

SAFETY DATA SHEET

GHS

United States English

Section 1. Identification

Product name PYRAX® WA In case of emergency

Code 34108 1-203-295-2140

Supplier/Manufacturer Vanderbilt Minerals, LLC Chemtrec: 1-800-424-9300
Outside US: +1-703-527-3887

33 Winfield Street Norwalk, CT 06855

Chemical name Hydrated aluminum silicate mineral

Synonym Pyrophyllite

Material uses Additive/filler ceramics, paint, etc.

Product type Solid.

Relevant identified uses of the substance or mixture and uses advised against

Not applicable.

Section 2. Hazards identification

OSHA/HCS status This material is considered hazardous by the OSHA Hazard Communication Standard

(29 CFR 1910.1200).

Classification of the CARCINOGENICITY (inhalation) - Category 1A

substance or mixture SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (respiratory tract)

(inhalation) - Category 1

GHS label elements

Hazard pictograms



Signal word Danger

Hazard statements May cause cancer if inhaled.

Causes damage to organs through prolonged or repeated exposure if inhaled.

(respiratory tract)

Precautionary statements

General Read label before use. Keep out of reach of children. If medical advice is needed,

have product container or label at hand. Avoid excessive dust generation. Avoid

breathing dust. Use only with adequate ventilation.

Prevention Obtain special instructions before use. Do not handle until all safety precautions have

been read and understood. Wear protective gloves. Wear eye or face protection: Recommended: splash goggles. Wear protective clothing. Do not breathe dust. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

Response Get medical attention if you feel unwell. IF exposed or concerned: Get medical

attention.

Storage Store locked up. Store in a dry place.

Disposal Dispose of contents and container in accordance with all local, regional, national and

international regulations.

Hazards not otherwise May cause mechanical eye or skin irritation in high concentrations. Product may

classified become slippery when wet.

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Section 3. Composition/information on ingredients

Substance/mixture Substance

Chemical name Hydrated aluminum silicate mineral

Ingredient name	CAS number	% by weight
quartz	14808-60-7	40 - 50
pyrophyllite	12269-78-2	<40
mica	12001-26-2	18 - 25
kaolin clay	1332-58-7	5 - 10

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact Flush with plenty of water for at least 15 minutes, occasionally lifting upper and lower

eyelids. If irritation develops and persists, seek medical attention.

Skin contactFlush skin with plenty of water. Seek medical attention if irritation develops.

Inhalation

Move to fresh air. If respiratory distress develops, seek medical attention.

Ingestion Unlikely to be toxic by ingestion. Rinse mouth out with water. Do not induce vomiting

unless directed to do so by medical personnel. Seek medical attention if significant

quantities have been ingested or symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact Not a primary eye irritant. May cause mechanical irritation.

Skin contactNo known significant effects or critical hazards.InhalationNo known significant effects or critical hazards.IngestionNo known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contactNo specific data.Skin contactNo specific data.InhalationNo specific data.IngestionNo specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician Treat symptomatically.

Specific treatments No specific treatment.

Protection of first-aidersNo action shall be taken involving any personal risk or without suitable training. If it is

suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water

before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing This product is not combustible. Use an extinguishing agent suitable for the

media surrounding fire.

Unsuitable extinguishing

media

No restrictions on extinguishing media for this product.

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Section 5. Fire-fighting measures

Specific hazards arising from the chemical

No specific fire or explosion hazard. This product is not flammable and does not support fire.

Hazardous thermal

decomposition products

There are no hazardous decomposition products.

Special protective actions for fire-fighters

Product may become slippery when wet.

Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill

Minimize dust generation.

Move containers from spill area. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill

Minimize dust generation.

Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

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Section 7. Handling and storage

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Recommended Storage

Store away from direct sunlight in dry conditions. Close container after use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits			
pyrophyllite	OSHA PEL (United States).			
	TWA: 15 mg/m³ total dust; 5 mg/m³ respirable dust (PNOR)			
	ACGIH TLV (United States).			
	TWA: 10 mg/m³ total dust; 3 mg/m³ respirable dust (PNOS)			
quartz	OSHA PEL (United States).			
	TWA: 0.05 mg/m ³ from respirable fraction			
	ACGIH TLV (United States).			
	TWA: 0.025 mg/m ³ from respirable fraction			
mica	OSHA PEL (United States).			
	TWA 3 mg/m ³ from respirable fraction			
	ACGIH TLV (United States).			
	TWA 3 mg/m ³ from respirable fraction			
kaolin clay	OSHA PEL (United States).			
	TWA 5 mg/m ³ from respirable fraction			
	ACGIH TLV (United States).			
	TWA 2 mg/m³ from respirable fraction			

Appropriate engineering controls

If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields. Recommended: splash goggles

Skin protection

Hand protection

Protective gloves should be worn under normal conditions of use.

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Section 8. Exposure controls/personal protection

Body protection Personal protective equipment for the body should be selected based on the task being

performed and the risks involved and should be approved by a specialist before

handling this product.

Other skin protection Appropriate footwear and any additional skin protection measures should be selected

based on the task being performed and the risks involved and should be approved by a

specialist before handling this product.

Respiratory protection Based on the hazard and potential for exposure, select a respirator that meets the

appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important

aspects of use. Recommended: disposable particulate mask

Personal protective equipment (Pictograms)



Section 9. Physical and chemical properties

Appearance

Physical state Solid. [Powdered solid]

Color White to tan.
Odor Odorless.

pH 6.9 [Conc. (% w/w): 10%]

Melting pointNot available.Boiling pointNot applicable.

Flash point [Product does not sustain combustion.]

Evaporation rate

Vapor pressure

Vapor density

Relative density

Solubility in water

Viscosity

Not applicable.

Not applicable.

Not available.

Not available.

Not available.

Section 10. Stability and reactivity

Reactivity Not reactive

Chemical stability The product is stable.

Possibility of hazardous

reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid No specific data.

Incompatible materials No specific data.

Hazardous decomposition

products

Under normal conditions of storage and use, hazardous decomposition products should

not be produced.

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Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

KAOLIN CLAY: oral LD50, rat: 149 g/kg (Federation of American Societies for Experimental Biology, 1977; as cited by Cosmetic Ingredient Review, 2003). Not sufficient for classification.

Irritation/Corrosion

CRYSTALLINE SILICA: Not irritating to the skin or eyes based on OECD 404 and 405 studies, respectively (EUROSIL, 2008).

KAOLIN CLAY: Not irritating to the skin or eyes based on OECD 404 and 405 studies, respectively (European Kaolin and Plastic Clays Association, 2005).

Exposure to high levels of any dust may result in mechanical irritation of the respiratory tract, skin and eyes; not sufficient for classification.

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Conclusion/Summary

CRYSTALLINE SILICA: Silica dust, crystalline, in the form of quartz is classified by IARC as Group 1 (carcinogenic to humans) based on "sufficient evidence" in occupationally exposed humans and sufficient evidence in animals. Crystalline silica of respirable size is classified by the NTP as a known human carcinogen. In its 2013 Proposed Rule on respirable crystalline silica, "OSHA preliminarily concludes that the human data provides ample evidence that exposure to respirable crystalline silica increases the risk of lung cancer among workers", while NIOSH identifies various crystalline or fused silicas a potential occupational carcinogens. However, not all epidemiologic and animal studies have demonstrated a cancer association and some uncertainty exists concerning the cancer classification of crystalline silica. For example, in Europe, a recent review concludes that crystalline silica should not be classified as a carcinogen since silicosis of the lung is the key endpoint for classification (Morfeld, 2010).

Classification

Product/ingredient name	OSHA	IARC	NTP
quartz	(a)	1	Known to be a human carcinogen.
kaolin clay (b)	-	-	-

- (a) OSHA does not have a set list of carcinogens or potential carcinogens, but defers to the IARC and NTP classifications. For quartz, see OSHA's qualitative statement in text above.
- (b) Classified by ACGIH as A4 (not classifiable as a human carcinogen).

Reproductive toxicity

Not available.

Teratogenicity

KAOLIN CLAY: No fetal effects in rats in the absence of maternal toxicity (Patterson et al, 1977).

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

KAOLIN CLAY: Inhalation of respirable kaolin clay dust can cause kaolinosis, a form of pneumoconiosis.

CRYSTALLINE SILICA: Inhalation of respirable crystalline silica dust can cause silicosis, a form of progressive pulmonary fibrosis.

High levels of exposure to any dust may aggravate pre-existing respiratory conditions.

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Section 11. Toxicological information

Aspiration hazard

Not applicable.

Information on the likely routes of exposure

Routes of entry anticipated: Oral, Inhalation.

Potential chronic health effects

General Excessive exposure to any dust may aggravate pre-existing respiratory conditions.

Carcinogenicity May cause cancer if inhaled. Risk of cancer depends on duration and level of exposure.

Mutagenicity
No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Other information Not available.

Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

Other adverse effects No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

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Section 14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	Not regulated.	-	-	-		-
TDG Classification	Not regulated.	-	-	-		-
ADR/RID Class	Not regulated.	-	-	-		-
IMDG Class	Not regulated.	-	-	-		-
IATA-DGR Class	Not regulated.	-	-	-		-

PG*: Packing group

Section 15. Regulatory information

U.S. Federal regulations

United States inventory (TSCA 8b)

All components are listed or exempted.

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 311/312

Classification Delayed (chronic) health hazard

State regulations

Massachusetts The following components are listed: SILICA, CRYSTALLINE, QUARTZ; mica; Kaolin

New York None of the components are listed.

New Jersey The following components are listed: SILICA, QUARTZ; QUARTZ (SiO2); mica; KAOLIN

Pennsylvania The following components are listed: QUARTZ (SiO2); MICA-GROUP MINERALS;

Kaolin

California Prop. 65



WARNING: This product can expose you to crystalline silica respirable, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

International regulations

Canada inventoryAll components are listed or exempted. **Europe inventory**All components are listed or exempted.

International lists

Australia inventory (AICS): All components are listed or exempted.

China inventory (IECSC): All components are listed or exempted.

Japan inventory (ISHL): All components are listed or exempted.

Japan inventory (ISHL): All components are listed or exempted.

Malaysia Inventory (EHS Register): All components are listed or exempted.

New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.

Philippines inventory (PICCS): All components are listed or exempted.

Taiwan Chemical Substances Inventory (TCSI): All components are listed or exempted.

Thailand inventory: All components are listed or exempted.

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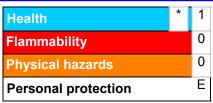
Korea inventory (KECI): All components are listed or exempted.

Section 15. Regulatory information

Turkey inventory (CICR): All components are listed or exempted. **Vietnam inventory**: All components are listed or exempted.

Section 16. Other information

Hazardous Material Identification System (U.S.A.)



National Fire Protection Association (U.S.A.)



The customer is responsible for determining the PPE code for this material.

History

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Key to abbreviations ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973

as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

Information contact Vanderbilt Global Services, LLC

Corporate Risk Management

1-203-295-2143

Visit www.vanderbiltminerals.com for more information.

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^{*} Chronic Potential