.

**6.2 Environmental precautions:**

Not applicable.

**6.3 Methods and material for containment and cleaning up:**

Use appropriate tools to put the spilled solid in a convenient waste disposal container.  
Dispose material according to local and regional requirements.

**6.4 Reference to other sections:**

See Section 13 for information on disposal.

## ***Section 7: Handling and Storage***

**7.1 Precautions for safe handling:**

Avoid contact with skin and eyes.  
Do not breathe dust.  
For precautions, see Section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities:**

Suitable for any general chemical storage area.  
Keep container tightly closed.

**7.3 Specific end uses:**

Adsorbent / Desiccant

This material is not being offered for clinical or diagnostic applications, agricultural uses or for human or animal consumption.

## ***Section 8: Exposure Controls and Personal Protection***

**8.1 Control parameter and Personal Protection:**

Contains no substances with occupational exposure limit values.

**8.2 Exposure controls:**

**8.2.1 Appropriate engineering controls:**

Use process enclosures, local exhaust ventilation, or other engineering controls to limit airborne levels.  
Handle in accordance with good industrial hygiene and safety practice.  
Wash hands before breaks and at the end of workday.

**8.2.2 Individual protection measures:**

Use safety glasses, lab coat, and dust respirator.  
Be sure to use an NIOSH approved certified respirator or equivalent.

**8.2.3 Environmental exposure controls:**

No additional relevant information available.

## ***Section 9: Physical and Chemical Properties***

9.1 Information on basic physical and chemical properties.

Physical state: Solid (Beads)

Color: White, Grey, Beige  
Odor: Odorless  
Odor threshold: No data available  
pH: No data available  
Melting point/Freezing point: No data available  
Boiling point/Boiling point range: No data available  
Flash Point: No data available  
Evaporation rate: No data available  
Flammability (solid, gas): No data available  
Upper/lower flammability or explosive limits: No data available  
Vapor Pressure: No data available  
Vapor density: No data available  
Relative density: No data available  
Solubility: No data available  
Partition coefficient (n-octanol/water): No data available  
Auto-ignition temperature: No data available  
Decomposition temperature: No data available  
Viscosity: No data available  
Explosive properties: No data available  
Oxidizing Properties: No data available

## **9.2 Other information:**

No further relevant information available.

## **Section 10: Stability and Reactivity**

### **10.1 Reactivity:**

No data available.

### **10.2 Chemical Stability:**

The product is stable under normal ambient temperatures and anticipated storage and handling conditions.

### **10.3 Possibility of Hazardous Reactions:**

Used product may release adsorbed hazardous materials upon exposure to heat, humid air, or water.

### **10.4 Conditions to avoid:**

Heat, humid air, water.

### **10.5 Incompatible materials:**

Prevent unintentional contact with water or moisture.

### **10.6 Hazardous decomposition products:**

Not applicable.

## **Section 11: Toxicological Information**

### Information on the likely routes of exposure

#### 11.1 Information on toxicological effects

##### A. Acute toxicity:

LD50	Oral (rat)(male and female)	>5,000 mg/Kg
LD50	Dermal (rabbit)	>= 5,000 mg/Kg

##### B. Skin corrosion/irritation:

No data available.

##### C. Serious eye damage/irritation:

No data available.

##### D. Respiratory or skin sensitization:

No data available.

##### E. Germ cell mutagenicity:

No data available.

##### F. Carcinogenicity:

IARC: Group 3: Not classifiable as to its carcinogenicity to humans (Silicic acid, aluminum sodium salt).

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by OSHA.

##### G. Reproductive toxicity:

No data available.

##### H. STOT-single exposure:

Inhalation – May cause respiratory irritation.

##### I.. STOT-repeated exposure:

No data available.

##### J. Aspiration hazard:

Dust may irritate lungs.

## **Section 12: Ecological Information**

#### 12.1 Toxicity:

No data available.

**12.2 Persistence and degradability:**

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

**12.3 Bio-accumulative potential:**

No data available.

**12.4 Mobility in soil:**

No data available.

**12.5 Results of PBT and vPvB assessment:**

No data available.

**12.6 Other adverse effects:**

No data available.

**Section 13: Disposal Considerations****13.1 Waste treatment methods:**

**Product:** Dispose of in accordance with federal, state, and local environmental control regulations.

**Contaminated packaging:** Packaging may contain residual dust. Dispose of in accordance with federal, state, and local environmental control regulations.

**Section 14: Transport Information**

**DOT:** Not a dangerous good.

**IATA:** Not a dangerous good.

**IMDG:** Not a dangerous good.

**Section 15: Regulatory Information****15.1 Safety, health and environmental regulations/ legislation specific for the substance or mixture****Federal and State Regulations:****SARA 302 Components:**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 311/312 Hazards:**

No SARA hazards.

**SARA 313:**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (de Minimis) reporting levels established by SARA Title III, Section 313.

**Massachusetts Right to Know Components:**

No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right to Know Components:**

Molecular Sieve            CAS # 1344-00-9

**New Jersey Right to Know Components:**

Molecular Sieve      CAS # 1344-00-9

**California Proposition 65 Components:**

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

**Other countries:**

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

**DSCL (EEC):** This product is not classifiable according to the EU regulations.

**15.2 Chemical Safety Assessment**

Date of Preparation: 04 October 2017.

**Abbreviations and acronyms**

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

CMRG: Chemical Manufacturer's Recommended Guidelines

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

AIHA: American Industrial Hygiene Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bio-accumulative and Toxicological

vPvB: very Persistent and very Bio-accumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

STEL: Short Term Exposure Limit

CEIL: Ceiling

**Section 16: Other Information****Disclaimer of Liability:**

Caution! Do not use SPI Supplies products or materials in applications involving implantation within the body; direct or indirect contact with the blood pathway; contact with bone, tissue, tissue fluid, or blood; or prolonged contact with mucous membranes. Products offered by SPI Supplies are not designed or manufactured for use in implantation in the human body or in contact with internal body fluids or tissues. SPI Supplies will not provide to customers making devices for such applications any notice, certification, or information necessary for such medical device use required by US FDA (Food and Drug Administration) regulation or any other statute. SPI Supplies and Structure Probe, Inc. make no representation, promise, express warranty or implied warranty concerning the suitability of these materials for use in implantation in the human body or in contact with internal body tissues of fluids.



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