

SHEALD Board

MSDS#: ProRoc 011

WHMIS	Protective Clothing	TDG Road / Rail
 Not Controlled		 Not Regulated

SECTION 1: PRODUCT AND COMPANY INFORMATION

PRODUCT NAMES:	SHEALD* Board
PRODUCT USE:	Interior cladding used in the construction of buildings
MSDS RECORD #:	ProRoc 011
CHEMICAL NAME:	Mixture
SYNONYMS:	Lead-backed Gypsum Board
CHEMICAL FAMILY:	Calcium sulphate dihydrate CAS 10101-41-4 and Lead
CHEMICAL FORMULA:	CaSO ₄ ·2H ₂ O . (C ₂ H ₃ Cl) _n + Pb
WHMIS	
CLASSIFICATION:	Not controlled (considered a manufactured article)
TDG CLASSIFICATION:	Not regulated
MANUFACTURER:	BPB Canada Inc. Inc. 2424 Lakeshore Road West, Mississauga, Ontario, Canada L5J 1K4 Telephone: (905) 823-9881 Fax: (905) 823-4860 Web Site: www.bpb-na.com
OTHER:	In case of an emergency call 1-800-327-7455 (24 hrs)

* SHEALD is a Cominco Limited Trade Name

SECTION 2: COMPOSITION AND INGREDIENT INFORMATION

COMPOSITION AND INGREDIENT INFORMATION

Chemical Name	CAS No.	Wt. %
Crystalline silica (Quartz)	14808-60-7	0 – 0.1
Lead	7439-92-1	15 – 40

Note: See Section 6 of this MSDS for exposure limit data for ingredients.

SECTION 3: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	Solid
APPEARANCE:	Boards of nominal dimensions, consisting of a gypsum core encased in paper liners with a layer of laminated lead sheet 0.40 mm (1/64") thickness. The gypsum core may be white/grey or tan in colour and may also have short strands of fiberglass bound into it.
pH:	7 – 9 (approximate)
SPECIFIC GRAVITY: (Water = 1)	2.30 – 2.37 (gypsum core)
BOILING POINT:	Not applicable
FREEZING POINT:	Not applicable
VISCOSITY:	Not applicable
VAPOR PRESSURE: (mm Hg @ 20°C)	Not applicable
VAPOR DENSITY: (Air = 1)	Not applicable
SOLUBILITY IN WATER:	0.2% (approximate)
WATER / OIL DISTRIBUTION COEFFICIENT:	Not available
ODOUR TYPE:	Odourless
ODOUR THRESHOLD:	Not available
EVAPORATION RATE: (n-Butyl Acetate = 1)	Not applicable

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SECTION 4: FIRE FIGHTING MEASURES

FLASH POINT AND METHOD (°C):

Not available.

CONDITIONS OF FLAMMABILITY:

Paper liners are combustible at various temperatures. Core is non-combustible and does not support combustion. Lead metal is not combustible.

FLAMMABILITY LIMITS (%):

Not applicable

AUTO IGNITION TEMPERATURE (°C):

Not applicable

EXTINGUISHING MEDIA:

Use extinguishing media appropriate for the surrounding fire.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Not applicable

EXPLOSION DATA: SENSITIVITY TO MECHANICAL IMPACT:

Not applicable

EXPLOSION DATA: SENSITIVITY TO STATIC DISCHARGE:

Not applicable

FIRE FIGHTING INSTRUCTIONS:

Not available

HAZARDOUS COMBUSTION PRODUCTS:

At very high temperatures (>1450°C), calcium sulphate may produce SO_x

Lead, when heated in air, may form highly toxic lead oxide fumes.

SECTION 5: STABILITY AND REACTIVITY

STABILITY:

Stable

INCOMPATIBLE MATERIALS AND CONDITIONS TO AVOID:

Gypsum is a stable, unreactive material under normal workplace-conditions. Hazardous reactions may occur with some highly reactive materials or at high temperatures.

HAZARDOUS DECOMPOSITION PRODUCTS:

Lead does not decompose but when heated to very high temperatures toxic lead and lead oxide fumes may be generated.

Calcium sulphate dehydrates at temperatures above 128°C to form calcined gypsum. At temperatures above 163°C, calcined gypsum will boil off additional water to form calcium sulphate anhydrite, a completely stable salt.

HAZARDOUS POLYMERIZATION:

Will not occur

SECTION 6: TOXICOLOGICAL INFORMATION

ACUTE EFFECTS:

Working with the product can generate dusts which can have an irritant action on nasal or bronchial passages and on the eyes. Cutting the lead-backed boards may liberate lead and gypsum dust.

Eyes:

In general, the dust is not expected to be irritating except as a "foreign object". Some tearing, blinking and mild temporary pain may occur as the solid material is rinsed from the eye by tears.

Skin:

Dusts from this product may be irritating causing redness and discomfort. Lead dust may be absorbed through the skin.

Inhalation:

Short-term inhalation of dust can cause mechanical irritation of the mucous membranes and upper respiratory tract with symptoms, such as shortness of breath and sneezing. High concentrations of dust may cause coughing and mild, temporary irritation following a short-term exposure. Lead dust may be absorbed through the respiratory system. Symptoms of lead poisoning are listed under Ingestion.

Ingestion:

Not a likely route of exposure. Ingestion of lead dust is toxic. Symptoms of lead poisoning are abdominal pain, nausea and vomiting, headache, loss of appetite, insomnia, muscle weakness, and a metallic taste in the mouth.

CHRONIC EFFECTS:

Heavy prolonged industrial exposure to high airborne concentrations of dust may cause impaired lung function. Chronic bronchitis and respiratory tract lesions have also been reported with high level exposures.

Crystalline Silica, contained in this product in trace amounts, is a known human carcinogen by inhalation. Long-term inhalation of dusts may cause silicosis or cancer.

Cutting the lead-backed gypsum board may generate lead dust. Lead dust may be absorbed through the respiratory system, through ingestion or through prolonged skin contact. Exposure to lead may cause effects on the gastrointestinal tract, blood, thyroid, immune system, central nervous system and kidneys, which may result in colic, shock, anemia, kidney damage and encephalopathy. Lead may accumulate in the body to reach toxic levels. The symptoms of chronic lead exposure are similar to those of toxicity through ingestion.

SENSITIZATION EFFECTS:

Not available

IRRITANCY:

May cause mechanical irritation of the eyes, skin and respiratory system due to abrasion.



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MUTAGENICITY:

Some mutagenicity for exposure to Crystalline silica has been reported in test organisms.

TERATOGENICITY:

Inorganic lead exposure during pregnancy may cause harmful effects on pregnancy, including increased miscarriages and stillbirths.

REPRODUCTIVE EFFECTS:

Lead may cause retarded development of the newborn.

SYNERGISTIC PRODUCTS:

Tobacco smoking in conjunction with long-term high dust exposures may increase both smoking and dust-related pulmonary health problems.

People with pre-existing renal, nervous, circulatory, skin or vision problems may be more sensitive to the toxic effects of lead.

CARCINOGENICITY:

Ingredient	ACGIH	IARC	NTP
Crystalline silica (Quartz)	A2	Group 1	Known
Lead	A3	Group 2B	Not listed

DESCRIPTION OF CARCINOGENICITY DESIGNATIONS:

ACGIH (American Conference of Governmental Industrial Hygienists):

A2: Suspected human carcinogen

A3: Confirmed animal carcinogen with unknown relevance to humans.

IARC (International Agency for Research on Cancer):

Group 1: The agent is carcinogenic to humans

Group 2B: The agent is possibly carcinogenic to humans.

NTP: (National Toxicity Program):

Group 1: The agent is carcinogenic to humans

TOXICITY:

Ingredient	LD ₅₀ Oral (mg/kg)	LD ₅₀ Dermal (mg/kg)	LC ₅₀ Inhalation (ppm, 4 hrs.)
Crystalline silica (Quartz)	Not available	Not available	Not available
Lead	Not available	Not available	Not available

EXPOSURE VALUES:

Ingredient	ACGIH TLV (8-hr. TWA) (mg/m ³)	OSHA PEL (8-hr. TWA) (mg/m ³)	Ontario TWA EV (mg/m ³)
Crystalline silica (Quartz)	0.05 (respirable fraction)	0.1 (Silica, crystalline quartz, respirable dust)	0.1 (silica, fused, respirable)
Total Dust	10	15	10 Airborne Total Dust
Lead	0.15	0.05	0.15

SECTION 7: PREVENTIVE MEASURES

SPILL PROCEDURES:

Scrape, sweep or vacuum up, keeping dust generation to a minimum. If vacuuming dusts, use a vacuum capable of filtering respirable dusts.

PROTECTIVE EQUIPMENT:

- Eyes:** No specific requirements but safety glasses are recommended when handling wallboard.
- Skin:** The uses of body covering protective clothing, gloves and safety shoes or boots while handling wallboard are recommended.
- Respirator:** Wearing a NIOSH approved dust mask is recommended when working with the product generates dust at concentrations greater than 10 mg/m³. At high concentrations of dust wear a full-face cartridge respirator with a dust filter or a positive pressure respirator.

ENGINEERING CONTROLS:

Local exhaust ventilation at point of dust generation is recommended to keep particle counts below exposure limits. General ventilation may help to reduce airborne dust.

STORAGE REQUIREMENTS:

Boards should be stored flat and evenly supported to prevent warping. Boards should be protected from excessive moisture.

WORK/HYGIENIC PRACTICES:

Product should be handled in a manner which minimizes air-borne dust generation.
Lifts (full or partial) should be moved by forklift truck or crane with forks or slings set so that the load is centered, supported and stable. Individual boards should be carried vertically to prevent damage.

WASTE DISPOSAL:

Dispose in landfill in accordance with all applicable regulations. Any disposal practice must be in compliance with local, provincial, state and federal laws and regulations.
Many areas now have recycling programs which include uncontaminated wallboard scrap. Such scrap may be reintroduced to the manufacturing process and made into new board.



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SECTION 8: FIRST AID MEASURES

- Inhalation: Move the exposed person to fresh air and allow to rest. If breathing problems persist, seek medical attention.
- Eye Contact: Remove contact lenses. Do not allow victim to rub eye(s). Let the eye(s) water naturally for a few minutes. Have victim look right and left, and then up and down. If particle/dust does not dislodge, flush with lukewarm, gently flowing water for 5 minutes or until particle/dust is removed, while holding the eyelid(s) open. If irritation persists, obtain medical attention. DO NOT attempt to manually remove anything stuck to the eye(s).
- Skin Contact: Wash area with mild soap and water. If irritation persists, seek medical attention.
- Ingestion: If problems arise obtain medical advice.

SECTION 9: ADDITIONAL INFORMATION

CANADIAN NSNR STATUS (DSL):

All ingredients are present on the Domestic Substances List.

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PREPARATION DATE:

May 2, 2003

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www.bpb-na.com

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