

# Material Safety Data Sheet

## VOLCANIC ASH

Carolina Biological Supply Company

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Revised 9/25/00

Replaces None

Printed 3/02

### 1. Product Description

**Product Name:** Volcanic ash  
**Product Code(s):** Various  
**Size:** Various  
**Chemical Name:** Product is a mixture  
**CAS Number:** Product is a mixture  
**Formula:** See section 2  
**Synonyms:** None known  
**Distributor:** Carolina Biological Supply Company  
2700 York Road  
Burlington, NC 27215

**Chemical Emergency Information:**  
800-227-1150 (8am-5pm [ET] M-F)  
**Chemtrec (Transportation Spill Response 24 hours):**  
800-424-9300

### 2. Composition/Information on Ingredients

**Principle Hazardous Components:** Ash composition can vary widely from sample to sample.

Published data indicates that Mount St. Helens ash can contain the following: sodium silicates, calcium silicates, aluminum silicates, crystalline free silica (cristabolite and quartz). Greater than 90% of the ash particles are less than 10 microns in diameter.

**TLV and PEL units:**

For respirable cristabolite  
ACGIH-TLV: 0.05 mg/m<sup>3</sup>  
OSHA-PEL: 5 mg/m<sup>3</sup>  
For respirable quartz  
ACGIH-TLV: 0.1 mg/m<sup>3</sup>  
OSHA-PEL: 10 mg/m<sup>3</sup>

### 3. Hazardous Identification

**Emergency Overview:** Avoid contact with skin or eyes. Wear goggles to protect particles from scratching the eye. Keep skin covered to avoid irritation or burns.

**Potential Health Effects:**

**Eyes:** May cause irritation.

**Skin:** May cause irritation.

**Ingestion:** May cause gastrointestinal discomfort.

**Inhalation:** May cause irritation to respiratory tract.

### 4. First Aid Measures

**Emergency and First Aid Procedures:**

**Eyes** - Flush with water for at least 15 minutes, raising and lowering eyelids occasionally. Get medical attention if irritation persists.

**Skin** - Thoroughly wash exposed area for at least 15 minutes. Remove contaminated clothing. Launder contaminated clothing before reuse. Get medical attention if irritation persists.

**Ingestion** - If swallowed, if conscious, give plenty of water and induce vomiting immediately as directed by medical personnel. Immediately call a physician or poison control center. Never give anything by mouth to an unconscious person.

**Inhalation** - Remove to fresh air. Give oxygen if breathing is difficult; give artificial respiration if breathing has stopped. Keep person warm, quiet, and get medical attention.

### 5. Firefighting Procedures

**Flash Point (Method Used):** N/A

**NFPA Rating:** Health: 2

Fire: 1

Reactivity: 0

**Extinguisher Media:** Use dry chemical, CO<sub>2</sub> or appropriate foam.

**Flammable Limits in Air % by Volume:** N/A

**Autoignition Temperature:** N/A

**Special Firefighting Procedures:** Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.

**Unusual Fire and Explosion Hazards:** None known

### 6. Spill or Leak Procedures

**Steps to be Taken in Case Material is Released or Spilled:**

Ventilate area of spill. Clean-up personnel should wear proper protective equipment. Avoid creating dust. Sweep or scoop up and containerize for disposal.

### 7. Special Precautions

**Precautions to be Taken in Handling or Storing:** Avoid contact with eyes or skin. Wash immediately upon contact. Material is suitable for general chemical storage. Store in a tightly closed container.

**Other Precautions:** N/A

# Material Safety Data Sheet

## VOLCANIC ASH (cont.)

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### 8. Special Protection Information

**Respiratory Protection (Specify Type):** None expected to be needed under normal conditions of use.

**Ventilation:** Local Exhaust:  
Mechanical (General): No  
Special: No  
Other: No

**Protective Gloves:** Rubber, neoprene, PVC, or equivalent.

**Eye Protection:** Splash-proof chemical safety goggles should be worn at all times.

**Other Protective Clothing or Equipment:** Lab coat, eye wash, and safety shower.

### 9. Physical Data

**Molecular Weight:** Product is a mixture

**Melting Point:** N/A

**Boiling Point:** N/A

**Vapor Pressure:** N/A

**Vapor Density(Air=1):** N/A

**Specific Gravity(H<sub>2</sub>O=1):** N/A

**Percent Volatile by Volume:** N/A

**Evaporation Rate(H<sub>2</sub>O=1):** N/A

**Solubility in Water:** Negligible

**Appearance and Odor:** Odorless, small pieces of rock and glass

### 10. Reactivity Data

**Stability:** Stable

**Conditions to Avoid:** Generating dust

**Incompatibility (Materials to Avoid):** None known

**Hazardous Decomposition Products:** None known

**Hazardous Polymerization:** Will not occur

### 11. Toxicity Data

**Toxicity Data:** To the best of our knowledge, the toxicological properties of volcanic ash have not been thoroughly evaluated.

**Effects of Overexposure:**

Acute: See section 3

Chronic: None known for volcanic ash. Chronic exposure to certain silicates which may be present in the ash can result in silicosis and other chronic respiratory diseases.

**Conditions Aggravated by Overexposure:** Respiratory conditions

**Target Organs:** Lungs, eyes

**Primary Route(s) of Entry:** Inhalation, skin and eye contact

### 12. Ecological Data

**EPA Waste Numbers:** None

### 13. Disposal Information

**Waste Disposal Methods:** Dispose in accordance with all applicable Federal, State and Local regulations.

Always contact a permitted waste disposer (TSD) to assure compliance.

### 14. Transport Information

N/A

### 15. Regulatory Information

**EPA TSCA Status:** On TSCA Inventory

**Hazard Category for SARA Section 311/312 Reporting:** Acute

Product or Components	SARA Sec. 313				
	SARA EHS Sec. 302 TPQ	Chemicals Name List	CERCLA Sec. 103 RQ lbs.	RCRA Sec. 261.33	
Volcanic ash	No	No	No	No	No

### 16. Additional Information

The information provided in this Material Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the Material Safety Data Sheet. Any employer must carefully assess the applicability of any information contained herein in regards to the particular use to which the employer puts the material.

#### Glossary

**ACGIH** American Conference of Governmental Industrial Hygienists

**CAS Number** Chemical Services Abstract Number

**CERCLA** Comprehensive Environmental Response, Compensation, and Liability Act

**DOT** U.S. Department of Transportation

**IARC** International Agency of Research on Cancer

**N/A** Not Available

**NTP** National Toxicology Program

**OSHA** Occupational Safety and Health Administration

**PEL** Permissible Exposure Limit

**ppm** parts per million

**RCRA** Resource Conservation and Recovery Act

**SARA** Superfund Amendments and Reauthorization Act

**TLV** Threshold Limit Value

**TSCA** Toxic Substances Control Act