



For Information Call James Hardie Gypsum Environmental Health and Safety Department: 206-768-3789

PRODUCT IDENTIFICATION

GENERIC NAME: Gypsum Board
TRADE NAME: **Hardirock**® which includes:
Regular Core, Fire X®, Max "C"™,
Waterguard™, Soffit Board, Sheathing,
Shaftliner, HD™ Ceiling Board and
Veneer Base.
CHEMICAL NAME: Calcium Sulfate Dihydrate
CAS NUMBER: 10101-41-4 and 13397-24-5
FORMULA: $\text{CaSO}_4 \cdot 2 \text{H}_2\text{O}$

PHYSICAL DATA

SOLUBILITY IN WATER: Less than 3 grams/liter
SPECIFIC GRAVITY: 0.6 - 0.75
APPEARANCE AND ODOR: White or light brown core
encased in manila, gray, tan,
green or blue paper; no odor.

FIRE AND EXPLOSION DATA

Products are noncombustible and nonexplosive.
Surface burning characteristics when tested in accordance
with ASTM E 84:

Flame Spread	<25
Smoke Developed	<25

REACTIVITY

STABILITY: Products are stable.
HAZARDOUS
POLYMERIZATION: None
MOISTURE: Prolonged or repeated contact with mois-
ture will cause deterioration of the core.

PRECAUTIONS FOR SAFE HANDLING AND USE

1. Avoid creating or breathing dust.
2. When sawing, sanding, drilling or abrading, always take
the following precautions:
 - wear a NIOSH approved dust mask,
 - maintain adequate ventilation and air circulation,
 - warn others in the area,
 - use a NIOSH/MSHA approved respirator when dust levels
exceed the permissible exposure limit (PEL),
 - wear safety glasses, goggles or a face shield as necessary
for eye protection.
3. Clean up spilled dry material by shoveling, sweeping, or vacuuming.
4. Dispose in accordance with federal, state and local regulations.

HEALTH HAZARD WARNING

Risk Summary

Silica: Trace amounts of crystalline silica may be found as a naturally occurring ingredient in the gypsum ore that is used to manufacture gypsum boards. Gypsum boards do not release respirable dust in their installed state, and therefore, do not present any known health hazards as such. However, drilling, sawing, sanding or otherwise abrading the products may generate not only nuisance dust but also very small quantities of respirable silica dust.

Fiberglass: Some gypsum boards such as fire resistant and thin core products (less than 3/8" thick) have fiberglass added to the formulation. Fiberglass adds strength without increasing combustibility. As with silica, respirable dust containing fiberglass may be released by drilling, sawing, sanding or otherwise abrading gypsum boards.

Primary Routes of Entry

Inhalation and contact with eyes.

Acute Effects

Failure to follow safe handling procedures when using this product may generate dust levels above the PELs.

Inhalation: Excessive exposure to dust from cutting, sanding, drilling or other forms of abrading may cause coughing or other upper respiratory irritation.
Eye Contact: Exposure to dust may cause redness and irritation.

Chronic Effects

Proposition 65 Warning: Respirable crystalline silica is known by the State of California to cause cancer.

International Agency for Research on Cancer (IARC) has determined that there is sufficient evidence to establish that inhaled crystalline silica is a carcinogen to humans.

The National Toxicology Program (NTP) has concluded that respirable crystalline silica may reasonably be found to constitute a carcinogenic risk.

OSHA has not made any finding regarding the carcinogenicity of respirable crystalline silica.

Medical research has found no significant increase in cancer or other chronic health effects from exposure to fiberglass. IARC considers fiberglass filament as not classifiable as to human carcinogenicity. It is not considered a carcinogen by the NTP and OSHA. Fiberglass is listed on the California Director's List of Hazardous Substances as a mechanical irritant.

Medical Conditions Generally Aggravated By Exposure

Pre-existing upper respiratory and lung disease, such as, but not limited to bronchitis, emphysema and asthma.

First Aid Emergency Procedures

Inhalation: Remove to fresh air.
Skin: None
Eyes: Irrigate with generous quantities of water.
Consult physician if irritation continues.



James Hardie
Gypsum

PRODUCT INGREDIENTS

Material	Percent	TLV mg/m ³	PEL mg/m ³	CAS Number
Calcium sulfate dihydrate	>80	10	15(T)5(R)	10101-41-4
Recycled paper (cellulose)	<15	10	15(T)5(R)	None found
Acid modified starch	<15	10	15(T)5(R)	65999-63-6
Sulfate of potash	<10	10	15(T)5(R)	7778-80-5
Inorganic borates	<5	10	15(T)5(R)	10043-35-3
Napthalenesulfonic acid formaldehyde polymer sodium salt	<1	N/E	N/E	9084-06-4
Sodium sulfate	<1	N/E	N/E	7757-82-6
Crystalline Silica	*	0.1	30mg/m ³	14808-60-7 (T)
			% SiO ₂ + 2	
			10mg/m ³	(R)
% SiO ₂ + 2				
Fiberglass	<1	10(T)	15(T)5(R)	65997-17-3
Wax emulsion	<5	5(T)	15(T)5(R)	8002-74-2
Methyl hydrogensiloxane	<1	N/E	N/E	N/E
Vermiculite	<5	0.1(R)	30mg/m ³	1318-00-9 (T)
			% SiO ₂ + 2	
			10mg/m ³	(R)
% SiO ₂ + 2				

(T) = Total

(R) = Respirable

*Trace amounts of naturally occurring crystalline (quartz) silica may be found in gypsum (calcium sulfate dihydrate).

Note: As of the date of preparation of this document, the foregoing information is believed to be accurate.
Please check the currency of this MSDS by contacting James Hardie Technical Services. 9.99

For Additional Product Information Contact James Hardie Gypsum Technical Services Department • Phone: 1-800-346-3537 • Web Site: www.hardirock.com