



AMERICAN COLLOID COMPANY

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Arlington Heights, Illinois 60004-1434 • USA
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MATERIAL SAFETY DATA SHEET - May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

PRODUCT NAME: VOLCLAY FOUNDRY

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Section I

MANUFACTURER'S INFORMATION

Manufacturer's Name & Address:

American Colloid Company
1500 West Shure Drive
One North Arlington
Arlington Heights, Illinois 60004

Emergency Telephone Number: 312-392-4600
Telephone Number for Information: 312-392-4600
Date Prepared: August 31, 1988

Section II

HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Hazardous Components

(Specific Chemical Identity: Common Name(s))

Hazardous Components (Specific Chemical Identity: Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Crystalline Quartz CAS# 14808-60-7				
Total Dust (Quartz)	$\frac{30\text{mg}/\text{m}^3}{\% \text{SiO}_2 + 2} = 3\text{mg}/\text{m}^3$			2-6%
Respirable Crystalline Quartz				
present (TWA)	$\frac{10\text{mg}/\text{m}^3}{\% \text{SiO}_2 + 2} = 1\text{mg}/\text{m}^3$	0.1mg/m ³ TWA	NIOSH 50ug/m ³ TWA	<2%
proposed (TWA)	0.1mg/m ³	50ug/m ³ TWA		
Total Nuisance Dust	15mg/m ³	10mg/m ³		
Respirable Nuisance Dust	5mg/m ³	5mg/m ³		

* WARNING:

This clay product contains a small amount of crystalline silica which may cause delayed respiratory disease if inhaled over a prolonged period of time. Avoid breathing dust. Use NIOSH/MSHA approved respirator where TLV for crystalline silica may be exceeded. IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to Humans (volume 42, 1987) concludes that there is "limited evidence" of the carcinogenicity of crystalline silica to humans. IARC classification 2A.

PRODUCT IDENTIFICATION

Chemical Name: Bentonite Clay
Chemical Family: Natural Mineral, Montmorillonite
CAS No.: 1302-78-9
FORMULA: Naturally occurring hydrated aluminosilicate of sodium, calcium, magnesium, and iron
NFPA/HMIS: Health - 0, Fire - 0, Reactivity - 0, Specific Hazard - See Section VI
Dot Class: Not Regulated



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Section III PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point	- Not Applicable	Specific Gravity (H ₂ O = 1)	- 2.5
Vapor Pressure (mm. Hg.)	- Not Applicable	Melting Point	- Not Applicable
Vapor Density (AIR = 1)	- Not Applicable	Evaporation Rate (Butyl Acetate = 1)	- Not Applicable
Solubility in Water	- Negligible		
Appearance and Odor	- Pale grey to buff powder or granules, odorless		

Section IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	- Not Applicable		
Flammable Limits	- Not Applicable	LEL -	UEL -
Extinguishing Media	- Not Applicable		
Special Fire Fighting Procedures	- Inorganic Mineral/Non-Flammable		
Unusual Fire and Explosion Hazards	- Not Applicable		

Section V REACTIVITY DATA

Stability	Unstable - Stable - X	Conditions to Avoid - None Known
Incompatibility (Materials to Avoid)	- None Known	
Hazardous Decomposition or By-products	- None Known	
Hazardous Polymerization	May Occur - Will Not Occur - X	Conditions to Avoid - None Known

Section VI HEALTH HAZARD DATA

Route(s) of Entry: Inhalation? Yes Skin? No Ingestion? No

Health Hazards (Acute and Chronic) - May cause delayed respiratory disease if dust inhaled over a prolonged period of time.

Carcinogenicity: NTP? No IARC Monographs? Yes OSHA Regulated? No

IARC Monographs on the evaluation of the Carcinogenic Risk of Chemicals to Humans (volume 42, 1987) concludes that there is "limited evidence" of the carcinogenicity of crystalline silica to humans. IARC classification 2A.

Signs and Symptoms of Exposure - Excessive inhalation of dust may result in shortness of breath and reduced pulmonary function.

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.

Emergency and First Aid Procedures - Eyes - Flush with water.
- Gross inhalation of dust - Remove to fresh air; give oxygen or artificial respiration if necessary; get medical attention.



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Section VII PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be Taken in Case Material is Released or Spilled - Vacuum if possible to avoid generating airborne dust. Avoid breathing dust. Wear an approved respirator. Avoid adding water, the product will become slippery when wet.

Waste Disposal Method - Follow federal, state and local regulations for solid waste.

Precautions to Be Taken in Handling and Storing - Avoid breathing dust, use NIOSH/MSHA approved respirator where TLV limits for Crystalline Silica may be exceeded.

Other Precautions - Slippery when wet.

Section VIII CONTROL MEASURES

Respiratory Protection (Specify Type) - OSHA standard 1910.134 or ANSI Z88.2-1980 specification.

Ventilation	- Local Exhaust	- As appropriate	Special	- None
	- Mechanical (General)	- As appropriate	Other	- None
Protective Gloves	- Not Required		Eye Protection	- Recommended
Other Protective Clothing or Equipment	- None			
Work/Hygienic Practices	- Use good housekeeping practices.			

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