R.T. Vanderbilt Company, Inc.

Material Safety Data Sheet

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Section I. Chemical Product and Company Identification		
Product Name/ Trade Name	PYRAX [®] HS	Code 33207
Trade Name		CAS# 12269-78-2
Supplier	R. T. Vanderbilt Company, Inc. 30 Winfield Street Norwalk, CT 06855	In case of (203) 853-1400 Emergency
Synonym	Pyrophyllite	Protective Clothing
Chemical Name	Hydrated aluminum silicate mineral	
Chemical Family	Phylosilicates (structural).	
Manufacturer	R. T. Vanderbilt Company, Inc. Material Uses Additive/f 30 Winfield Street Norwalk, CT 06855	iller ceramics, paint, etc.

Section II. Composition and Information on Ingredients			
Name	CAS #	% by Weight	TLV/PEL
quartz pyrophyllite mica kaolin clay	14808-60-7 12269-78-2 12001-26-2 1332-58-7	50-60 <40 18-25 5-10	OSHA PEL: TWA respirable fraction formula: 10 mg/m ³ / % SiO ₂ +2 ACGIH: TWA 0.05 mg/m ³ from respirable fraction As particles not otherwise regulated (PNOR). TWA 3 mg/m ³ from respirable fraction (OSHA) TWA 5 mg/m ³ from respirable fraction (OSHA)
Total Product			 TWA: 15 mg/m³ total dust 5 mg/m³ 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).

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 available.	
Fire Hazards in Presence of Various Substances	Not applicable.	
Explosion Hazards in Presence of Various Substances	None	
Fire Fighting Media and Instructions	Not applicable.	
Special Remarks on Fire Hazards	No additional remark.	
Special Remarks on Explosion Hazards	No additional remark.	

Section VI. Accidental Release Measures	
Small Spill	Put spilled solid in a waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and state regulations.
Large Spill	Use a shovel to put the material into a proper waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and state regulations. Be careful that the product is not present at a concentration level above TLV. Check Section XIII for disposal information.

Section VII. Handling and Storage	
Handling and Storage Procedures	No special storage considerations. Handle in ways which minimize dust generation.

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 user operations generate dust, use ventilation to keep exposure to airborne contaminants below the exposure limit.	
	If local exhaust ventilation is used, a capture velocity of 150-200 fpm is recommended.	
Personal Protection	Safety glasses. Any NIOSH approved filter dust respirator. No special skin protection is required. Wash skin if mechanical irritation is experienced.	

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Section IX. Physical and Chemical Properties		
Appearance	Solid. (Powdered solid.)	
Molecular Weight	Not available.	
pH	Not applicable.	
Melting/ Sublimation Point	Not available.	
Specific Gravity	2.8 (Water = 1)	
Volatility	0% (v/v).	
Odor	None.	
Solubility	Insoluble in cold water.	

Section X. Stability and Reactivity Data	
Stability	The product is stable.
Instability Temperature	Not available.
Conditions of Instability	Not available.
Incompatibility with Various Substances	Not considered to be reactive.
Corrosivity	Not available.

Section XI. Toxicological Information	
Routes of Entry	Inhalation. Ingestion.
Acute Effects	
Eye contact	Not a primary eye irritant. Dust 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	This material is not expected to be an ingestion hazard based on animal testing.
Inhalation	Inhalation of high concentrations may cause mechanical irritation and discomfort. Repeated exposure may cause chronic effects.
Remarks	No additional remark.
Chronic Effects	CARCINOGENIC EFFECTS: See remarks. MUTAGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. REPRODUCTIVE TOXICITY: Not available.
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Remarks	PYROPHYLLITE: In the absence of crystalline silica, pyrophyllite can cause a low category pneumoconiosis (with little respiratory disability) in prolonged, high dust concentrations.
	KAOLIN: Published literature suggests that extremely high exposures to kaolin dust over a prolonged period of time can lead to a low category pneumoconiosis (with little respiratory disability) in a small number of workers.
	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.
	Excessive exposure to any dust may aggravate pre-existing respiratory conditions. Repeated or prolonged exposure can produce damage to the lungs.

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	No additional remark.		

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).	
	Not applicable.	
Maritime Transportation	Not available.	

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Section XV. Other F	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, birth defects or other reproductive harm, which would require a warning under the statute: quartz Pennsylvania RTK: quartz: (generic environmental hazard) Florida: quartz Minnesota: quartz Massachusetts RTK: quartz New Jersey: quartz TSCA 8(b) inventory: PYRAX® HS SARA 302/304/311/312 hazardous chemicals: quartz SARA 311/312 MSDS distribution - chemical inventory - hazard identification: quartz: immediate health hazard, delayed health hazard				
Hazardous Material Information System (U.S.A.)	Health Hazard * 1 Fire Hazard 0 Reactivity 0 Personal Protection a * Chronic Potential National Fire Protection Association (U.S.A.) Health Flammability				
Protective Clothing (Pictograms)					

Section XVI. Other Information				
References	Not available.			
Other Special Considerations	Not available.			
Validated by Sue Kelly on 7/2/2002.		Verified by Sue Kelly.		
		Printed 7/5/2002.		
Information Contac	t John Kelse (203) 853-1400 ext. 217 Corporate Risk Management			

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