



# MATERIAL SAFETY DATA SHEET

MSDS NO. 01400

**DUROCK® Cement Board, DUROCK® Exterior Cement Board,  
DUROCK® Underlayment Board & Concrete Utility Board**

Page 1 of 4

United States Gypsum Company  
125 South Franklin Street  
Chicago, Illinois 60606-4678

Product Safety: 1 (800) 507-8899  
Version Date: October 1, 1999  
Version 3

## SECTION I PRODUCT IDENTIFICATION

**PRODUCT(S):** DUROCK® Cement Board, DUROCK® Exterior Cement Board, DUROCK® Underlayment Board & Concrete Utility Board

**CHEMICAL FAMILY:** Cement Panel

## SECTION II INGREDIENTS

MATERIAL	WT%	TLV (mg/m <sup>3</sup> )	PEL (mg/m <sup>3</sup> )	CAS NUMBER
Portland Cement	10-30	10(T)	10(T)/5(R)	65997-15-1
Expanded Clay Aggregate Or Expanded Shale	30-50	(NE)	(NE)	68334-37-2 68476-95-9
High Alumina Cement	0-10	10(T)	10(T)/5(R)	65997-16-2
Fly Ash	10-20	5(R)	(NE)	68131-74-8
Gypsum	0-10	10	15(T)/5(R)	13397-24-5*
Fiber Glass Scrim	1-5	10	15(T)/5(R)	65997-17-3
Cellulose Fiber	0-2	10	15/5(R)	9004-34-6
Crystalline Silica	<5	0.1 (R)	0.1 (R)	14808-60-7

(T) – Total (R) – Respirable (NE) – Not Established

All ingredients of this product are included in the U.S. Environmental Protection Agency's Toxic Substances Control Act Chemical Substance Inventory. All components of this product are included in the Canadian Domestic Substances List (DSL) or the Canadian Non-Domestic Substances List (NDSL).

## INFORMATION FOR HANDLING AND IDENTIFICATION OF CHEMICAL HAZARDS

NFPA Ratings: Health: 1 Fire: 0 Reactivity: 0 Other: N/A

HMIS Ratings: Health: 1 Fire: 0 Reactivity: 0

Personal Protection: Use eye and skin protection. Use NIOSH/MSHA-approved respiratory protection when necessary.

0 = Minimal Hazard 1 = Slight Hazard 2 = Moderate Hazard 3 = Serious Hazard 4 = Severe Hazard

## SECTION III PHYSICAL DATA

**Appearance and Odor:** Gray board; mild odor.

**Solubility in Water:** None.

**Specific Gravity (H<sub>2</sub>O = 1):** 1.2 (Apparent bulk density).



# MATERIAL SAFETY DATA SHEET

DUROCK<sup>®</sup> Cement Board, DUROCK<sup>®</sup> Exterior Cement Board,  
DUROCK<sup>®</sup> Underlayment Board & Concrete Utility Board

MSDS NO. 01400

Page 2 of 4

## SECTION IV FIRE AND EXPLOSION HAZARD DATA

<b>Flash Point (Method Used):</b>	Not combustible.
<b>Extinguishing Media:</b>	Use extinguishing media appropriate for surrounding fire.
<b>Special Fire Fighting Procedures:</b>	None.
<b>Unusual Fire and Explosion Hazards:</b>	None.

## SECTION V HEALTH HAZARD DATA

Both portland cement and plaster of paris are considered nuisance dusts. The primary hazard with portland cement is its alkalinity (pH~12). If product is cut with a power saw, the dust produced can be irritating. Eye, skin, nose, throat, and upper respiratory irritation can occur with prolonged dust exposure.

### EFFECTS OF OVEREXPOSURE:

#### ACUTE:

**EYES:** Portland cement is a strongly alkaline material. Contact with eyes will cause irritation and possible corrosion damage, burning, and corneal edema. Particulates will also cause mechanical irritation of eyes.

**SKIN:** Irritation and possible alkali burns can result if very wet panels are handled without impervious gloves. Because of the high alkalinity of portland cement, burns may occur 12 to 48 hours after exposures of 1 to 6 hours with direct contact of panel or dusts. Burns may occur without obvious pain at the time of exposure. Portland cement in dry form will not cause an alkaline burn by itself. Direct, prolonged or repeated contact with the skin may cause irritation.

Rubbing of this product against the skin can result in abrasions. Rinse with water until free of material to avoid abrasions, then wash skin thoroughly with mild soap and water. Can cause mechanical irritation to skin, especially in sensitive individuals. May dry skin. If irritation persists, consult physician.

**INHALATION:** Irritating and may be corrosive to respiratory tract. Inhalation of dust from this product may irritate the nose, throat, lungs, and upper respiratory tract. Persons subjected to large amounts of this dust will be forced to leave area because of nuisance conditions such as coughing, sneezing and nasal irritation from dust. Labored breathing may occur after excessive inhalation. Remove subject to fresh air. If respiratory symptoms persist (irritation, cough, nausea, dizziness, etc.), consult physician.

**INGESTION:** If ingested, caustic burns may occur in the mouth, esophagus, or stomach. May be corrosive to the digestive tract.

#### CHRONIC:

**EYES:** conjunctivitis and Keratitis.

**SKIN:** Dermatitis.

**INHALATION:** Bronchitis and emphysema have been reported after many years of exposure to portland cement. Prolonged and repeated exposure to respirable crystalline silica can result in lung disease (i.e., silicosis) and/or lung cancer. If product is cut with a power saw, the dust produced can be irritating to the respiratory system and, if breathed in large quantities over a long period of time, can cause lung damage.

**INGESTION:** Burns to esophagus and stomach.

### EMERGENCY AND FIRST AID PROCEDURES:

**EYES:** Immediately flush thoroughly with large amounts of water for 30 minutes, including under lids, to remove particles. Get medical attention immediately. Contact lenses should not be worn when working with portland cement.

**SKIN:** Promptly wash thoroughly with copious amounts of water for at least 15 minutes or longer, depending on the concentration, amount and duration of exposure. If irritation or pain persists after washing, see physician. If cement penetrates the clothing, promptly remove the clothing and wash the skin. Wash clothing before wearing again.

**INHALATION:** Remove to fresh air. Leave the area of dust exposure and remain away until coughing and other symptoms subside. Other measures are usually not necessary, however, if conditions warrant, contact physician.

**INGESTION:** Get medical attention immediately, Portland cement is highly alkaline (pH~12) and may cause burns to the esophagus and stomach. The use of diluents is controversial and neutralization is contraindicated.



# MATERIAL SAFETY DATA SHEET

DUROCK<sup>®</sup> Cement Board, DUROCK<sup>®</sup> Exterior Cement Board,  
DUROCK<sup>®</sup> Underlayment Board & Concrete Utility Board

MSDS NO. 01400

Page 3 of 4

TARGET ORGANS: Eyes, Skin, Respiratory System.

MEDICAL CONDITIONS WHICH MAY BE AGGRAVATED: Pre-existing upper respiratory and lung disease such as, but not limited to, bronchitis, emphysema and asthma.

PRIMARY ROUTES OF ENTRY: Inhalation; Eye and/or Skin contact.

## CARCINOGENICITY OF INGREDIENTS:

MATERIAL	IARC	NTP
Crystalline Silica	Group 1	Anticipated

In June, 1997, the International Agency for Research on Cancer (IARC) classified crystalline silica (quartz and cristobalite) as a human carcinogen. In making the overall evaluation, the IARC Working Group noted that carcinogenicity in humans was not detected in all industrial circumstances studies. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs.

IARC states that crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (Group 1).

## SECTION VI REACTIVITY DATA

<b>STABILITY:</b>	Stable
<b>INCOMPATIBILITY:</b>	None known.
<b>HAZARDOUS POLYMERIZATION:</b>	Will not occur.
<b>HAZARDOUS DECOMPOSITION:</b>	None known.

## SECTION VII SPILL OR LEAK PROCEDURES

### STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Normal clean up methods.

### WASTE DISPOSAL METHOD:

In accordance with Federal, State, and Local regulations.

## SECTION VIII SPECIAL PROTECTION INFORMATION

### RESPIRATORY PROTECTION:

If product is cut with a power saw, the saw must be equipped with a dust collector and wear a NIOSH/MSHA-approved respirator if the dust level in the work area is above the TLV or PEL. Provide general mechanical ventilation and local exhaust to meet TLV requirements. Hand score and snap to avoid creating dust.

### PERSONAL PROTECTIVE EQUIPMENT:

Wear safety glasses or goggles for eye protection. Wear gloves and work clothing for hand and skin protection.



# MATERIAL SAFETY DATA SHEET

DUROCK<sup>®</sup> Cement Board, DUROCK<sup>®</sup> Exterior Cement Board,  
DUROCK<sup>®</sup> Underlayment Board & Concrete Utility Board

MSDS NO. 01400

Page 4 of 4

## SECTION IX SPECIAL PRECAUTIONS

### PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Keep clean, dry and flat. Store on original pallets or on stringers on 16 inch centers.

### ΔWARNING!

Dust hazard. Can cause irritation or burns to skin, eyes, nose, throat, or respiratory system. Avoid exposure to dust. Avoid contact with skin and eyes. Wear skin and eye protection. If skin contact occurs, wash thoroughly with water. If irritation persists, consult physician. When working with this material wear safety glasses or goggles for eye protection. If eye contact occurs, immediately flush thoroughly with water for 15 minutes. If irritation persists, consult physician. Long-term breathing of large amounts of respirable crystalline silica can cause lung disease (i.e., silicosis) or cancer. Hand score and snap to avoid creating dust. If cutting this board with a power saw ventilate and use dust collector to reduce dust during cutting. Wear a NIOSH/MSHA-approved respirator. Do not take internally. If ingested, consult physician. Product safety information: (800) 507-8899.

**KEEP OUT OF REACH OF CHILDREN.**

END