



## MATERIAL SAFETY DATA SHEET

## BENTONITE CLAY

# MSDS

### 1. PRODUCT NAME AND COMPANY IDENTIFICATION

Product Name: BENTONITE CLAY, SODIUM or CALCIUM TYPE  
Product Use: Personal Care Formulations  
Company Name: Natural Sourcing  
Company Address: 341 Christian Street, Oxford, CT 06478, USA  
Date Issued: 04/11/2013  
Emergency Telephone Number: Chemtrec Tel: (800) 262-8200

### 2. COMPOSITION/INGREDIENT INFORMATION

Ingredients: Natural mineral, raw material, montmorillonite.  
Naturally occurring hydrated aluminosilicate of sodium,  
calcium, magnesium, and iron.  
Preservatives & Solvents: None  
Other Gases & Liquids: None  
Other Solids: Respirable crystalline silica (CAS #s 7631-86-9 and  
14808-60-7). Estimated quantity less than 2%.  
CAS #: 1302-78-9

### 3. HAZARDS IDENTIFICATION

Eyes: Mechanical irritant  
Skin: Possible drying resulting in dermatitis  
Ingestion: Not expected to be a hazard  
Short term exposure to dust levels exceeding the PEL may  
cause irritation of respiratory tract resulting in a dry cough.  
Inhalation: Chronic exposure to free silica contain in airborne bentonite  
dust where levels are higher than TLVs may lead to  
development of silicosis or other respiratory problems.  
Persistent dry cough and labored breathing upon exertion are  
symptomatic.  
Risk of Slips/Falls: To use in complete safety, respect exposure limits.  
Dampening the floor while cleaning a clay storage site may  
render it extremely slippery. Dry cleaning is recommended if  
people are required to continue working on the site.

### 4. FIRST AID MEASURES

Eyes: Flush with plenty of water or eye wash solution for 15 minutes.  
Get medical attention if irritation persists.  
Skin: Due to its use in cosmetics, no adverse effects are expected.  
May dry mucous and skin. Wash with soap and water.

Ingestion:	No information
Inhalation:	Remove to fresh air. If symptoms of irritation persist, seek medical advice. Inhalation may aggravate respiratory illness.
Medical Conditions Generally Aggravated by Exposure:	Individuals with pulmonary and/or respiratory disease, including but not limited to asthma and bronchitis should be precluded from exposure to dust.

#### 5. FIRE FIGHTING MEASURES

Extinguishing Media:	N/A
Special Firefighting Procedures:	N/A
Unusual Fire & Explosion Hazards:	N/A
HMIS Rating:	0
Note:	Will not burn

#### 6. ACCIDENTAL RELEASE MEASURES (STEPS FOR SPILLS)

Precautions:	Avoid breathing dust. Wear respirator approved for silica bearing dust. Vacuum up to avoid generating airborne dust. Avoid using water. Slippery when wet.
Disposal:	Dispose of in accordance with Federal, State and Local Regulations.

#### 7. HANDLING AND STORAGE

Handling	
Safe Handling:	Avoid dust formation. Provide appropriate ventilation where dust forms. In the event where there is insufficient ventilation wear suitable respirator approved for silica bearing dust.
Storage	
Requirements for Storage Areas and Containers:	Store in closed containers below 30°C in well ventilated areas. Very slippery when wet.

#### 8. EXPOSURE CONTROL/PERSONAL PROTECTION

Exposure Value Limits:	Respect the regulatory provisions for dust (inhalable and breathable) and crystalline silica.
Eye:	Safety glasses should be worn.
Skin/Body:	Gloves should be worn.
Respiratory:	Use NIOSH/MSHA approved respirators for silica bearing dust.
Ventilation:	Provide appropriate ventilation and filters in places where dust may be generated.
Other:	Evaluate need based on application. Slip proof shoes may be worn where spills may occur.
Work/Hygiene Practice:	Normal work and hygiene practices

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Powder
Color:	Grey
Odor:	Characteristic
Solubility in Water:	Insoluble
Vapor Density:	Heavier than air.

Specific Gravity: 2.45-2.6

#### 10. STABILITY AND REACTIVITY

Stability: Stable  
Incompatibility (Materials to Avoid): N/A  
Hazardous Decomposition or Byproducts: N/A  
Conditions to Avoid: N/A

#### 11. TOXICOLOGICAL INFORMATION

Exposure Limits: OSHA PEL @ 8 hr. TWA) 15 mg/m<sup>3</sup> (total dust)  
5 mg/m<sup>3</sup> (respirable dust)  
Reparable crystalline silica : 0.1 mg/m<sup>3</sup>

Signs & Symptoms of Exposure: Prolonged or high exposure to respirable dust may cause shortness of breath and other respiratory effects. The international agency for research on cancer has determined that crystalline silica inhaled in the form of quartz or cristobalite in conjunction with the use of these materials from occupational sources is carcinogenic to humans. (Group 1 – carcinogenic to humans) (Refer to IARC monograph 68, Silica, some silicates and organic fibers published June 1997). The National Toxicology Program classifies respirable crystalline silica as “reasonable anticipated to be a carcinogen”. For further information, see: “Adverse Effects of Crystalline Silica Exposure” published by the American Thoracic Society, medical section of the American Lung Association, American Journal of Respiratory and Critical Care Medicine, Volume 155, pages 761-765, 1997.

Carcinogenicity: The small quantities of crystalline silica (quartz) found in this material are, under normal conditions, naturally coated with an unremovable layer of amorphous silica and/or clay. IARC (Vol 68, 1997, pp 191-192) states that crystalline silica (quartz) can differ in toxicity depending on the minerals with which it is combined, citing studies in IARC (Vol 42, 1987, p 86) which states that the toxic effect of crystalline silica (quartz) is reduced by the protective effect.... Due mainly to clay minerals....”.

Medical Conditions Generally Aggravated by Exposure: Individuals with pulmonary and/or respiratory disease, including but not limited to asthma and bronchitis should be precluded from exposure to dust.

#### 12. ECOLOGICAL INFORMATION

Ecotoxicity: No known ecological hazards are associated with this product.

#### 13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods: Dispose of according to local, state and federal regulations, and in a manner that does not pose a risk due to emission of breathable dust.

#### 14. TRANSPORT INFORMATION

DOT Classification: Not a DOT Hazardous substance.

#### 15. REGULATORY INFORMATION

No Information

#### 16. ADDITIONAL INFORMATION

This information is provided for documentation purposes only.

The complete range of conditions or methods of use are beyond our control therefore we do not assume any responsibility and expressly disclaim any liability for any use of this product. Information contained herein is believed to be true and accurate however, all statements or suggestions are made without warranty, expressed or implied, regarding accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof. Compliance with all applicable federal, state, and local laws and local regulations remains the responsibility of the user.

This safety sheet cannot cover all possible situations which the user may experience during processing. Each aspect of your operation should be examined to determine if, or where, additional precautions may be necessary. All health and safety information contained in this bulletin should be provided to your employees or customers.