



# Material Safety Data Sheet

MSDS No: **GB-1504**

PermaBase® BRAND Cement Board Products

Date: July 1, 2009  
Supersedes Date: May 22, 2006

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## 1. PRODUCT AND COMPANY INFORMATION

### Manufacturer Information:

National Gypsum Company  
2001 Rexford Road  
Charlotte, NC 28211

### For Emergency Product Information Call:

Director Quality Services  
(704) 551-5820 - 24 Hour Emergency Response  
Website: [www.nationalgypsum.com](http://www.nationalgypsum.com)

Product Name: **PermaBase  
PermaBase Flex  
PermaBase UltraBacker™**

Use: Underlayment for Ceramic Tile on floors, countertops, EIFS systems.

Generic Descriptions: Gray cementitious material sandwiched between two layers of a fiberglass mesh scrim or a fiberglass mat laminate with a double wrapped edge.

## 2. HAZARDS IDENTIFICATION

Appearance and Odor: Gray solid with slight organic odor upon opening that dissipates quickly.

**Contains no asbestos.** HMIS Hazard Class No. 1, 0, 0.

### Emergency Overview

PermaBase® BRAND Cement Board Products do not present an inhalation, ingestion, or contact health hazard unless subjected to operations such as sawing, sanding or machining which result in the generation of airborne particulate. Dust generated is alkaline, and could cause corrosive damage to skin, tissues, and eyes. Wear eye and skin protection. This product also contains quartz (crystalline silica) as a naturally occurring contaminant. It is recommended that a NIOSH approved particulate respirator be worn whenever working with this product results in airborne dust exposure exceeding the prescribed limits. (See Section 11 - Toxicological Information)

### OSHA Regulatory Status

While this material is not considered hazardous by the OSHA Hazard Communication Standard (29CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.

**2. HAZARDS IDENTIFICATION (CONTINUED)****Potential Health Effects**

Primary Routes of Entry: Inhalation, Dermal contact

Target Organs: Respiratory system, skin, eyes.

Inhalation: Acute exposure to airborne dust concentrations in excess of the PEL/TLV may result in coughing, dyspnea, wheezing, and a burning irritation of the nose, throat, and upper respiratory tract, along with possible impaired pulmonary function. Chronic exposures may result in lung disease (silicosis and/or lung cancer). (See Section 11 - Toxicological Information)

Exposures to respirable crystalline silica have not been documented during normal use of this product. However, good housekeeping practices and industrial hygiene monitoring is recommended when the potential for significant exposure exists.

Skin Contact: Contact with wet portland cement may cause severe irritation, redness, and possible burns. Continued and prolonged contact may result in drying of the skin. Contact with dust or glass fibers may produce itching, rash and/or redness. Repeated or prolonged exposure may result in dermatitis.

Eye Contact: Contact with dust may cause burns and/or mechanical irritation. Do not wear contact lenses if dust will be generated.

Ingestion: Wet product is alkaline, and may cause chemical burns to the mouth, throat, esophagus and stomach. Gastrointestinal irritation or bleeding may develop.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

<u>Component</u>	<u>CAS-Number</u>	<u>Weight Percent</u>
Portland Cement	65997-15-1	<25
High Alumina Cement	65997-16-2	<6
Pozzolan		<25
Sand		<50
Naphthalene Sulfonate		<2
Crystalline Silica (Quartz)	14808-60-7	<5
Fiberglass scrim or fiberglass glass mat laminate	65997-17-3	<5

**4. FIRST AID MEASURES**

- **Inhalation:** Remove exposed individual to fresh air immediately. If breathing difficulty persists, seek medical attention.
- **Skin:** Flush and wash skin with soap and water. Utilize lotions to alleviate dryness if present. Seek medical attention if irritation persists.
- **Eye:** Do not rub or scratch eyes. Immediately flush eyes with water for 15 minutes. Seek medical attention to evaluate for burns or scratches.
- **Ingestion:** Product is not intended to be ingested. Large amounts may cause abdominal discomfort or possible obstruction of the digestive tract. Seek medical attention if problems persist.

## **5. FIRE FIGHTING MEASURES**

### **Flammable Properties**

- Not flammable or combustible
- NFPA Hazard Class No: 0/0/0

### **Extinguishing media**

- Dry chemical, foam, water, fog or spray

### **Protection of firefighters**

- Standard protective equipment and precautions

### **Fire and Explosion Hazards**

- None

### **Hazardous Combustion Products**

- None known

## **6. ACCIDENTAL RELEASE MEASURES**

Not applicable, as product is an article composite.

General recommendations:

- Wear appropriate Personal Protective Equipment. (See Section 8)
- Maintain proper ventilation.
- 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.
- Waste material is not a hazardous waste. Dispose of in accordance with applicable federal, state, and local regulations.

## **7. HANDLING AND STORAGE**

- Avoid contact with eyes, skin and clothing.
- Wear recommended personal protective equipment when handling. (See Section 8)
- Avoid breathing dust.
- Minimize generation of dust.
- Utilize proper lifting techniques when moving product and employ mechanical/ergonomic assistance when possible (i.e. move with forklifts, hold in place with lifts) to minimize the risk of back injury.
- Store material in a cool, dry, ventilated area, away from excessive heat or sunlight.
- Store panels flat to minimize damage.
- Do not stack panels too high when storing to minimize the risk of falling.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Exposure Guidelines**

Component	Exposure Limits	
	OSHA PEL (mg/m <sup>3</sup> )	ACGIH TLV (mg/m <sup>3</sup> )
Portland Cement	15 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>
High Alumina Cement	10 <sup>(T)</sup> 5 <sup>(R)</sup>	10 <sup>(T)</sup>
Pozzolan		
Sand		
Naphthalene Sulfonate		
Crystalline Silica (Quartz)	0.1 <sup>(R)</sup>	0.025 <sup>(R)</sup>
Fiberglass Scrim	15 <sup>(T)</sup> 5 <sup>(R)</sup>	1 f/cc <sup>(R)</sup>

T- Total Dust  
- Respirable Dust

**Engineering Controls**

- Work/Hygiene Practices: The score and snap method of cutting is recommended. Sawing, drilling or machining will produce dust.
- Ventilation: Provide local and general exhaust ventilation to maintain a dust level below the PEL/TLV.
- Utilize wet methods, when appropriate, to reduce generation of dust.

**Personal Protective Equipment**

- Respiratory Protection: A NIOSH approved particulate respirator is recommended in poorly ventilated areas or if the PEL/TLV is exceeded. OSHA's 29 CFR 1910.134 (Respiratory Protection Standard) must be followed whenever work conditions require respirator use.
- Eye Protection: Safety glasses or goggles.
- Skin: Gloves, protective clothing and/or barrier creams may be utilized if conditions warrant.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance:** Gray color  
**Odor:** Low to none  
**Physical State:** Solid  
**Ph:** ~12  
**Solubility (H<sub>2</sub>O):** Slight  
**Boiling, Freezing, Melting Point:** Not Applicable  
**Decomposition Temperature:** Not Applicable  
**Vapor pressure:** Not Applicable  
**Vapor density:** Not Applicable  
**Volatile organic compounds (VOC) content:** None

**Flammability:** Not Applicable  
**Flash Point:** Not Applicable  
**Upper/Lower explosive limits:** Not applicable  
**Auto-ignition temperature:** Not Applicable  
**Partition coefficient: n-octanol/water:** Not applicable  
**Evaporation rate:** Not Applicable  
**Molecular weight:** mixture  
**Molecular formula:** Not applicable  
**Specific Gravity:** ~1.2  
**Bulk Density:** ~73 lbs/ft<sup>3</sup>

**10. STABILITY AND REACTIVITY**

**Chemical stability:** Stable in dry environments.

**Conditions to avoid:** Contact with strong acids

**Incompatibility:** None

**Hazardous decomposition:** None known

**Hazardous polymerization:** Will not occur.

**11. TOXICOLOGICAL INFORMATION****Human Data**

There is no information on toxicokinetics, metabolism and distribution.

There have been reports of irritation and burns to mucus membranes of the eyes and respiratory tract upon acute exposure to dusts in excess of the recommended limits.

Chronic exposure to crystalline silica (a naturally occurring contaminant) in the respirable size has been shown to cause silicosis, a debilitating lung disease. In addition, the International Agency for Research on Cancer (IARC) classifies crystalline silica inhaled in the form of quartz or cristobalite from occupational sources as carcinogenic to humans, Group 1. The National Toxicology Program (NTP) classifies respirable crystalline silica as a substance which may be reasonably anticipated to be a carcinogen. OSHA does not regulate crystalline silica as a human carcinogen. Industrial hygiene monitoring to date has not identified any detectable respirable crystalline silica in dust sampling conducted during gypsum panel installation utilizing recommended procedures.

**Animal Data**

LD<sub>50</sub> and LC<sub>50</sub> data not available.

**12. ECOLOGICAL INFORMATION**

This product could be toxic to fish due to its high alkalinity from the portland cement. No studies are available.

**13. DISPOSAL CONSIDERATIONS**

- Dispose of according to Local, State, Federal, and Provincial Environmental Regulations.
- Recycle if possible.

**14. TRANSPORT INFORMATION**

- This product is not a DOT hazardous material
- Shipping Name: Same as product name
- ICAO/IATA/IMO: Not applicable

**15. REGULATORY INFORMATION**

All ingredients are included on the TSCA inventory.

**Federal Regulations**

**SARA Title III:** Not listed under Sections 302, 304, and 313

**CERCLA:** Not listed

**RCRA:** Not listed

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

