




Material Safety Data Sheet

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Section I. Chemical Product and Company Identification

Product Name/ Trade Name	PYRAX® HS	Code	33207
		CAS#	See Section II
Supplier	R. T. Vanderbilt Company, Inc. 30 Winfield Street Norwalk, CT 06855	In case of Emergency	(203) 853-1400
Synonym	Pyrophyllite	Protective Clothing	
Chemical name	Hydrated aluminum silicate mineral		
Chemical Family	Phyllosilicates (structural).		
Manufacturer	R. T. Vanderbilt Company, Inc. 30 Winfield Street Norwalk, CT 06855	Material Uses	Additive/filler ceramics, paint, etc.

Section II. Hazardous Ingredients

Name	CAS #	% by Weight	TLV/PEL
quartz	14808-60-7	50-60	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)
pyrophyllite	12269-78-2	<40	
mica	12001-26-2	18-25	
kaolin clay	1332-58-7	5-10	
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).

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.

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Section V. Fire and Explosion Data

Flammability of the Product Non-flammable.

Autoignition Temperature Not applicable.

Flash Point 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.

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.

Section XV. Regulatory Information

TSCA Listed.

Federal and State Regulations
 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
 OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

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.)



Protective Clothing (Pictograms)



Section XVI. Other Information

References Not available.

Other Special Considerations Not applicable.

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Information Contact John Kelse (203) 853-1400 ext. 217
 Corporate Risk Management

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