

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

Product Identity: Penetron®, Penecrete Mortar™, Penepug®, Penetron Plus®
Manufacturer's Name: Penetron International, Ltd.
Street Address: 45 Research Way, Suite 203, East Setauket, New York 11733, USA
Emergency Telephone Number: +1 (631) 941-9700
Product Use: Concrete protection and permeability reduction.
Date of Preparation of the MSDS: 1/22/1981
Date of Last Revision of the MSDS: 7/12/2009

SECTION 2 - HAZARDS IDENTIFICATION

Physical Form: Solid (light grey powder).
Odor: No odor.
Primary Entry Routes: Inhalation, ingestion, skin contact, eye contact.
Target Organs or Systems: Contains material which may cause damage to upper respiratory tract, mucous membranes, eyes, nose, sinus.
Signs and Symptoms of Exposure (Acute Effects):
Inhalation: Cough, sore throat.
Ingestion: Burning sensation.
Skin Contact: Dry skin, redness.
Eye Contact: Redness, burning sensation.
Signs and Symptoms of Exposure (Chronic Effects): Repeated or prolonged contact with skin may cause dermatitis. Repeated or prolonged contact may cause skin sensitization.
Aggravation of Pre-Existing Conditions: Pre-existing conditions involving any of the above mentioned target organs or systems may be aggravated by this product.
Hazard description: Xi Irritant.



IRRITANT

Risk Phrases:

R36/37/38 Irritating to eyes, respiratory system and skin.
R43 May cause sensitization by skin contact.

Safety Phrases:

S2 Keep out of reach of children.
S22 Do not breathe dust.
S24/25 Avoid contact with skin and eyes.
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S28 After contact with skin, wash immediately with plenty of water.
S36/37/39 Wear suitable protective clothing, gloves and goggles.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	CAS NUMBER	% BY WEIGHT
Portland Cement	65997-15-1	40-70
Alkaline Earth Metals	1317-65-3	10-30
Crystalline Silica, Quartz, Crystalline Silicon Dioxide	14808-60-7	5-10
Does not contain chlorides		

SECTION 4 - FIRST AID MEASURES

Eye Contact: Lightly blow away any powder residue and immediately flush with water for 15 minutes. Remove contact lenses if easily possible. Seek medical attention if irritation occurs.

Skin Contact: Immediately flush affected area with water for 15 minutes. Remove and wash any contaminated clothing. Seek medical attention if irritation occurs.

Inhalation: Move affected individual to fresh air and seek medical attention immediately.

Ingestion: Immediately rinse mouth out with water. Do not induce vomiting. Seek immediate medical attention.

SECTION 5 - FIRE FIGHTING MEASURES

Flammable Properties: N/A. Product is not combustible.

Suitable Extinguishing Media: Use any extinguishing media suitable for the surrounding fire.

Protection of Firefighters: Firefighters should wear self-contained breathing apparatus and full fire fighting turn-out gear.

Chemical Hazards: Mixed with water the product will produce an alkaline solution which can cause skin irritation.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions: Evacuate contaminated area. Do not walk through spilled material. Increase ventilation and wear protective clothing and respiratory protection.

Environmental Precautions: Keep spilled material and runoff from entering drains, sewers, ditches and waterways. Minimize use of water to prevent environmental contamination.

Methods for Clean-up: Avoid generating dust. Vacuum, shovel or sweep up spilled material and place in a tightly sealed drum for proper disposal.

SECTION 7 - HANDLING AND STORAGE

Handling: Wear appropriate protective clothing and dust masks when there is risk of exposure. Minimize unnecessary personal contact. Workers should wash hands and face before eating and drinking.

Storage: Store in original container whenever possible. Store in a cool, dry, well-ventilated area out of direct sunlight. Do not store in the vicinity of food and drink. Keep in sealed container until needed.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

PRODUCT NAME	EXPOSURE LIMITS	
	OSHA PEL TWA	ACGIH TLV TWA
Portland Cement	15 mg/m ³ - 8 hours	10 mg/m ³ - 8 hours
Alkaline Earth Metals	15 mg/m ³ - 8 hours	10 mg/m ³ - 8 hours
Quartz, Crystalline Silica		10 mg/m ³ - 8 hours

Consult local or regional authorities for acceptable exposure limits.

Personal Protective Equipment (PPE):

Eye/Face Protection: Use safety goggles for mechanical mixing, spraying and overhead applications.

Skin Protection: Wear rubber or plastic gloves for prolonged exposure.

Respiratory Protection: Under normal conditions, use of a dust mask is recommended. In cases where airborne concentrations are expected to exceed exposure limits, wear a NIOSH approved air-purifying device.

General Hygiene Considerations: Wash all exposed skin after handling materials and before eating, drinking or using a lavatory. Launder all clothes and wash protective gear once finished using materials.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Grey powder.
Odor: Odorless.
Physical State: Solid (powder).
pH: 10-13 when in solution.
Vapor Pressure (mm Hg): Not Applicable.
Boiling Point: Not Applicable.
Melting Point: >1000°C.
VOC Content: None.

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability: Products are chemically stable.
Conditions to Avoid: Avoid exposure without appropriate protective work clothing and dust masks. Protect from water and cold damage.
Incompatible Materials: Products are incompatible with strong acids.
Hazardous Decomposition: Under normal storage and use conditions neither hazardous decomposition nor polymerization should occur.
Hazardous Reactions: When mixed with water; products produce an alkaline solution which can cause skin irritation.

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute Toxicity:

PRODUCT / INGREDIENT NAME	RESULT	SPECIES	DOSE	EXPOSURE
Alkaline Earth Metals	LD50 Oral	Rat	7340 mg/kg	-

Carcinogenicity:

PRODUCT / INGREDIENT NAME	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Quartz	A2	I	-	+	Proven	-

SECTION 12 - ECOLOGICAL INFORMATION

Environmental Effects: No known significant effects.
Ecotoxicity: Not Available.
Degradability: Not Available.
Bioaccumulation: Not Available.
Mobility: Not Available.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste Disposal: Disposal should be in accordance with applicable regional, national and local laws and regulations. Avoid spillage of material and prevent material or runoff from entering drains, sewers, ditches and waterways. Minimize use of water to prevent environmental contamination.

SECTION 14 - TRANSPORT INFORMATION

REGULATORY INFORMATION	UN NUMBER	PROPER SHIPPING NAME	CLASSES	PG*	ADDITIONAL INFO
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

US FEDERAL REGULATIONS:

United States Inventory (TSCA 8b): Not determined.

TSCA 8(d) H and S Data Reporting:

4-methyl-m-phenylene diisocyanate: 1990;

2-methyl-m-phenylene diisocyanate: 1990.

SARA 302/304/311/312 Extremely Hazardous Substances: No products were found.

SARA 302/304 Emergency Planning and Notification: No products were found.

SARA 302/304/311/312 Hazardous Chemicals:

Cement, Portland, chemicals;

Quartz (SiO₂);

Limestone.

SARA 311/312 MSDS Distribution - Chemical Inventory - Hazard Identification:

Cement, Portland, chemicals: Immediate (acute) health hazard.

Quartz (SiO₂): Immediate (acute) health hazard; Delayed (chronic) health hazard.

Limestone: Immediate (acute) health hazard.

EU GUIDELINES:

This product has been established and marked in accordance with EU Directive/Ordinance on non-hazardous materials.

Code Letter and Hazard Designation of Product: Xi Irritant

Risk Phrases:

R36/37/38 Irritating to eyes, respiratory system and skin.

R43 May cause sensitization by skin contact.

Safety Phrases:

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S36/37/39 Wear suitable protective clothing, gloves and goggles.

AUSTRALIAN CODE:

Under the Australian Code for Transport of Dangerous Goods by Road and Rail, the product is not classified as Dangerous Goods.

SECTION 16 - OTHER INFORMATION

The information herein refers only to the materials listed. It does not relate to the use of these materials in combination with any other materials or applications for which the product is not intended. The information included is accurate and reliable as of the most recent revision date of this MSDS.

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