

# Material Safety Data Sheet

## SmartBoard



### 1. Product and company identification

**Common name** : SmartBoard  
**Material uses** : Construction material.  
**Supplier/Manufacturer** : Smartboard Building Products  
615 Bowes Road, Unit # 6  
Tel 905-761-1999  
Fax 905-761-7693  
**In case of emergency** : CANUTEC (613) 996-6666  
**MSDS authored by:** : Kemika XXI Inc. + 1-450-435-7475

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### 2. Hazards identification

**Physical state** : Solid.  
**Odor** : Odorless.  
**Color** : Gray. (Dark.)  
**Hazard status** : This material is classified hazardous under OSHA regulations in the United States, the WHMIS Controlled Product Regulation in Canada, the NOM-018-STPS-2000 in Mexico and Brazil NBR 14725:2001.  
**Emergency overview** : WARNING!  
CONTAINS MATERIAL WHICH CAUSES DAMAGE TO THE FOLLOWING ORGANS:  
LUNGS, RESPIRATORY TRACT, EYE, LENS OR CORNEA.  
MAY CAUSE RESPIRATORY TRACT AND EYE IRRITATION.  
POSSIBLE CANCER HAZARD  
CONTAINS MATERIAL WHICH CAN CAUSE CANCER  
Avoid contact with eyes. Avoid breathing dust. Use only with adequate ventilation. Wash thoroughly after handling. Risk of cancer depends on duration and level of exposure.  
**Routes of entry** : Dermal contact. Eye contact. Inhalation. Ingestion.  
**Potential acute health effects**  
**Eyes** : Moderately irritating to eyes.  
**Skin** : No known significant effects or critical hazards.  
**Inhalation** : Moderately irritating to the respiratory system.  
**Ingestion** : No known significant effects or critical hazards.  
**Potential chronic health effects** : Carcinogenic effects Classified 1 (Known to be human carcinogens.) by NTP, + (Proven.) by OSHA, + (Proven.) by NIOSH [Natural sand]. Classified A2 (Suspected for humans.) by ACGIH, 2A (Probable for human.) by IARC [Natural sand]. Classified 3 (Not classifiable for humans.) by IARC [Silica, Amorphous]. Classified A4 (Not classifiable for humans or animals.) by ACGIH [Magnesium oxide]. Classified 1 (Known to be human carcinogens.) by NTP, + (Proven.) by NIOSH [Silica crystalline, quartz]. Classified A2 (Suspected for humans.) by ACGIH, 2A (Probable for human.) by IARC [Silica crystalline, quartz].  
Mutagenic effects Not available.  
Teratogenic effects Not available.  
**Medical conditions aggravated by over-exposure** : Repeated or prolonged exposure to the substance can produce lung damage. Repeated exposure of the eyes to a low level of dust can produce eye irritation. Repeated or prolonged exposure to the substance can produce target organs damage.

See toxicological information (section 11)

### 3. Composition/information on ingredients

#### United States

Name	CAS number	%
Natural sand	14808-60-7	10 - 30
Portland cement mixture	65997-15-1	10 - 30
Silica, Amorphous	7631-86-9	1 - 5
Aluminosilicate	12040-43-6	1 - 5
Calcium Oxide	1305-78-8	1 - 5
Silica crystalline, quartz	14808-60-7	0.1 - 0.5

#### Canada

Name	CAS number	%
Natural sand	14808-60-7	10 - 30
Portland cement mixture	65997-15-1	10 - 30
Silica, Amorphous	7631-86-9	1 - 5
Aluminosilicate	12040-43-6	1 - 5
Calcium Oxide	1305-78-8	1 - 5
Silica crystalline, quartz	14808-60-7	0.1 - 0.5

#### Mexico

Name	UN number	IDLH	Classification				CAS number	%
			H	F	R	Special		
Natural sand	Not regulated.	50 mg/m <sup>3</sup>	2	0	0		14808-60-7	10 - 30
Portland cement mixture	Not regulated.	5000 mg/m <sup>3</sup>	3	0	0		65997-15-1	10 - 30
Calcium Oxide	UN1910	25 mg/m <sup>3</sup>	3	0	0		1305-78-8	1 - 5
Silica, Amorphous	Not regulated.	3000 mg/m <sup>3</sup>	0	0	0		7631-86-9	1 - 5
Aluminosilicate	Not regulated.	-	0	1	0		12040-43-6	1 - 5
Silica crystalline, quartz	Not regulated.	50 mg/m <sup>3</sup>	2	0	0		14808-60-7	0.1 - 0.5

#### Brazil

Name	CAS number	%
Natural sand	14808-60-7	10 - 30
Portland cement mixture	65997-15-1	10 - 30
Silica, Amorphous	7631-86-9	1 - 5
Aluminosilicate	12040-43-6	1 - 5
Calcium Oxide	1305-78-8	1 - 5
Silica crystalline, quartz	14808-60-7	0.1 - 0.5

## 4 . First aid measures

- Eye contact** : Check for and remove any contact lenses. In case of contact with eyes, rinse immediately with plenty of water. Get medical attention if symptoms occur.
- Skin contact** : Wash with soap and water. Get medical attention if symptoms occur.
- Inhalation** : If inhaled, remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms appear.
- Ingestion** : Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear.
- Notes to physician** : No specific antidote. Medical staff must contact Poison Control Center.

## 5 . Fire-fighting measures

- Flammability of the product** : Non-flammable.
- Extinguishing media**
- Suitable** : Use an extinguishing agent suitable for the surrounding fire because this product is not expected to burn.
- Not suitable** : None known.
- Special exposure hazards** : No specific hazard.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment.

## 6 . Accidental release measures

- Personal precautions** : Use suitable protective equipment.
- Environmental precautions** : No special measures required. See section 13 for waste disposal information.
- Methods for cleaning up** : Avoid creating dusty conditions and prevent wind dispersal. Place spilled material in an appropriate container for disposal.

## 7 . Handling and storage

- Handling** : Avoid contact with eyes. Use only with adequate ventilation. Avoid breathing dust. Wash thoroughly after handling.
- Storage** : Must be stored in a dry location.

## 8 . Exposure controls/personal protection

### United States

**Product name**

Natural sand

**Exposure limits**

**ACGIH TLV (United States, 1/2004).**

TWA: 0,05 mg/m<sup>3</sup> 8 hour(s). Form: Respirable fraction

**NIOSH REL (United States, 12/2001).**

TWA: 0,05 mg/m<sup>3</sup> 10 hour(s). Form: All forms.

**OSHA PEL 1989 (United States, 3/1989).**

TWA: 0,1 mg/m<sup>3</sup> 8 hour(s). Form: Respirable dust

**ACGIH TLV (United States, 1/2004).**

TWA: 10 mg/m<sup>3</sup> 8 hour(s). Form: All forms.

**NIOSH REL (United States, 12/2001).**

TWA: 5 mg/m<sup>3</sup> 10 hour(s). Form: Respirable fraction

TWA: 10 mg/m<sup>3</sup> 10 hour(s). Form: Total

**OSHA PEL (United States, 8/1997).**

TWA: 5 mg/m<sup>3</sup> 8 hour(s). Form: Respirable fraction

Portland cement mixture

Silica, Amorphous	TWA: 15 mg/m <sup>3</sup> 8 hour(s). Form: Total dust <b>NIOSH REL (United States, 12/2001).</b>
Aluminosilicate	TWA: 6 mg/m <sup>3</sup> 10 hour(s). Form: All forms. <b>ACGIH TLV (United States, 1/2005).</b>
Calcium Oxide	TWA: 2 mg/m <sup>3</sup> 8 hour(s). Form: Soluble <b>NIOSH REL (United States, 12/2001).</b> TWA: 2 mg/m <sup>3</sup> 10 hour(s). Form: All forms. <b>ACGIH TLV (United States, 1/2005).</b> TWA: 2 mg/m <sup>3</sup> 8 hour(s). Form: All forms. <b>NIOSH REL (United States, 12/2001).</b> TWA: 2 mg/m <sup>3</sup> 10 hour(s). Form: All forms. <b>OSHA PEL (United States, 8/1997).</b>
Silica crystalline, quartz	TWA: 5 mg/m <sup>3</sup> 8 hour(s). Form: All forms. <b>ACGIH TLV (United States, 1/2005).</b> TWA: 0,05 mg/m <sup>3</sup> 8 hour(s). Form: Respirable fraction <b>NIOSH REL (United States, 12/2001).</b> TWA: 0,05 mg/m <sup>3</sup> 10 hour(s). Form: All forms. <b>OSHA PEL 1989 (United States, 3/1989).</b> TWA: 0,1 mg/m <sup>3</sup> 8 hour(s). Form: Respirable dust

### Canada

Product name	Exposure limits
Natural sand	<b>ACGIH TLV (United States, 1/2004).</b> TWA: 0,05 mg/m <sup>3</sup> 8 hour(s). Form: Respirable fraction
Portland cement mixture	<b>ACGIH TLV (United States, 1/2004).</b> TWA: 10 mg/m <sup>3</sup> 8 hour(s). Form: All forms.
Aluminosilicate	<b>ACGIH TLV (United States, 1/2005).</b> TWA: 2 mg/m <sup>3</sup> 8 hour(s). Form: Soluble
Calcium Oxide	<b>ACGIH TLV (United States, 1/2005).</b> TWA: 2 mg/m <sup>3</sup> 8 hour(s). Form: All forms.
Silica crystalline, quartz	<b>ACGIH TLV (United States, 1/2005).</b> TWA: 0,05 mg/m <sup>3</sup> 8 hour(s). Form: Respirable fraction

### Mexico

Product name	Exposure limits
Natural sand	<b>NOM-010-STPS (Mexico, 9/2000).</b> CPT: 0,1 mg/m <sup>3</sup> 8 hour(s). Form: All forms
Portland cement mixture	<b>NOM-010-STPS (Mexico, 9/2000).</b> CCT: 20 mg/m <sup>3</sup> 15 minute(s). Form: All forms CPT: 10 mg/m <sup>3</sup> 8 hour(s). Form: All forms
Silica, Amorphous	<b>NOM-010-STPS (Mexico, 9/2000).</b> CPT: 10 mg/m <sup>3</sup> 8 hour(s). Form: Inhalable fraction CPT: 3 mg/m <sup>3</sup> 8 hour(s). Form: Breathable particulates
Aluminosilicate	<b>NOM-010-STPS (Mexico, 9/2000).</b> CPT: 2 mg/m <sup>3</sup> 8 hour(s). Form: All forms
Calcium Oxide	<b>NOM-010-STPS (Mexico, 9/2000).</b> CPT: 2 mg/m <sup>3</sup> 8 hour(s). Form: All forms

## Brazil

### Product name

Natural sand

Portland cement mixture

Aluminosilicate

Calcium Oxide

Silica crystalline, quartz

### Exposure limits

**ACGIH TLV (United States, 1/2004).**

TWA: 0,05 mg/m<sup>3</sup> 8 hour(s). Form: Respirable fraction

**ACGIH TLV (United States, 1/2004).**

TWA: 10 mg/m<sup>3</sup> 8 hour(s). Form: All forms.

**ACGIH TLV (United States, 1/2005).**

TWA: 2 mg/m<sup>3</sup> 8 hour(s). Form: Soluble

**ACGIH TLV (United States, 1/2005).**

TWA: 2 mg/m<sup>3</sup> 8 hour(s). Form: All forms.

**ACGIH TLV (United States, 1/2005).**

TWA: 0,05 mg/m<sup>3</sup> 8 hour(s). Form: Respirable fraction

### Engineering measures

: Use only with adequate ventilation. If user operations generate dust, fumes, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

### Personal protection

#### Eyes

: Safety glasses.

#### Skin

: Overalls buttoned to the neck and wrist.

#### Respiratory

: Disposable particulate mask.

#### Hands

: Not applicable.



### HMIS Code/Personal protective equipment

: E

### Personal protection in case of a large spill

: Safety glasses, goggles or face shield. Impervious gloves. Full suit. Boots. Wear NIOSH-approved self-contained breathing apparatus or equivalent and full protective gear. Wash hands, forearms and face thoroughly after handling compounds and before eating, smoking and using the lavatory and at the end of the day. Follow good industrial hygiene practice.

## 9 . Physical and chemical properties

### Physical state

: Solid.

### Color

: Gray. (Dark.)

### Odor

: Odorless.

### Relative density

: Weighted average: 1.61 (Water = 1)

### Solubility

: Insoluble in water.

## 10 . Stability and reactivity

### Stability and reactivity

: The product is stable.

### Incompatibility with various substances

: Reactive with oxidizing materials and acids.

### Hazardous polymerization

: Will not occur.

## 11 . Toxicological information

### Acute Effects

- Eyes** : Moderately irritating to eyes.
- Skin** : No known significant effects or critical hazards.
- Inhalation** : Moderately irritating to the respiratory system.
- Ingestion** : No known significant effects or critical hazards.
- Potential chronic health effects** : Carcinogenic effects Classified 1 (Known to be human carcinogens.) by NTP, + (Proven.) by OSHA, + (Proven.) by NIOSH [Natural sand]. Classified A2 (Suspected for humans.) by ACGIH, 2A (Probable for human.) by IARC [Natural sand]. Classified 3 (Not classifiable for humans.) by IARC [Silica, Amorphous]. Classified A4 (Not classifiable for humans or animals.) by ACGIH [Magnesium oxide]. Classified 1 (Known to be human carcinogens.) by NTP, + (Proven.) by NIOSH [Silica crystalline, quartz]. Classified A2 (Suspected for humans.) by ACGIH, 2A (Probable for human.) by IARC [Silica crystalline, quartz].  
Mutagenic effects Not available.  
Teratogenic effects: Not available.
- Target organs** : Contains material which causes damage to the following organs: lungs, upper respiratory tract, eye, lens or cornea.

## 12 . Ecological information

- Environmental precautions** : No known significant effects or critical hazards.
- Products of degradation** : Some metallic oxides.
- Toxicity of the products of biodegradation** : The product itself and its products of degradation are not toxic.

## 13 . Disposal considerations

- Waste disposal** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional and local authority requirements.

## 14 . Transport information

**NAERG** : Not applicable.

### Regulatory information

**UN/ IMDG/IATA DOT/TDG** : Not regulated.

## 15 . Regulatory information

### United States

- HCS Classification** : Irritating material  
Carcinogen  
Target organ effects
- U.S. Federal regulations** : TSCA 8(a) PAIR: 1-cyclohexene, 4-vinyl-  
TSCA 8(b) inventory: All components listed.



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: Natural sand; Portland cement mixture; Calcium Oxide  
 SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Natural sand: Immediate (acute) health hazard, Delayed (chronic) health hazard; Portland cement mixture: Immediate (acute) health hazard; Calcium Oxide: Immediate (acute) health hazard  
 Clean Water Act (CWA) 307: No products were found.  
 Clean Water Act (CWA) 311: No products were found.  
 Clean Air Act (CAA) 112 accidental release prevention: No products were found.  
 Clean Air Act (CAA) 112 regulated flammable substances: No products were found.  
 Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

**State regulations**

: Pennsylvania RTK: Natural sand: (generic environmental hazard); Portland cement mixture: (generic environmental hazard); Gypsum: (generic environmental hazard); Calcium Oxide: (generic environmental hazard); Calcium carbonate: (generic environmental hazard); Magnesium oxide: (generic environmental hazard); Silica crystalline, quartz: (generic environmental hazard); Silica, Amorphous: (generic environmental hazard); Aluminosilicate: (generic environmental hazard); Iron oxide: (environmental hazard, generic environmental hazard); 1-cyclohexene, 4-vinyl-: (generic environmental hazard)  
 Massachusetts RTK: Natural sand; Portland cement mixture; Calcium Oxide; Calcium carbonate; Magnesium oxide; Silica crystalline, quartz; Silica, Amorphous; 1-cyclohexene, 4-vinyl-  
 New Jersey: Natural sand; Portland cement mixture; Calcium Oxide; Magnesium oxide; Silica crystalline, quartz; Silica, Amorphous; Calcium nitrate  
**WARNING:** This product contains a chemical known to the State of California to cause cancer.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Natural sand	Yes.	No.	No.	No.
Silica crystalline, quartz	Yes.	No.	No.	No.
1-cyclohexene, 4-vinyl-	Yes.	No.	No.	No.

**Canada**

**WHMIS (Canada)**

: Class D-2A: Material causing other toxic effects (Very toxic).  
 Class D-2B: Material causing other toxic effects (Toxic).



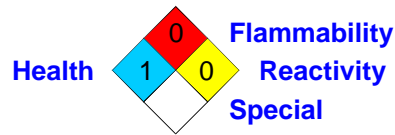
CEPA DSL: All components listed.

CEPA NDSL: Limestone

This product has been classified in accordance with the hazard criteria of the Canadian CPR, the United States OSHA, the Mexican NOM -018-STPS-2000 and the Brazilian NBR 14725:2001. This MSDS contains all the information required by the CPR, OSHA, the American National Standard Institute (ANSI) Z400.1, NOM -018-STPS-2000 and NBR 14725:2001.

**Mexico**

**Classification** :



**HAZARD RATINGS**

- 4- Extreme
- 3- Serious
- 2- Moderate
- 1- Slight
- 0- Minimal

**International lists**

: This product, (and its ingredients) is (are) listed on national inventories, or is (are) exempted from being listed, Australia (AICS), in Europe (EINECS/ELINCS), in Korea (TCCL), in Japan (METI), in the Philippines (RA6969).

**16 . Other information**

**Label requirements (U.S.A.)** : CONTAINS MATERIAL WHICH CAUSES DAMAGE TO THE FOLLOWING ORGANS: LUNGS, RESPIRATORY TRACT, EYE, LENS OR CORNEA. MAY CAUSE RESPIRATORY TRACT AND EYE IRRITATION. POSSIBLE CANCER HAZARD CONTAINS MATERIAL WHICH CAN CAUSE CANCER

**Hazardous Material Information System (U.S.A.)** :

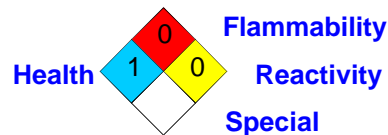
**HMIS RATING**

Health	*	1
Fire hazard		0
Physical Hazard		0
Personal protection		E

**HAZARD RATINGS**

- 4- Extreme
  - 3- Serious
  - 2- Moderate
  - 1- Slight
  - 0- Minimal
- See section 8 for more detailed information on personal protection.

**National Fire Protection Association (U.S.A.)** :



**References**

: ANSI Z400.1, MSDS Standard, 2004. - Manufacturer's Material Safety Data Sheet. - 29CFR Part1910.1200 OSHA MSDS Requirements. - 49CFR Table List of Hazardous Materials, UN#, Proper Shipping Names, PG. - Canada Gazette Part II, Vol. 122, No. 2. Registration SOR/88-64, 31 December 1987. Hazardous Products Act "Ingredient Disclosure List" - Canadian Transport of Dangerous Goods, Regulations and Schedules, Clear Language version 2005. - Official Mexican Standards NOM-018-STPS-2000 and NOM-004-SCT2-1994. Brazil NBR 14725:2001.

**Date of issue** : 04/15/2006  
**Version** : 1

**Notice to reader**

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.