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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

PermaBASE CI™ Insulated Cement Board

IDENTIFIERS

PermaBASE CI™

OTHER MEANS OF IDENTIFICATION

N/A

RECOMMENDED USE

Typically specified for use in exterior wall applications.

RESTRICTIONS ON USE

Use in well-ventilated area and avoid breathing dust. Avoid skin contact.

MANUFACTURER/SUPPLIER DETAILS

PermaBASE Building Products, LLC 2001 Rexford Road Charlotte, NC 28211 Website: permabase.com

EMERGENCY TELEPHONE NUMBER

Director Quality Services – National Gypsum Services Company (704) 551-5820 - 24 Hour Emergency Response

National Gypsum Company is the exclusive service provider for products manufactured by PermBASE Building Products, LLC.

SECTION 2: HAZARDS IDENTIFICATION

UNITED STATES (US)

According to OSHA 29CFR 1910.1200 (HCS)

GHS CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

Carcinogenicity - Category 1A - (H-350)

Specific target organ toxicity, repeated exposure – Category 1 (H-372)

Acute toxicity, inhalation - Category 4 (H-332) Skin corrosion/irritation Category 2 (H315) Serious eye irritation - Category 1 (H-318)

PICTOGRAM







SIGNAL WORD

Health Hazard Corrosive

HAZARD STATEMENTS

H-350 May cause cancer

H-332, 372 Harmful if inhaled. Causes damage to organs (lungs) through prolonged or repeated exposure.

H-315, 318 Causes skin irritation and serious eye irritation.

PRECAUTIONARY STATEMENTS

PREVENTION

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Do not breathe dust.

Use personal protective equipment as required. (See Section 8)

Use engineering controls and wet methods to minimize dust.



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RESPONSE

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If on skin, wash with plenty of soap and water. If skin irritation occurs, get medical attention. If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if exposed or concerned.

STORAGE

Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.

DISPOSAL

Dispose of material in accordance with federal, state, and local regulations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	COMMON NAME/SYNONYM	IDENTIFIERS/CAS NUMBER	% (WEIGHT)	IMPURITIES
Silicon Dioxide (SiO ₂)	Sand, quartz	14808-60-7	<40	
Mixture-calcium and aluminum silicates	Portland Cement	65997-15-1	<40	Crystalline silica (CAS # 14808-60-7)
Mixture-silicates aluminates	Pozzolan, fly ash	68131-74-8	<20	Crystalline silica (CAS # 14808-60-7)
Mixture-calcium aluminates	High Alumina Cement	65997-16-2	<20	Crystalline silica (CAS # 14808-60-7)
Mixture-calcium, aluminum silicates, amorphous silica	Fiberglass scrim or fiberglass mat laminate	65997-17-3	<4	Mixture-calcium, aluminum silicates, amorphous silica
Calcium Hydroxide	Hydrated lime	1305-62-0	<2	Crystalline silica (CAS # 14808-60-7)
Polyurethane modified polyisocyanurate polymer	Polyiso foam, containing: Residual blowing agent	None	<15	
pentanes		109-66-0	<2	
Continuous filament glass fibers	Non-woven coated glass facer containing: Fiberglass Limestone	65997-17-3	<5	
Limestone		1317-65-3	Proprietary	Crystalline silica (CAS # 14808-60-7)
Polyvinyl acetate	Latex		Proprietary	

SECTION 4: FIRST-AID MEASURES

INHALATION

Remove to fresh air. Drink water to clear throat and blow nose to remove dust. If breathing difficulty persists, seek medical attention.

EYE CONTACT

Do not rub or scratch eyes. Immediately flush eyes with water for 15 minutes. Remove contact lenses (if applicable). Seek medical attention if irritation persists.

SKIN CONTACT

Flush and wash skin with soap and water. Utilize lotions to alleviate dryness if present. Seek medical attention if irritation persists.

INGESTION

Product is not intended to be ingested or eaten. If product is ingested, irritation of the gastrointestinal tract may occur, and should be treated symptomatically. Do not induce vomiting. Rinse mouth with water to remove particles, and drink plenty of water to help reduce the irritation. (No chronic effects are expected following ingestion).

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Any condition generally aggravated by mechanical irritants in the air or on the skin. Specific data are not available which address medical conditions that are generally recognized as being aggravated by exposure to this product.

MOST IMPORTANT SYMPTOMS/EFFECTS. ACUTE AND DELAYED:

See Section 11 - Toxicological Information

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SECTION 5: FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Dry chemical, foam, water, or extinguishing media appropriate for surrounding fire.

UNUSUAL FIRE AND EXPLOSION HAZARDS

The product is a solid article that will burn if exposed to an ignition source of sufficient heat and intensity, or open flame, such as a welder's torch. It should be installed with a 15-minute thermal barrier between it and the structure's interior. Under certain fire conditions, combustible gases can be generated, creating rapidly spreading, high-intensity flames and dense, black smoke. Burning of this product can produce irritating and potentially toxic fumes and gases, including carbon monoxide and carbon dioxide; other undetermined hydrocarbon fractions could be released in small quantities.

Flashpoint: Not applicable (product is not a liquid)

Auto-Ignition temperature: Not determined

SPECIAL HAZARDS ARISING FROM THE MIXTURE

Pentane vapors may be emitted from freshly produced foam or when product is heated. Pentane concentrations between the lower and upper explosive limits (LEL and UEL) may accumulate under unique circumstances inside a sealed container or within confined areas. If such concentrations are provided a source of ignition, there may be a very high rate of flame propagation.

Pentane:Flashpoint $< -37^{\circ}$ CVapor Pressure $= 514 \text{ mm Hg at } 25^{\circ}$ CBoiling point $= 28 \text{ to } 49^{\circ}$ CLEL= 1.5% (35,000 mg/m3)Vapor density= 2.49UEL= 7.8%

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS

A SCBA is recommended to limit exposures to combustion products when fighting any fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Product is solid article.

General recommendations:

Wear appropriate Personal Protective Equipment. (See Section 8). Maintain proper ventilation.

ENVIRONMENTAL PRECAUTIONS

Do not discard residues into sewers, storm sewers, or surface waters. Chemicals in this material are not expected to cause harm to aquatic or terrestrial plants or animals; however, fish or other animals may eat the product, which could obstruct their digestive tracts.

Be a good steward of the environment and clean up residues (some components of the product are not biodegradable).

Dispose of in accordance with applicable federal, state, and local regulations.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

Pick-up larger pieces to avoid a tripping hazard. Sweep or vacuum remaining material into a waste container for disposal.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

Cutting of product should be done in a manner to reduce or control generation of airborne dusts. Avoid unnecessary dust exposures when cutting or abrading by using adequate local or general ventilation.

Avoid dust contact with ignition sources. Handle product using good industrial hygiene and safety practices. Wear recommended personal protective equipment when handling. (See Section 8)

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Store in a dry, well-ventilated area. Assure storage containers or areas and shipping containers are adequately ventilated.

No Smoking-No Matches-No Welding rules should be enforced. Install according to manufacturer's recommendations.

Store panels flat to minimize damage. Do not stack panels too high when storing to minimize the risk of falling.

Avoid contact with strong acids.

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Exposure Limits

COMPONENT	OSHA PEL (mg/m³)	ACGIH TLV (mg/m³)			
Nuisance dusts NOS containing no asbestos and <1% crystalline silica	15 ^(T) 5 ^(R)	10 ^(T)			
Fiberglass dust	See nuisance dusts	5 ^(T)			
Limestone dust	See nuisance dusts	See nuisance dusts			
Pentanes vapor	2950 TWA	1410 TWA			
Formaldehyde	0.9 TWA 2.5 STEL	0.4 TWA			
Portland Cement	15 ^(T) 5 ^(R)	10 ^(T)			
High Alumina Cement	15 ^(T) 5 ^{(R}	10 ^(T)			
Pozzolan	15 ^(T) 5 ^(R)	10 ^(T)			
Sand	[(10) / (%SiO2+2)] ^(R) : [(30) / (%SiO2+2)] ^(T)	0.025 ^(R)			
Crystalline Silica (Quartz) ¹	[(10) / (%SiO2+2)] ^(R) : [(30) / (%SiO2+2)] ^(T)	0.025 ^(R)			
Fiberglass Scrim	15 ^(T) 5 ^(R)	1 f/cc ^(R)			
Calcium Hydroxide (Hydrated Lime)	15 ^(T) 5 ^(R)	5 ^(R)			
Calcium Carbonate	15 ^(T) 5 ^(R)	10 ^(T)			
T - Total Dust R - Respirable Dust 1 - Present as an impurity in raw materials.					

EXPOSURE CONTROLS/APPROPRIATE ENGINEERING CONTROLS

Work/Hygiene Practices: Pick up large pieces; do not wash down drain. Sweep or vacuum smaller pieces into a waste container for disposal. If needed, use water spray to wet down and minimize dust generation. Do not dry sweep dust accumulation or use compressed air for cleanup. Exposed skin areas should be washed with soap and cool water after working with product. Clothing should be laundered separately from other clothes.

Ventilation: Normal work area ventilation.

PERSONAL PROTECTIVE EQUIPMENT/RESPIRATORY PROTECTION

If respiratory tract irritations occur or if any dust exposure limit is exceeded, use a respirator such as 3M Model 8271 or Model 8210, or equivalent for protection against nuisance dusts. When normal ventilation is provided to work area, no respiratory protection is needed for pentane vapor.

EYE PROTECTION

If respiratory tract irritations occur or if any dust exposure limit is exceeded, use a respirator such as 3M Model 8271 or Model 8210, or equivalent for protection against nuisance dusts. When normal ventilation is provided to work area, no respiratory protection is needed for pentane vapor.

SKIN

To avoid skin irritation from excessive dust generated during cutting operations, wear long-sleeved, loose fitting clothing, long pants, and gloves.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

- a. Appearance: white or cream-colored foam flat or tapered solid with a coated glass mat facing on each side.
- b. Odor: Negligible
- c. Odor threshold: Not available
- **d. pH:** Not available
- e. Melting point/freezing point: MP >250°F, FP Not Available
- f. Initial boiling point and boiling range: Not Available

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g. Flash point: Not Applicable – product not a liquid (Accumulated pentane vapors from freshly produced foam or when product is heated, <-37°C)

h. Evaporation rate: Not available

i. Flamability (solid, gas): (See section 5)

j. Upper/lower flammability or explosive limits: Not available (Accumulated pentane vapors from freshly produced foam or when product is heated, LEL=1.5% or 35000 mg/m3, UEL=7.8%

k. Vapor pressure: Not availablel. Vapor density: Not available

m. Relative density: <1

n. Solubility(ies): Insoluble in water

o. Partition coefficient: n-octanol/water: Not available
 p. Auto-ignition temperature: Not determined
 q. Decomposition temperature: Not available

r. Viscosity: Not available

s. Volatile organic compound (VOC) content: Pentanes < 3%

SECTION 10: STABILITY AND REACTIVITY

a. Reactivity: No data availableb. Chemical stability: Stable

c. Possibility of hazardous reactions: Minimal (insignificant)

- d. Conditions to avoid (e.g., static discharge, shock, or vibration): To prevent structural deterioration, avoid contact with acetone, methyl ethyl ketone, tetrahydrofuran, chlorine, chloroform, hydrogen peroxide, ethylene dichloride, dimethyl sulfoxide, and dimethyl formamide.
- e. Incompatible materials: acetone, methyl ethyl ketone, tetrahydrofuran, chlorine, chloroform, hydrogen peroxide, ethylene dichloride, dimethyl sulfoxide, and dimethyl formamide.
- f. Hazardous decomposition products: None identified

SECTION 11: TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS/INFORMATION ON LIKELY ROUTES OF EXPOSURE

INGESTION May cause gastrointestinal irritation. (See below)

INHALATION Dust may irritate respiratory system. Chronic exposure may result in lung disease. (See below)

SKIN CONTACT May cause irritation to the skin. (See below) **EYE CONTACT** May cause mechanical irritation. (See below)

SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS

Extensive medical-scientific research has been conducted regarding the health aspects of fiber glass over the past 50 years. The International Agency for Research on Cancer (IARC), and agency of the World Health Organization (WHO), at a meeting in June 1987, reviewed all the significant research on the health effects attributed to fiberglass. IARC determined that the data from both human and animal studies was inadequate to classify continuous filament glass fibers such as used in fiber glass reinforcement products, as carcinogenic to humans. No chronic health effects are known to be associated with exposure to glass fibers. Results from epidemiological studies have not shown any increase in respiratory disease or cancer. The International Agency for Research on Cancer has classified continuous filament fiberglass —Not Classifiable as to Carcinogenicity to Humans|| (Group 3).

TOXICOLOGICAL DATA

No toxicological data is available for this product. Toxicological information for components of this product listed below:

ACUTE TOXICITY: Not available

SKIN CORROSION/IRRITATION: Not available

SERIOUS EYE DAMAGE/EYE IRRITATION: Not available

SKIN SENSITIZATION: Not available

RESPIRATORY SENSITIZATION: Not available

Results from epidemiological studies have not shown any increase in respiratory disease.

SENSITIZATION: Not available
MUTAGENICITY: Not available
CARCINOGENICITY: Not available

Results from epidemiological studies have not shown any increase in cancer.

REPRODUCTIVE EFFECTS: Not available

SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE: Not available

ASPIRATION TOXICITY: Not available

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SECTION 12: ECOLOGICAL INFORMATION

- a. **Ecotoxicity (aquatic and terrestrial, where available):** This product not expected to cause harm to aquatic or terrestrial plants or animals; however, fish or other animals may eat the product, which could obstruct their digestive tracts.
- b. Persistence and degradability: Some components of the product are not biodegradable.
- c. Bioaccumulative potential: Not available
- d. Mobility in soil: Not available
- e. Other adverse effects (such as hazardous to the ozone layer): This product is not manufactured with, nor does it contain any Class 1 Ozone depleting chemicals as defined by EPA in Title VI of the Clean Air Act Amendments of 1990 40 CFR Part 82, Protection of Stratospheric Ozone. This product is not classified as a hazardous air pollutant in the Title III Clean Air Act of 1990.

SECTION 13: DISPOSAL CONSIDERATIONS

This product, if discarded as supplied, is not considered a hazardous waste under RCRA (40 CFR 261) and may be placed directly into receptacles that will transport the waste to a municipal waste, industrial waste, or demolition waste landfill. If contact with a contaminating substance alters the material, it is the user's responsibility to determine at the time of disposal whether it meets RCRA criteria for hazardous waste. Dispose in accordance with federal, state and local regulations.

SECTION 14: TRANSPORT INFORMATION

This product is not a DOT hazardous material.
Shipping Name: Same as product name
ICAO/IATA/IMO: Not applicable 157320, Class 150
National Motor Freight Classification (NMFC)

SECTION 15: REGULATORY INFORMATION

All ingredients are included on the TSCA inventory.

FEDERAL REGULATIONS

SARA Title III: Not listed under Sections 302, 311,312 and 313

CERCLA: Not listed **RCRA**: Not listed

OSHA: Dust and potential respirable crystalline silica generated during product use may be hazardous.

State Regulations: California Prop 65: Respirable crystalline silica is known to the state of California to cause cancer. Industrial hygiene monitoring during recommended use of this product failed to identify any respirable crystalline silica.

Canada WHMIS: All components of this product are included in the Canadian Domestic Substances List (DSL).

Crystalline silica: WHMIS Classification D2A

SECTION 16: OTHER INFORMATION

SDS PREPARED BY:

PermaBASE Building Products, LLC 2001 Rexford Road Charlotte, NC 28211 (704) 551-5820

EFFECTIVE DATE CHANGE:

January 20, 2021

KEY TO ABBREVIATIONS

ACGIH American Conference of Governmental Industrial Hygienists CAS Chemical Abstract Services Number CFR Code of Federal Regulations DOT Department of Transportation EPA Environmental Protection Agency HEPA High Efficiency Particulate Air HCS Hazard Communications Standard **HMIS** Hazardous Material Identification System IARC International Agency for Research on Cancer IATA International Air Transport Association ICA0 International Civil Aviation Organization

PermaBASE CI™ **Insulated Cement Board**

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IMO International Maritime Organization

NIOSH National Institute for Occupational Safety and Health

NFPA National Fire Protection Association

NTP National Toxicology Program

OSHA Occupational Safety and Health Administration

PEL Permissible Exposure Limit PPE Personal Protective Equipment

TLV Threshold Limit Value **TSCA** Toxic Substance Control Act TWA Time Weighted Average

WHMIS Workplace Hazardous Materials Information System

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind expressed or implied is made with respect to the information contained herein. This safety data sheet was prepared to comply with the OSHA Hazard Communication Standard (29 CFR 1910.1200).

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PermaBASE Building Products, LLC 2001 Rexford Road Charlotte, NC 28211 704.365.7300