SAFETY DATA SHEET

31548-0141

Section 1: COMPANY AND PRODUCT IDENTIFICATION

Company Name	Penguin Pottery LLC
Address	193 A St, Unit 42, Wilder, VT 05088
Emergency Contact	IN CASE OF EMERGENCY PLEASE CONTACT YOUR REGIONAL / LOCAL POISON CONTROL CENTER. 1-800-222-1222
Phone	603-200-3042
Email	support@penguinpottery.com
Website	www.penguinpottery.com
Product name	Penguin Pottery - Dry Kiln Wash - Just Add Water - Prevents Glaze from Sticking to Kiln Shelves
Product use/description	Kiln wash
Product Identifier Codes	PP-CH-DRYKW
Restrictions on use	Not for ingestion or use in cosmetics; do not use on food-contact surfaces unless fired to maturity.
Regulatory Basis	OSHA Hazard Communication Standard (29 CFR 1910.1200), GHS classification

Section 2: HAZARDS IDENTIFICATION

Classification	Classification according to OSHA Hazard Communication Standard (29 CFR 1910.1200) and GHS Rev. 3: Carcinogenicity, Category 1A (Inhalation). Specific Target Organ Toxicity, Repeated Exposure (STOT-RE), Category 1 (Lungs, via inhalation).
Hazard statement	H350: May cause cancer by inhalation. H372: Causes damage to lungs through prolonged or repeated exposure by inhalation. H320: Causes eye irritation.
Signal word	Danger
Precautionary statement	P201: Obtain special instructions before use. P260: Do not breathe dust. P270: Do not eat, drink or smoke when using this product. P280: Wear respiratory protection, eye protection, and protective gloves. P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308+P313: IF exposed or concerned: Get medical advice/attention. P314: Get medical advice/attention if you feel unwell. P501: Dispose of contents/container in accordance with local regulations.
Pictogram(s) by GHS	GHS08 (Health Hazard) 
Other Hazards	The primary hazard is associated with the inhalation of fine, respirable dust, containing crystalline silica, generated when handling the dry components. The risk of chronic disease depends on the duration and level of exposure over a long period. This risk is minimized by following the safe handling procedures and wearing the recommended personal protective equipment. Once mixed with water into a liquid slip, the inhalation hazard is significantly reduced but not eliminated. Spray application of the liquid glaze slip creates an inhalation hazard. Dust may also be generated from dried, uncleaned spills.

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Trade Secret Notice	Detailed formulation is proprietary information. This glaze contains a proprietary mixture of ceramic materials as listed below.

Section 4: FIRST AID MEASURES	
On inhalation	Move person to fresh air and keep comfortable for breathing. If coughing, sneezing, or shortness of breath persists, seek medical advice/attention.
On skin contact	Brush off loose powder. Wash affected area thoroughly with soap and water. Get medical attention if irritation develops and persists.
On eye contact	Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Remove contact lenses if present and easy to do. Continue rinsing. Get immediate medical advice/attention.
On ingestion	Rinse mouth with water. Do not induce vomiting. Call a poison center or get medical advice/attention if you feel unwell.
Acute/delayed symptoms	Immediate effects include serious eye irritation and respiratory irritation. Delayed effects from chronic exposure include silicosis and lung cancer.
Special treatment needed	For significant eye contact, immediate medical attention is required. For inhalation exposure, treat symptomatically. If respiratory symptoms are severe or persistent, seek medical attention.

Section 5: FIREFIGHTING MEASURES	
Suitable extinguishing media	Product is not flammable. Use fire-extinguishing media appropriate for surrounding materials. Water spray, foam, dry chemical, CO2.
Unsuitable extinguishing media	None known
Specific hazards arising from the chemical	Product is water-based; not flammable. Combustion of organic components may produce CO, CO2.
Protective equipment for firefighters	Standard protective gear and SCBA if in enclosed space
Special precautions for fire fighters	Prevent runoff from entering drains or waterways
Will hazardous combustion occur?	No

Section 6: ACCIDENTAL RELEASE MEASURES	
Personal precautions	Ensure adequate ventilation. Evacuate unnecessary personnel from the area. Wear the personal protective equipment specified in Section 8 of this SDS (including an N95 respirator, safety glasses/goggles, and gloves) before initiating cleanup. Avoid any action that creates airborne dust.
Environmental precautions	Do not allow large quantities of powder to enter drains or waterways.
Methods for cleaning up	Contain the spill to prevent it from spreading. Clean up spills promptly using a method that does not generate airborne dust. Do not dry sweep. Recommended cleanup methods: Wet Method: Gently mist the spilled powder with water to dampen it. Once dampened, scoop or wipe up the material and place it in a sealed container for disposal. HEPA Vacuum: Use an industrial vacuum cleaner equipped with a HEPA filter to collect the spilled material. Place recovered material into a properly labeled, sealed container for disposal according to local regulations.

Section 7: HANDLING AND STORAGE	
Safe handling	Read this entire SDS and understand all hazards before handling the product. Handle the dry powders only in a well-ventilated area, preferably with local exhaust ventilation. Avoid creating airborne dust. When mixing, slowly and gently add the powder to the liquid to minimize dusting. Wear the personal protective equipment (PPE) as specified in Section 8, including a respirator, eye protection, and gloves. After application, do not sand, scrape, or grind the dried or fired glaze, as this can release hazardous respirable dust containing crystalline silica. Wash hands thoroughly after handling. Do not eat, drink, or smoke in the work area.
Safe storage	Store in a cool, dry, well-ventilated location away from children and pets. Keep containers tightly closed when not in use. Protect the liquid medium from freezing. Store away from incompatible materials such as strong acids, bases, and oxidizing agents.

Section 8: EXPOSURE CONTROL AND PERSONAL PROTECTION	
Engineer Control	OSHA Permissible Exposure Limit (PEL) for Respirable Crystalline Silica (quartz): 50 ug/m3 averaged over an 8-hour day (TWA). OSHA PEL for Zirconium compounds (as Zr): 5 mg/m3 (8-hour TWA). Handle and mix dry powders only in a well-ventilated area. Whenever possible, use local exhaust ventilation (e.g., a downdraft table or fume hood) to capture dust at the source. Ensure work surfaces are easy to clean.
Respiratory Protection	A NIOSH-approved particulate respirator (e.g., an N95, N100, or P100 series) is REQUIRED when handling, weighing, or mixing the dry powders. Ensure the respirator is properly fitted and used in accordance with the manufacturer's instructions.
Protective Gloves	Gloves (e.g., nitrile or latex) are recommended to prevent skin contact and for good hygiene.
Protective Glasses	Safety glasses with side shields or, preferably, safety goggles are REQUIRED when handling the dry powders to prevent eye contact with airborne dust.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES	
Physical state/appearance	Fine, dry powder mixture.
Color	Off-white
Odor	Slight / none
Odor threshold	Not applicable
Boiling point/range	Not applicable
Freezing point/range	Not applicable
Flash point	Not applicable (inorganic material, not combustible)
Solubility(ies)	Insoluble in water; forms a suspension
Explosive properties	None
Flammability (solid, gas)	Not flammable
Vapor pressure	Not applicable
Vapor density	Not applicable
Relative density	Approx. 2.5-2.7 (water = 1)
Decomposition temperature	Calcium carbonate component decomposes at > 825 C
Viscosity	Not applicable (dry powder)

Section 10: STABILITY AND REACTIVITY	
Chemical stability	Stable under normal conditions, storage and transport.
Conditions to avoid	Generation of dust.
Incompatible materials	Strong acids/bases, strong oxidizers
Hazardous decomposition products	None expected under normal conditions. During high-temperature ceramic firing, carbon dioxide (CO_2) will be released from the decomposition of calcium carbonate. Firing may also produce new crystalline silica phases (e.g., cristobalite), which also carry an inhalation hazard.
Possibility of hazardous reactions	None known
Reactivity	Not reactive under normal conditions. Crystalline silica component may react with strong acids (e.g., hydrofluoric acid).

Section 11: TOXICOLOGICAL INFORMATION	
Information on likely routes of exposure	The primary routes of exposure are inhalation of dust and eye contact. Skin contact and ingestion are secondary routes.
Eye contact - serious eye damage or irritation	Causes eye irritation (Category 2B). Dust particles are abrasive and will cause mechanical irritation.
Skin contact - skin corrosion, sensitization or irritation	Not classified. May cause mechanical irritation or dryness from prolonged contact.
Ingestion - carcinogenicity/aspiration hazard	Not classified. Considered to have low acute toxicity (LD50 Rat > 2000 mg/kg)
Inhalation - respiratory sensitization/toxicity	Acute exposure to dust may cause respiratory tract irritation, coughing, and sneezing. Chronic long-term exposure to respirable crystalline silica dust may lead to silicosis (a severe lung disease) and lung cancer.
Symptoms related to the physical chemical and toxicological characteristics	Eye irritation; respiratory irritation from dust; coughing; in cases of long-term exposure to dried dust, risk of silicosis
Delayed or immediate effects	Immediate (Acute) Effects: Serious eye irritation and respiratory irritation upon exposure to airborne dust. Delayed (Chronic) Effects: The most significant hazard is the potential for developing silicosis and/or lung cancer after prolonged or repeated inhalation of respirable crystalline silica dust.
Germ cell mutagenicity	Not classified
Chemicals listed on NTP, IARC or OSHA as a carcinogen	Respirable crystalline silica (quartz) is listed by IARC and NTP as carcinogenic by inhalation.
Additional information	The dry powder components of this product contain crystalline silica (quartz). Respirable crystalline silica is classified as a 'known to be a human carcinogen' by the National Toxicology Program (NTP) and as 'carcinogenic to humans' (Group 1) by the International Agency for Research on Cancer (IARC). This hazard is associated specifically with the inhalation of fine, respirable particles.

Section 12: ECOLOGICAL INFORMATION (NON-MANDATORY)	
Ecotoxicity	The mineral components of this product are not expected to be hazardous to the aquatic environment. Large releases may increase the turbidity (cloudiness) of waterways.
Persistence and degradability	The inorganic components are stable and are not biodegradable.
Bioaccumulative potential	Low
Mobility in soil	This material has limited mobility in soil. In water, the powder components will settle as sediment.
Other adverse effects	Avoid uncontrolled releases

Section 13: DISPOSAL CONSIDERATIONS (NON-MANDATORY)	
Disposal instructions	The user is responsible for proper disposal. Dispose of unused dry powder, liquid medium, and mixed glaze in accordance with all applicable local, state, and federal regulations. Do not allow the product to enter drains or waterways.
Local disposal regulations	Follow municipal waste disposal guidelines
Hazardous waste code	This product, as supplied, is not considered a hazardous waste under U.S. RCRA regulations (40 CFR 261). However, disposal regulations may vary by location.
Contaminated packaging	Ensure containers are completely empty before recycling or disposal. Powder residue in empty containers should be handled with the same precautions as the bulk product.
Waste residues	Collect and dispose of non-hazardous waste unless contaminated.

Section 14: TRANSPORTATION INFORMATION (NON-MANDATORY)	
UN/ID number (DOT)	Not regulated
UN/ID number (IMDG)	Not regulated
UN/ID number (IATA)	Not regulated
Proper shipping name	Not applicable
Transport hazard class (DOT)	Not applicable
Transport hazard class (IMDG)	Not applicable
Transport hazard class (IATA)	Not applicable
Packing group (DOT)	Not applicable
Packing group (IMDG)	Not applicable
Packing group (IATA)	Not applicable
Environmental provisions	Not applicable
Special precautions	Ensure containers are sealed to prevent dust release during transport.

Section 15: REGULATORY INFORMATION (NON-MANDATORY)	
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)	This product is considered a 'Hazardous Chemical' under the OSHA Hazard Communication Standard due to the presence of Crystalline Silica and its classification as a Carcinogen (Cat 1A) and STOT-RE (Cat 1). It is also subject to the OSHA standard for Respirable Crystalline Silica (29 CFR 1910.1053).
TSCA	All components are listed on the TSCA Inventory or are exempt.
SARA Title III: Section 302 (EHS)	No components listed.
SARA 311/312 (40 CFR 370) Hazardous Chemical	Immediate (Acute) Health Hazard: Yes (Eye Irritation). Delayed (Chronic) Health Hazard: Yes (Carcinogenicity, STOT-RE).
SARA 313 (TRI reporting)	No components are subject to reporting thresholds.
CERCLA (Superfund) reportable quantity (lbs.) (40 CFR 302.4)	No components listed with an RQ.
California Proposition 65 Warning	WARNING: This product can expose you to chemicals including Crystalline Silica (airborne particles of respirable size), which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.
State Right-to-Know	Components such as Crystalline Silica (Quartz) (CAS 14808-60-7), Kaolin (CAS 1332-58-7), and Calcium Carbonate (CAS 1317-65-3) are listed on various state right-to-know lists (e.g., Pennsylvania, New Jersey, Massachusetts).

Section 16: OTHER INFORMATION	
Disclaimer	This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety, and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. Penguin Pottery assumes no liability for injury to the vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in this data sheet. Furthermore, Penguin Pottery assumes no liability for injury to the vendee or third persons proximately caused by abnormal use of the material, even if reasonable safety procedures are followed. All buyers/users assume all risks associated with the use of the material.
Date Created	23-Oct-25
Date Updated	2026-05-05
HMIS III Rating	Health: 2* (2 = Moderate Hazard, * = Chronic Hazard), Flammability: 0, Physical Hazard: 0, Personal Protection: E (Safety glasses, gloves, dust respirator)