micromeritics®

SAFETY DATA SHEET

Zeolyst™ CBV 600 Zeolite H-SUSY

Date of Preparation: 07/01/2014

SDS #: 004-16844-00MSDS

SECTION 1: IDENTIFICATION

Product Identification: ZEOLYST™ CBV 600 Zeolyte H-SUSY

Chemical Formula: $5 \cdot SiO_2 / Al_2O_3$

CAS Number: This product is a mixture under TSCA. CAS No. for identification purposes: 1318-02-1

Other Designations: Zeolyte type SUSY, hydrogen form

Volumes: None

Recommended Use: For laboratory use only.

Restrictions: For laboratory use only.

Supplier Information:

Micromeritics Instrument Corp.	Contact:	Human Resources
4356 Communications Drive	Phone:	(770) 662-3636
Norcross, GA 30093-2901 USA	Fax:	(770) 662-3696

Manufacturer: Zeolyst International Southpoint, P.O. Box 830, Valley Forge, PA 19482-0830 24 hour Emergency Phone Number 610-651-4200

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification: Category 5 Acute Toxicity: Oral/Inhalation

Signal word: None

Hazard Statements:

H303: May be harmful if swallowed

H316: Causes mild skin irritation

H320: Causes eye irritation

H333: May be harmful if inhaled

Pictograms: Not applicable

Precautionary Statements:

P280: Wear protective gloves/protective clothing/eye protection/face protection

P302+350: IF ON SKIN: Gently wash with soap and water

Potential Health Effects

Primary Entry Routes: Inhalation, ingestion

Target Organs: Not Applicable

Acute Effects

Inhalation: Dust may irritate respiratory tract.

Eye: May cause abrasion or irritation to eyes.

Skin: May cause dehydration or irritation to skin.

Ingestion: No known adverse effects.

Carcinogenicity: Material not listed (IARC, NTP, and OSHA) as cancer-causing agent

Medical Conditions Aggravated by Long-Term Exposure: Asthma and lung diseases, skin diseases.

Chronic Effects: No known chronic hazards.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient Name	CAS Number	% wt or % vol.
Sodium Oxide	12401-86-4	0.2
Aluminum Oxide	1344-28-1	25.3
Silica	14808-60-7	74.5

Trace Impurities:

	OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH
Ingredient	**TWA**	**STEL**	**TWA**	**STEL**	**TWA**	**STEL**	**IDLH**
Sodium Oxide	None estab.	none estab.	5 mg/m^3	none estab.	none estab.	none estab.	none estab.
Aluminum Oxide	10 mg/m^3	none estab.	10 mg/m^3	none estab.	none estab.	none estab.	none estab.
Silica	0.1 mg/m^3	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.

SECTION 4: FIRST-AID MEASURES

Inhalation: If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory discomfort occurs.

Eye Contact: No specific first aid measures are required because this material is not expected to cause eye irritation. As a precaution remove contact lenses, if worn, and flush eyes with water.

Skin Contact: Remove contaminated clothing and shoes. Wash thoroughly with soap and water. Wash or clean contaminated clothing and shoes before reuse.

Ingestion: No specific first aid measures are required because this material is not expected to be harmful if swallowed. Do not induce vomiting. As a precaution, give the person a glass of water or milk to drink and get medical advice. Never give anything by mouth to an unconscious person.

Special Precautions/Procedures: Avoid contact with eyes, skin, and clothing. Avoid breathing dust. Wash thoroughly after handling. Wash contaminated clothing before re-use. Use with adequate ventilation.
Note to Physicians: Not applicable.

SECTION 5: FIRE-FIGHTING MEASURES

Flammability Classification: Not Applicable

Extinguishing Media: Use any suitable for adjacent material

Unusual Fire or Explosion Hazards: None

Hazardous Combustion Products: Not Applicable

Fire-Fighting Instructions: Not Applicable

Fire-Fighting Equipment: Self-contained breathing apparatus

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal protection: Wear safety goggles, body-covering protective clothing, chemical resistant gloves, and rubber boots, NIOSH-approved dust respirator where dust occurs.

Environmental Hazards: Sinks in water. No known environmental hazards.

Small spill cleanup: Carefully shovel or sweep up spilled material and place in suitable container. Avoid generating dust. Use appropriate Personal Protective Equipment (PPE). See section 8.

Large spill cleanup: Keep unnecessary people away; isolate hazard area and deny entry. Do not touch or walk through spilled material. Carefully shovel or sweep up spilled material and place in suitable container. Avoid generating dust. Use appropriate Personal Protective Equipment (PPE). See section 8.

SECTION 7: HANDLING AND STORAGE

Handling Precautions: Wear appropriate personal protective equipment *(see Section 8).* Prohibit any eating, drinking, and smoking in areas where this material is handled, stored, and processed. If air contamination is above accepted level, use approved respirator. Keep lid closed when material is not in use. Avoid contact with eyes, skin, and clothing. Do not reuse container, even after material has been exhausted, as empty containers can retain product residue and can compromise the quality of use.

Handling Description: Prevent small spills and leakages to avoid slip hazard.

Storage Precautions: Store in agreement with local regulations. Store in original container protected from direct sunlight in a cool, dry, and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Store in original containers or clean metal, plastic, or fiber containers.

Storage Criteria: Chemical storage.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:
Ventilation: Use a well-ventilated area.

Administrative Controls:
Respiratory Protection: Use NIOSH-certified dust respirator where dust occurs. Observe OSHA regulations for respirator use (29 CFR 1910.134).

Personal Protective Equipment:
Eye/Face Protection: Wear safety glasses with side shields at all times.
Skin Protection: Wear protective clothing if engineering controls or work practices are not adequate to prevent skin contact. Selection of protective clothing may include gloves, apron, boots, and complete facial protection depending on operations conducted. Suggested materials for protective gloves include: nitrile, rubber.

General Considerations: Consider the potential hazards of this material (see hazards identification), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Flash Point: Noncombustible
Flash Point Method: Not Applicable
Burning Rate: Not Applicable
Autoignition Temperature: Not Applicable
LEL: Not Applicable
UEL: Not Applicable

Physical State: Solid
Appearance and Odor: White powder, odorless
Odor Threshold: Not applicable

Solubility: Negligible
Other Solubilities: Not applicable
Boiling Point: Not applicable

Vapor Pressure: Not applicable
Vapor Density (Air=1): Not applicable
Formula Weight: Not applicable
Density: Not applicable
Specific Gravity: Greater than 1
pH: Water dispersions are acidic, pH: 4-6

Freezing/Melting Point: Not applicable
Viscosity: Not applicable
Refractive Index: Not applicable
Surface Tension: Not applicable
% Volatile: Not applicable
Evaporation Rate: Not applicable

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable
Polymerization:
Chemical Incompatibilities: Absorbs water from air and fluids. Generates heat when it absorbs water.
Conditions to Avoid: None known.
Materials to Avoid: Absorbs water from air and fluids. Generates heat when it absorbs water.
Hazardous Decomposition Products: None indicated

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Data: When tested for primary irritation potential, similar materials caused mild eye irritation and were non-irritating to the skin. Human experience with similar materials indicates that prolonged or repeated contact may dry skin and cause irritation.
This material has not been tested for acute inhalation toxicity. It contains fine particles which can cause respiratory irritation.
The acute oral toxicity of this material has not been tested.
There are currently no reports of human toxicity for ingested zeolite.

Subchronic Data: This material has not been tested for subchronic toxicity potential.

Special Studies: This material has not been tested for chronic inhalation toxicity.

Zeolite Beta is not listed by NTP, IARC, or OSHA as a carcinogen.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: This material has not been tested for ecotoxicity potential. There are presently no known reports of adverse environmental effects.
Environmental Fate: Does not bioconcentrate in animals.
Physical/Chemical: Sinks in water.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal Methods:
The generation of waste should be avoided or minimized wherever possible.
This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues.

Disposal Regulatory Requirements: Landfill according to local, state, and federal regulations.
Disposed material is not a RCRA Hazardous waste.

Container Cleaning and Disposal: Not Available

SECTION 14: TRANSPORT INFORMATION

DOT Transportation Data (49 CFR 172.101):

Shipping Name: Not regulated
Shipping Symbols: Not Applicable
Hazard Class: Not regulated
ID No.: Not regulated
Packing Group: Not Applicable
Label: Not Applicable
Special Provisions (172.102):
Not Applicable

Packaging Authorizations
a) Exceptions: Not Applicable
b) Non-bulk Packaging: Not Applicable
c) Bulk Packaging: Not Applicable

Quantity Limitations
a) Passenger, Aircraft, or Railcar: Not Applicable
b) Cargo Aircraft Only: Not Applicable

Vessel Stowage Requirements
a) Vessel Stowage: Not Applicable
b) Other: Not Applicable

SECTION 15: REGULATORY INFORMATION

EPA Regulations: Not Applicable
OSHA Regulations: Not Applicable
State Regulations: Not Applicable

TSCA Inventory: This product is a mixture under TSCA. CAS No. for identification purposes: 1318-02-1.

SECTION 16: OTHER INFORMATION

Prepared By:
Revision Notes: Not Applicable
Additional Hazard Rating Systems: Not Applicable

Disclaimer: The information presented herein is believed to be accurate and was obtained from sources believed to be reliable. However, the information is provided without any representation or warranty, expressed or implied, with respect to its accuracy or completeness. It is the users' responsibility to determine the suitability of this product and the relevance of this information for their use.

Comments: Aluminum Oxide is subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372. MX1583S and MX1583T were previously on MSDS with MX1583R.