

30518-1050



**SHEFFIELD
POTTERY, INC.**
Mining / Raw & Most Clay - Supplies

MSDS

50200

SELF-HARDENING CLAY

We do not have an MSDS on the clay itself. Enclosed herewith are the MSDS Sheets on the following Ingredients.

C&C BALL CLAY
MARABOND 21
SHEFFIELD HAMMERMILLED CLAY
TALC

U.S. Route 7, P.O. Box 399 - Sheffield, Massachusetts 01257-0399



SPINKS CLAY COMPANY, INC.

P O BOX 820
 PARIS, TN 38242
 ph. (901) 642-5414 fax (901) 642-5493

MATERIAL SAFETY DATA SHEET

I. PRODUCT IDENTIFICATION

PRODUCT	Ball Clay (CAS# 1332-58-7)	EMERGENCY TELEPHONE NUMBER	Spinks (901) 642-5414
TRADE NAME:	Various*		
CHEMICAL NAME	Hydrous Aluminum Silicate		
CHEMICAL FAMILY	Kaolinite		
FORMULA:	Al ₂ O ₃ -2SiO ₂ -2H ₂ O+impurities	DATE REVISED:	January 28, 2000

* The information contained in this MSDS is applicable to all Spinks non-slurry ball clay products.

II. HAZARDOUS INGREDIENTS

COMPONENT	CAS#	PERCENT	ACGIH-TLV	OSHA-PEL
Crystalline Silica (Quartz)	14808-60-7	5-30%	0.05 mg/m ³	0.1 mg/m ³
Titanium Dioxide	13463-67-7	< 3%	10 mg/m ³	15 mg/m ³
Clay Dust (as a whole)				10 mg/m ³ ÷ (%SiO ₂ + 2)

The limits listed above are for the respirable fraction of each contaminant.
 The exposure limits are based on a TWA for an eight- (8) hour shift/ 40-hour week.

This product may contain trace amounts of 2,3,7,8 TCDD (dioxin). Test results indicate concentrations in the in the low part per trillion (ppt) range can be expected. Typically these concentrations are below 100 ppt.

III. HEALTH HAZARD DATA

CARCINOGENICITY INFORMATION: (silica)

OSHA REGULATED: Yes

NTP LISTED: Yes

IARC LISTED: Yes

WARNING! This product contains crystalline silica. IARC Monograph Volume 68, 1997 concludes " There is sufficient evidence in humans for the carcinogenicity of inhaled crystalline silica in the form of quartz or cristobalite from occupational sources." IARC classification - Group 1.

The National Toxicology Program (NTP), in the 6th Annual Report on Carcinogens, 1991, has included crystalline silica on its list of substances that are "reasonably anticipated to be carcinogens".

NIOSH has identified crystalline silica as a *Potential Occupational Carcinogen* using the OSHA classification system outlined in 29 CFR 1910.103.

WARNING! This product contains titanium dioxide. NIOSH has identified titanium dioxide as a potential occupational carcinogen.

ROUTES OF ENTRY

HEALTH EFFECTS

EYES :

Contact may cause irritation and temporary discomfort.

INHALATION:

Primary route of exposure! Symptoms of acute exposure include coughing, wheezing, difficult breathing, and upper respiratory track irritation. Prolonged and repeated exposure to concentrations in excess of the TLV or PEL may contribute to delayed respiratory complications.

INGESTION:

No information available.

SKIN:

None expected, but constant contact may cause irritation.

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IV. FIRST AID AND EMERGENCY PROCEDURES

INHALATION:	Move away from exposure into fresh air conditions. If breathing difficulties continue consult a physician.
EYE CONTACT:	Flush with water immediately. Consult a physician if irritation persists.
IF SWALLOWED:	None believed to be necessary for coincidental ingestion. Consult a physician for ingestion of large quantities.
SKIN CONTACT:	Wash with mild soap and water.

V. PHYSICAL AND CHEMICAL CHARACTERISTICS

APPEARANCE:	A solid of various shades of white, gray and black		
ODOR:	Earthy odor		
BOILING POINT:	NA	VAPOR PRESSURE:	NA
MELTING POINT:	NA	VAPOR DENSITY:	NA
SPECIFIC GRAVITY:	2.4 - 2.6	EVAPORATION RATE:	NA
SOLUBILITY IN WATER:	Insoluble	PERCENT VOLATILITY:	NA
PH:	4.0 - 8.0	VISCOSITY:	NA

VI. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:	Non-Flammable	SPECIAL FIREFIGHTING PROCEDURES:	None
EXTINGUISHING MEDIA:	NA	UNUSUAL FIRE AND EXPLOSION HAZARDS:	None Known
FLAMMABLE LIMITS:	NA		

VII. REACTIVITY DATA

STABILITY:	Stable	INCOMPATIBILITIES:	None Known
HAZARDOUS DECOMPOSITION:	None	CONDITIONS TO AVOID:	None Known
HAZARDOUS POLYMERIZATION:	Will not occur		

VIII. SPILL, LEAK AND DISPOSAL INFORMATION

SPILL AND LEAK RESPONSE: Minimize dust generation during cleanup. Vacuum or scoop spilled material into a container for reclamation or disposal.

WASTE DISPOSAL: Consult state and local authorities for disposal of products.
Ball clay is not considered a hazardous waste as defined by 40 CFR, Part 261.

IX. SPECIAL HANDLING AND PERSONAL PROTECTION INFORMATION

Avoid unnecessary product agitation to keep dust level to a minimum.
Local exhaust ventilation is recommended for dust generating processes.
Use NIOSH or MSHA approved respirators if dust concentrations exceed the TLV or PEL.
Eye wash stations are recommended in areas where this product is used.
Floors or surfaces covered with this product become extremely slippery when wet.

X. SPECIAL REGULATORY INFORMATION

California Proposition 65: Ball clay contains crystalline silica and trace amounts of 2,3,7,8 TCDD (dioxin). Both are included on the list of chemicals known to the state of California to be carcinogens or reproductive toxicants as defined by California Proposition 65.

Toxic Substances Control Act: Ball Clay is included on the TSCA inventory as a naturally occurring chemical substance, 40 CFR, Part 710.4(b).

Department of Transportation: Ball Clay is not regulated by the DOT.

To the best of our knowledge the information contained herein is accurate. However there is no warranty of any kind expressed or implied, as to the completeness or accuracy thereof. Final determination of the suitability of this information for a particular use of this product is the sole responsibility of the user.

MATERIAL SAFETY DATA SHEET

MARABOND 21 POWDER

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***** VI. SPILL OR LEAK PROCEDURES *****

SPILL RESPONSE : Mechanically collect and remove spilled material. Area may be washed with water.
 :
 NEUTRALIZING CHEMICALS : None required.
 WASTE DISPOSAL METHODS : Incinerate, bury or flush to sewer following applicable regulations.
 :

***** VII. REACTIVITY DATA *****

STABILITY : Stable CONDITIONS TO AVOID: Contact with strong oxidizing agents.
 INCOMPATIBILITY : MATERIALS TO AVOID : None
 HAZARDOUS POLYMERIZATION : Will not occur CONDITIONS TO AVOID: None
 HAZARDOUS DECOMPOSITION PRODUCTS : Sulfur dioxide, carbon dioxide, and carbon monoxide.

***** VIII. CONTROL MEASURES *****

VENTILATION REQUIREMENTS : Adequate ventilation for comfort is recommended.
 RESPIRATORY PROTECTION : Full respiratory protection program recommended.
 : NIOSH approved dust mask recommended.
 PROTECTIVE GLOVES : Gloves recommended for prolonged exposure.
 EYE PROTECTION : Goggles recommended for prolonged exposure.
 OTHER PROTECTIVE EQUIPMENT : Clothing which contacts skin should be changed daily.

***** IX. SPECIAL PRECAUTIONS *****

REPAIR/MAINTENANCE OF CONTAMINATED EQUIPMENT : None required.
 HYGIENE IN HANDLING AND STORAGE : Personal hygiene is strongly encouraged so all clothing items are changed daily.
 OTHER : Normal precautions common to good manufacturing practice should be followed.

***** X. ADDITIONAL REGULATORY CONCERNS *****

Lignosulfonates are non-toxic & non-irritating. Government regulations for use of lignosulfonates are summarized below:

- | | |
|--|-------------------------------|
| Agriculture Canada Animal Feeds. File No. 832.282. | 21 CFR 176.210 - Defoamers |
| 40 CFR 180.1001 Section (e) - Pesticides for Animals | 21 CFR 177.1210 - Gaskets |
| 21 CFR 176.120; 176.170; 176.180; 178.3120 - Paper | 21 CFR 175.105 - Adhesives |
| 21 CFR 173.310 - Boiler Water | 21 CFR 573.600 - Animal Feeds |
| 21 CFR 172.715; 182.99 - Pesticides for Food | |

The information and recommendations contained herein are offered as a service to our customers but are not intended to relieve the user from its responsibility to investigate and understand pertinent sources of information and to comply with all laws and procedures applicable to the safe handling and use of these materials. The information and recommendations provided herein were believed by LignoTech USA, Inc. to be accurate at the time of preparation or obtained from sources believed to be generally reliable. However, LignoTech USA, Inc. makes no warranty concerning their accuracy and LignoTech USA, Inc. will not be liable for claims relating to any party's use of or reliance on information or recommendations contained herein, regardless of whether it is claimed that the information or recommendations are inaccurate, incomplete or otherwise misleading.

MATERIALS SAFETY DATA SHEET

To comply with OSHA'S Hazard Communication Standard, 29 CFR 1910.1200

SECTION I. IDENTITY OF PRODUCT AND IMPORTER OR PRODUCER

Trade Name: Sheffield Slip Clay As Marked on Bag: Sheffield Slip Clay

Chemical Name: Hydrous Alumina silicate
CAS Number: 1332-58-7

Importer/Producer Name and Address:

Sheffield Pottery, Inc.
US RTE. 7 Box 399
Sheffield MA. 01257

Telephone No.:

For Information
413/229/7700

Date prepared: 10/20/88

SECTION II. HAZARDOUS INGREDIENTS

Total Quartz (SiO₂) is not more than 30% by dry weight, and it is not fine enough to be normally respirable.

See Section VI.

SECTION III. PHYSICAL DATA

Fusion Range: 1180°C - 1200°C
Solubility in H₂O: Slightly Soluble
Vapor Pressure: Not Applicable
Odor and Appearance: Earthy Odor, Green Powder

Specific Gravity: 2.7
% volatiles : < 100°C. NONE

SECTION IV. FIRE AND EXPLOSION HAZARD DATA

Non-Flammable and Non-Hazardous

SECTION V. REACTIVITY DATA

Stability: Stable

Incompatibility (Materials to Avoid): NONE
Hazardous Polymerization: Will NOT Occur

Data, information and recommendations recorded herein are accurate to the best of our knowledge. Sheffield Pottery, Inc. makes no warranty, either expressed or implied, with respect thereto and disclaims all liability from reliance thereon.

SECTION VI. HEALTH HAZARD DATA

OSHA Permissible Exposure Limit (PEL): Total Dust mg/m³: 0.90
Respirable Dust* mg/m³: 0.58

TLV-TWA: 0.3 mg/m³ Respirable Dust, based on free silica content

Route of Entry: Inhalation * Based on free silica content

Effects of overexposure:

Short Term - no effect other than as a nuisance dust
Long Term - Long term exposure to dust and free silica in concentrations higher than recommended PEL may cause silicosis.

First Aid: Eyes - Flush thoroughly with water. See a physician if irritation persists.

SECTION VII. SPILL, LEAK AND DISPOSAL INFORMATION

Action to be taken in case material is released or spilled: Clean up and collect, minimizing excessive dust*

Waste disposal method: Any approved solid waste disposal including burial.*

*Do not exceed recommended PEL - see section VI.

SECTION VIII. SPECIAL PROTECTION INFORMATION

Respiratory Protection: If dust concentrations exceed recommended Permissible Exposure Limits, use NIOSH approved dust respirators. If spraying coatings use NIOSH approved dust/mist respirators.

Ventilation: Local exhaust or other ventilation that will reduce dust concentrations to less than Permissible Exposure Limits is recommended. Use adequate ventilation if spraying coatings.

Eye Protection: Wear tight fitting goggles if high dust concentrations exist.

Other Protective Equipment: Not required.

SECTION IX. SPECIAL PRECAUTIONS


Minimize dust generation and exposure. Do not breath dust.



R. T. Vanderbilt Company, Inc.
INDUSTRIAL MINERALS AND CHEMICALS

Material Safety Data Sheet

minusa

Section I. Chemical Product and Company Identification			
Product Name/ Trade Name	NYTAL® 100HR	Code	30807
Supplier	R. T. VANDERBILT COMPANY, INCORPORATED 30 WINFIELD STREET NORWALK, CT 06855	CAS#	Mixture
		In case of Emergency	(203) 853-1400
Synonym	Industrial talc, tremolitic talc	Protective Clothing	
Chemical Name	Hydrous calcium magnesium silicate mineral mixture		
Chemical Family	Phylosilicates (structural).		
Manufacturer	R. T. Vanderbilt Company, Inc. 30 Winfield Street Norwalk, CT 06855	Material Uses	Additive in paints and ceramics

Section II. Composition and Information on Ingredients			
Name	CAS #	% by Weight	TLV/PEL
1) tremolite (nonasbestiform)	14567-73-8	30-50	As particles not otherwise regulated (PNOR). TWA 2 mg/m ³ from respirable fraction (ACGIH) See Section XVI (OSHA) As particles not otherwise regulated (PNOR). As particles not otherwise regulated (PNOR). OSHA PEL: TWA respirable fraction formula: 10 mg/m ³ / % SiO ₂ +2 ACGIH: TWA 0.1 mg/m ³ from respirable fraction
2) talc	14807-96-6	20-40	
3) serpentine (antigorite, lizardite)	12135-86-3	20-30	
4) anthophyllite (nonasbestiform)	17068-78-9	2-10	
5) quartz	14808-60-7	0.14	
Total Product			TWA: 15 mg/m ³ total dust 5 mg/m ³ respirable dust (OSHA) As particles not otherwise regulated (PNOR).

Section III. Hazards Identification	
Emergency Overview	Not an acute hazard. Contains quartz. May cause mechanical eye or skin irritation in high concentrations. As with all mineral spills, minimize dusting during clean-up. Do not breathe dust. Prolonged inhalation may cause lung injury. Product can become slippery when wet.
Target Organs	Pulmonary System (chronic risk).

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Section IV. First Aid Measures

Eye Contact	Flush with plenty of flowing water. Get medical attention if irritation persists.
Skin Contact	Wash off with water.
Inhalation	Allow the victim to rest in a well ventilated area if high concentration is inhaled and mechanical irritation or discomfort occurs. Seek medical attention if irritation persists.
Ingestion	Unlikely to be toxic by ingestion.

Section V. Fire and Explosion Data

Flammability of the Product	Non-flammable.
Auto-Ignition Temperature	Not applicable.
Flash Points	Not applicable.
Flammable Limits	Not applicable.
Products of Combustion	Not applicable.
Fire Hazards in Presence of Various Substances	Not considered to be flammable.
Explosion Hazards in Presence of Various Substances	None.
Fire Fighting Media and Instructions	Product will not burn, use appropriate extinguishing media for surrounding fires.
Special Remarks on Fire Hazards	Not available.
Special Remarks on Explosion Hazards	Not available.

Section VI. Accidental Release Measures

Small Spill	Use a vacuum to clean up spillage. If appropriate, use gentle water spray to wet down and minimize dust generation. Place in a sealed container. Material will become slippery when wet.
Large Spill	Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Avoid excessive dust generation. Use respiratory protection in high dust conditions.

Section VII. Handling and Storage

Handling and Storage Procedures	No special storage considerations. Handle in ways which minimize dust generation.
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Section VIII. Exposure Controls/Personal Protection

Engineering Controls	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If local exhaust ventilation is used, a capture velocity of 150-200 fpm is recommended.
Personal Protection	Safety glasses. Any NIOSH approved filler dust respirator. No special skin protection required. Wash skin if mechanical irritation is experienced.

Section IX. Physical and Chemical Properties

Appearance	White powder
Molecular Weight	Not available.
pH (1% soln/water)	Not available
Melting/ Sublimation Point	Not available.
Specific Gravity	2.85 (Water = 1)
Volatility	Non-volatile.
Odor	None
Solubility	Insoluble in cold water.

Section X. Stability and Reactivity Data

Stability	The product is stable.
Instability Temperature	Not applicable
Conditions of Instability	None known
Incompatibility with Various Substances	Non reactive.
Corrosivity	Not available.

Section XI. Toxicological Information

Routes of Entry	Inhalation, Ingestion.
Acute Effects	
Eye contact	Not a primary eye irritant. May cause mechanical irritation.
Skin contact	Mechanical skin irritation is possible but unlikely. Not absorbed through skin. Possible granuloma formation in open wounds (requires repeated, massive applications).
Sensitization	Not a sensitizer.
Ingestion	Not an ingestion hazard.


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Inhalation	Inhalation of high concentrations may cause mechanical irritation and discomfort. Repeated exposure may cause chronic effects.	
Remark	No additional remark	
Chronic Effects	<p>CARCINOGENIC EFFECTS: See remarks. MUTAGENIC EFFECTS: None known. TERATOGENIC EFFECTS: None known. DEVELOPMENTAL TOXICITY: None known</p>	
Remarks	<p>TALC: Prolonged exposure to excessive airborne concentrations of talc can result in scarring of the lungs (pneumoconiosis) or of the covering of the lungs (pleural thickening). Pneumoconiosis may produce symptoms of cough or shortness of breath. Pleural thickening usually produces no symptoms. Conditions can be determined by chest radiographic examination and pulmonary function test (FEV and FVC). Bronchial irritation may cause sputum production.</p> <p>CRYSTALLINE SILICA: Overexposure to respirable crystalline silica dust can cause silicosis, a form of progressive pulmonary fibrosis. "Inhalable" crystalline silica (quartz) is listed by IARC as a Group I carcinogen (lung) based on "sufficient evidence" in occupationally exposed humans and sufficient evidence in animals. Crystalline silica is also listed by the NTP as a known human carcinogen. Some studies have not demonstrated a cancer association and considerable controversy exists concerning the IARC and NTP classification.</p> <p>New York State talc has been tested as a whole and in parts in several animal studies with no carcinogenic association demonstrated. Epidemiologic studies in humans have been interpreted in conflicting ways with no clear evidence of an increased risk in lung tumors in association with exposure. Human, animal and in-vitro tests of basic product ingredients (talc and nonasbestiform tremolite) do not show a carcinogenic effect. All tremolite is of the nonasbestiform, common cleavage fragment variety.</p> <p>Excessive exposure to any dust may aggravate pre-existing respiratory conditions.</p>	

Section XII. Ecological Information	
Ecotoxicity	None known.
BOD5 and COD	Not available.
Products of Biodegradation	None known.
Toxicity of the Products of Biodegradation	None known.
Special Remarks on the Products of Biodegradation	Not available.

Section XIII. Disposal Considerations	
Waste Information	Not a US RCRA hazardous waste. Dispose of in accordance with state and local regulations.

Section XIV. Transport Information	
DOT	Not a DOT controlled material (United States).
	

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	Not applicable	
Maritime Transportation	Not available	

Section XV. Other Regulatory Information and Pictograms										
TSCA	Listed									
Federal and State Regulations	OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: quartz Pennsylvania RTK: talc; anthophyllite (nonasbestiform); quartz Florida: tremolite (nonasbestiform); talc; quartz Minnesota: talc; quartz Massachusetts RTK: talc; quartz TSCA 8(b) inventory: NYTAL® 100HR									
Hazardous Material Information System (U.S.A.)	<table border="1"> <tr><td>Health Hazard</td><td>0</td></tr> <tr><td>Fire Hazard</td><td>0</td></tr> <tr><td>Reactivity</td><td>0</td></tr> <tr><td>Personal Protection</td><td>E</td></tr> </table> <p>* Chronic Potential</p>	Health Hazard	0	Fire Hazard	0	Reactivity	0	Personal Protection	E	National Fire Protection Association (U.S.A.) Health  Flammability Reactivity Specific hazard
Health Hazard	0									
Fire Hazard	0									
Reactivity	0									
Personal Protection	E									
Protective Clothing (Pictograms)										

Section XVI. Other Information	
References	Not available.
Other Special Considerations	Quartz (none detected to less than 1.0% - this quartz range is "typical" and may change slightly with different lots.) Numerous samples for airborne concentrations of free silica during talc processing consistently reflect free silica levels in the <0.05 mg/m3 range (if detected at all). Talc PEL: The current OSHA PEL remains 20 mppfc. Due to antiquated particle counting technique, the gravimetric (ACGIH) limit is recommended.
Validated by Sue Kelly on 5/18/2000.	Verified by Sue Kelly. Printed 5/18/2000.
Information Contact	John Kelse (203) 853-1400 ext. 217 Corporate Risk Management
Notice to Reader	
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