Section 1: Product and Company Identification

Product Name
PermaBase® CI Insulated Cement Board

Product Identifiers
PermaBase® CI

Other means of identification NA

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
National Gypsum Company
2001 Rexford Road
Charlotte, NC 28211

In Canada:
UNIFIX INC. A subsidiary of National Gypsum Company
35, Unifix Street
Bromont, QC J2L 1N5
CANADA

Emergency Telephone Number
Director Quality Services 1-450-534-0955 or toll free 1-800-461-0955 (8h00 -17h00)
(704) 551-5820 - 24 Hour Emergency Response e-mail: info@unifixinc.com
Website: www.nationalgypsum.com
Website: www.unifixinc.com

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 2A (H-319)

GHS Label Elements
Pictogram NA

Signal Word
Danger

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, 319 Causes skin irritation and serious eye irritation

Precautionary Statements NA

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
Section 2: Hazards Identification (Continued)

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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Common name/ Synonym</th>
<th>Identifiers</th>
<th>% (weight)</th>
<th>Impurities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silicon Dioxide (SiO₂)</td>
<td>Sand, quartz</td>
<td>14808-60-7</td>
<td>&lt;40</td>
<td>Crystalline silica (CAS # 14808-60-7)</td>
</tr>
<tr>
<td>Limestone, industrial sand</td>
<td>1317-65-3</td>
<td>&lt;40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portland Cement</td>
<td>65997-15-1</td>
<td>&lt;20</td>
<td>Crystalline silica (CAS # 14808-60-7)</td>
<td></td>
</tr>
<tr>
<td>Pozzolan, fly ash</td>
<td>68131-74-8</td>
<td>&lt;20</td>
<td>Crystalline silica (CAS # 14808-60-7)</td>
<td></td>
</tr>
<tr>
<td>High Alumina Cement</td>
<td>65997-16-2</td>
<td>&lt;5</td>
<td>Crystalline silica (CAS # 14808-60-7)</td>
<td></td>
</tr>
<tr>
<td>Fiberglass scrim or fiberglass mat laminate</td>
<td>65997-17-3</td>
<td>&lt;4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydrated lime</td>
<td>1305-62-0</td>
<td>&lt;2</td>
<td>Crystalline silica (CAS # 14808-60-7)</td>
<td></td>
</tr>
<tr>
<td>Polyiso foam, containing: Residual blowing agent</td>
<td>None</td>
<td>&lt;15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-woven coated glass facer containing: Fiberglass</td>
<td>None</td>
<td>&lt;5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limestone</td>
<td>1317-65-3</td>
<td>Proprietary</td>
<td>Silica</td>
<td></td>
</tr>
<tr>
<td>Latex</td>
<td>9003-20-7</td>
<td>Proprietary</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Section 4: First-Aid Measures

**Inhalation**  
Remove to fresh air. Drink water to clear throat and blow nose to remove dust.

**Eye contact**  
Flush eyes with running water for at least 15 minutes. Do not rub or wipe eyes. If irritation persists, consult a medical professional.

**Skin contact**  
Wash with soap and cool running water.

**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)

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.

<table>
<thead>
<tr>
<th>Pentane:</th>
<th>Flashpoint</th>
<th>≤ -37°C</th>
<th>Vapor pressure</th>
<th>= 514 mm Hg at 25°C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boiling point</td>
<td>= 28 to 49°C</td>
<td>LEL</td>
<td>= 1.5% (35,000 mg/m³)</td>
</tr>
<tr>
<td></td>
<td>Vapor density</td>
<td>= 2.49</td>
<td>UEL</td>
<td>= 7.8%</td>
</tr>
</tbody>
</table>

**Special Protective Equipment and Precautions for Firefighters**  
Self-contained breathing apparatus (SCBA). 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 a 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.
Use a light water spray to minimize dust generation.
If accidentally released to a water body, material will float and disperse with wind and current; contain the material with booms and remove either manually or with a vacuum truck.
If accidentally released to land, scoop up material and put into suitable 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 Lighters—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.
### Section 8: Exposure Controls/Personal Protection

#### Control Parameters

<table>
<thead>
<tr>
<th>Component</th>
<th>OSHA PEL (mg/m³)</th>
<th>ACGIH TLV (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Exposure Limits</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Component</strong></td>
<td><strong>OSHA PEL</strong></td>
<td><strong>ACGIH TLV</strong></td>
</tr>
<tr>
<td><strong>Exposure Limits</strong></td>
<td>(mg/m³)</td>
<td>(mg/m³)</td>
</tr>
<tr>
<td>Nuisance dusts NOS containing no asbestos and &lt;1% crystalline silica</td>
<td>15 TWA total</td>
<td>10 TWA</td>
</tr>
<tr>
<td></td>
<td>5 TWA respirable</td>
<td></td>
</tr>
<tr>
<td>Fiberglass dust</td>
<td>See nuisance dusts</td>
<td>5 TWA</td>
</tr>
<tr>
<td>Limestone dust</td>
<td>See nuisance dusts</td>
<td>See nuisance dusts</td>
</tr>
<tr>
<td>Pentanes vapor</td>
<td>2950 TWA</td>
<td>1410 TWA</td>
</tr>
<tr>
<td>Formaldehyde</td>
<td>0.9 TWA</td>
<td>0.4 TWA</td>
</tr>
</tbody>
</table>

1 – Present as an impurity in raw materials

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**Exposure Controls**

5 of 9
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
Safety goggles or glasses with side shields are recommended.

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: NA
(e) Melting point/freezing point: MP >250°F, FP Not available
(f) Initial boiling point and boiling range: NA
(g) Flash point: Not applicable - product is not a liquid (Accumulated pentane vapors from freshly produced foam or when product is heated, <−37°C)
(h) Evaporation rate: Not available
(i) Flammability (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: NA
(l) Vapor density: NA
(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) VOC (Volatile Organic Compound): Pentanes <3%

Section 10: Stability and Reactivity

(a) Reactivity: Not available
(b) 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**
Dust may cause gastrointestinal irritation. (See below)

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

**Skin contact**
Dust may cause irritation to the skin. (See below)

**Eye contact**
Dust may cause irritation to the eyes. (See below)

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 fiber glass.

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

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
National Motor Freight Classification (NMFC): 157320, Class 150

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: Non-hazardous according to 29CFR1910.1200 when used as intended.
State Regulations
California Prop 65: Respirable crystalline silica is known to the state of California to cause cancer.
Canada WHMIS
All components of this product are included in the Canadian Domestic Substances List (DSL).
Pentane: Ingredients Disclosure List (IDL), exceeds threshold concentrations

Section 16: Other Information
SDS Prepared by: National Gypsum Company
2001 Rexford Road
Charlotte, NC 28211
Phone Number: (704) 551-5820
Date of Preparation: March 13, 2019

Revision indicators and Date
Effective Date Change:
Format Changes:
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
ICAO  International Civil Aviation Organization
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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