

SAFETY DATA SHEET

1. Identification

Product identifier

Product list

Paper Faced Gypsum Panels

Product List A

ToughRock® Veneer Plaster Base (Blueboard)
ToughRock® Flexroc® Gypsum Board
ToughRock® Mold-Guard™ Gypsum Board
ToughRock® Basement Board® Gypsum Board
ToughRock® Sound Deadening Gypsum Board
ToughRock® Stretch 54® Gypsum Board
ToughRock® Soffit Board

Product List B

ToughRock® Gypsum Board

Product List C

ToughRock® Span 24® Lite-Weight Ceiling Board
ToughRock® Stretch 54® Lite-Weight Gypsum Board
ToughRock® Lite-Weight Gypsum Board
ToughRock® MH Ceiling Board
ToughRock® Fireguard X® Gypsum Board
Toughrock® Fireguard 45® Gypsum Board

Product List D

ToughRock® Gypsum Sheathing
ToughRock® Span 24® Ceiling Board
ToughRock® Fireguard X® Gypsum Sheathing
ToughRock® Fireguard X® Stretch 54® Gypsum Board
ToughRock® Fireguard X® Mold-Guard™ Abuse-Resistant Gypsum
ToughRock® Fireguard X® Veneer Plaster Board
ToughRock® Fireguard X® Mold-Guard™ Gypsum Board
Toughrock® Fireguard X® Mold-Guard™ Max-Abuse Gypsum Board
Toughrock® Fireguard X® Mold-Guard™ Max-Impact Gypsum Board

Product List E

ToughRock® Shaftliner
ToughRock® Fireguard C® Soffit Board
ToughRock® Fireguard C® Stretch 54® Gypsum Board

Product List F

ToughRock® Lite-Weight Veneer Plaster Base

Product List G

ToughRock® Lite-Weight Fire-Rated Gypsum Board
ToughRock® Fireguard C® Gypsum Board

Other means of identification

Product code

GP-71A

Recommended use

Products accommodate wide range of wall, floor and ceiling applications and soffit treatments.

Recommended restrictions

None known.

Manufacturer/Importer/Supplier/Distributor information

Company name

Georgia-Pacific Gypsum LLC

Address

133 Peachtree Street, NE
Atlanta, GA 30303

Telephone

Technical Information 800.225.6119
(M)SDS Request 404.652.5119

E-mail

Not available.

Emergency phone number

Chemtrec - Emergency 800.424.9300

2. Hazard(s) identification

Emergency overview	Cutting, sanding, or otherwise working with this product may generate large amounts of dust. Dust may be irritating to eyes, skin and respiratory system.
Physical hazards	Not classified.
Health hazards	Not classified.
Environmental hazards	Not classified.
OSHA defined hazards	Not classified.
Label elements	
Hazard symbol	None.
Signal word	None.
Hazard statement	The mixture does not meet the criteria for classification.
Precautionary statement	
Prevention	Observe good industrial hygiene practices.
Response	Wash hands after handling. Get medical advice/attention if you feel unwell.
Storage	Store away from incompatible materials (see Section 10 of the SDS).
Disposal	Dispose of contents/container in accordance with applicable regulations.
Hazard(s) not otherwise classified (HNOC)	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
CALCIUM SULFATE DIHYDRATE		10101-41-4	80 - 100
SILICATE COMPOUND*****		Proprietary	1 - 5
VERMICULITE****		1318-00-9	1 - 5
BORIC ACID**		10043-35-3	0.5 - 1.5
CONTINUOUS FILAMENT GLASS FIBERS***		65997-17-3	0.5 - 1.5
CRYSTALLINE SILICA (QUARTZ)*		14808-60-7	0.1 - 1
Other components below reportable levels			0 - 0.1

The specific chemical identity and/or percentage of composition has been withheld as a trade secret.

Composition comments

** Found in products in List B, C and F, Section 1 of this SDS.

*** Found in products in List C, D, E and F, Section 1 of this SDS.

**** Found in products in List E, F and G, Section 1 of this SDS.

***** Only found in products in List G, Section 1 of this SDS.

Gypsum (calcium sulfate, dihydrate) contains naturally occurring silica crystalline (quartz), which is listed as a lung carcinogen. See Section 8 for exposure information.

*The weight percent for crystalline silica represents total crystalline silica and not the respirable fraction. Testing conducted by Georgia-Pacific did not detect respirable crystalline silica during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.

**Testing conducted by Georgia-Pacific did not detect boric acid during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.

4. First-aid measures

Inhalation	If dust from the material is inhaled, remove the affected person immediately to fresh air. Call a physician if symptoms develop or persist.
Skin contact	For skin contact, wash immediately with soap and water.
Eye contact	Do not rub eyes. Rinse with water. Get medical attention if irritation develops and persists. Do not rub the eyes.
Ingestion	May result in obstruction and irritation if ingested. Get medical attention.

Most important symptoms/effects, acute and delayed	Dusts may irritate the respiratory tract, skin and eyes.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Firefighters should wear full protective clothing including self contained breathing apparatus. Use water spray to cool unopened containers.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Wear appropriate protective equipment and clothing during clean-up. For personal protection, see section 8 of the SDS. Avoid inhalation of dust from the spilled material. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. Use personal protection recommended in Section 8. Keep unnecessary personnel away.
Methods and materials for containment and cleaning up	Avoid the generation of dusts during clean-up. Collect dust using a vacuum cleaner equipped with HEPA filter. This product is miscible in water. Stop the flow of material, if this is without risk. Large Spills: Wet down with water and dike for later disposal. Shovel the material into waste container. Following product recovery, flush area with water. Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal. Minimize dust generation. Sweep up or gather material and place in an appropriate container for disposal. Utilize wet methods, if appropriate, to minimize dust. For waste disposal, see section 13 of the SDS.
Environmental precautions	Keep out of drains, sewers, ditches, and waterways.

7. Handling and storage

Precautions for safe handling	Practice good housekeeping. Provide appropriate exhaust ventilation at places where dust is formed. Minimize dust generation and accumulation. Do not breathe dust. Do not get this material in contact with eyes. Do not taste or swallow. Avoid prolonged exposure. Use only in well-ventilated areas. Wear appropriate NIOSH/MSHA approved dust mask or filtering facepiece if dust is generated. Do not eat or drink while using the product. Wash hands before eating, drinking, or smoking.
Conditions for safe storage, including any incompatibilities	Store in tightly closed container. Store level and keep dry. Dewpoint or other conditions causing the presence of moisture can damage the product during storage. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	PEL	0.05 mg/m3	Respirable dust.
SILICATE COMPOUND*****	PEL	5 mg/m3 15 mg/m3	Respirable fraction. Total dust.

US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
SILICATE COMPOUND*****	TWA	5 mg/m3 15 mg/m3	Respirable fraction. Total dust.
VERMICULITE**** (CAS 1318-00-9)	TWA	5 mg/m3 15 mg/m3	Respirable fraction. Total dust.

ACGIH

Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	TWA	3 mg/m3	Respirable Particles.
CONTINUOUS FILAMENT GLASS FIBERS*** (CAS 65997-17-3)	TWA	5 mg/m3	Inhalable fraction.
VERMICULITE**** (CAS 1318-00-9)	TWA	3 mg/m3	Respirable particles.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
BORIC ACID** (CAS 10043-35-3)	STEL	6 mg/m3	Inhalable fraction.
	TWA	2 mg/m3	Inhalable fraction.
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	TWA	10 mg/m3	Inhalable fraction.
CONTINUOUS FILAMENT GLASS FIBERS*** (CAS 65997-17-3)	TWA	1 fibers/cm3	Fiber.
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	0.025 mg/m3	Respirable fraction.
SILICATE COMPOUND*****	TWA	2 mg/m3	Respirable fraction.
VERMICULITE**** (CAS 1318-00-9)	TWA	10 mg/m3	Inhalable particles.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	TWA	5 mg/m3 10 mg/m3	Respirable. Total
CONTINUOUS FILAMENT GLASS FIBERS*** (CAS 65997-17-3)	TWA	3 fibers/cm3 5 mg/m3	Fibrous dust. Fiber, total
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.
SILICATE COMPOUND*****	TWA	5 mg/m3 10 mg/m3	Respirable. Total

Biological limit values	No biological exposure limits noted for the ingredient(s).
Exposure guidelines	Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.
	*Testing conducted by Georgia-Pacific did not detect respirable crystalline silica during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.
	**Testing conducted by Georgia-Pacific did not detect boric acid during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.
Appropriate engineering controls	Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Ventilation should be sufficient to effectively remove and prevent buildup of any dusts or fumes that may be generated during handling or thermal processing. If engineering measures are not sufficient to maintain concentrations of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn. Score and snap method recommended. When using product, provide local and general exhaust ventilation to keep airborne dust concentrations below exposure limits. Use wet methods, if appropriate, to reduce the generation of dust.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Wear safety glasses with side shields (or goggles). Safety glasses or goggles are recommended when using this product. Ensure compliance with OSHA's PPE standard (29 CFR 1910.132 and .133) for eye and face protection. Eye wash fountain is recommended.
Skin protection	
Hand protection	Wear protective gloves.
Other	Wear appropriate chemical resistant clothing. Impervious protective clothing and gloves recommended to prevent drying or irritation of skin. Ensure compliance with OSHA's PPE standards (29 CFR 1910.132 (general) and 138 (hand protection)). Safety shower/eye wash fountain is recommended in the workplace area (29 CFR 1910.151 (c)).
Respiratory protection	Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. A NIOSH approved dust mask or filtering facepiece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).
Thermal hazards	Not applicable.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Keep away from food and drink.

9. Physical and chemical properties

Appearance	Paper faced gypsum boards
Physical state	Solid.
Form	Solid.
Color	Facing color varies
Odor	Odorless
Odor threshold	Not available.
pH	7
Melting point/freezing point	2642 °F (1450 °C) estimated
Initial boiling point and boiling range	Not applicable
Flash point	Not applicable
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not applicable

Flammability limit - upper (%)	Not applicable
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	Not applicable
Vapor density	Not applicable
Relative density	2.2 - 2.4 g/cm ³
Solubility(ies)	
Solubility (water)	0.2 % @ 22°C
Partition coefficient (n-octanol/water)	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	Not available.
Viscosity	Not applicable
Other information	
Explosive properties	Not explosive.
Flash point class	Not flammable
Oxidizing properties	Not oxidizing.
Specific gravity	2.2 - 2.4

10. Stability and reactivity

Reactivity	Contact with strong acids produces carbon dioxide.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Contact with incompatible materials. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).
Incompatible materials	Acids. Aluminum. Phosphorus.
Hazardous decomposition products	May include and are not limited to: calcium oxide and sulfur dioxide.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Dust may irritate respiratory system.
Skin contact	Dust or powder may irritate the skin. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
Eye contact	Dust generated during processing may cause eye irritation.
Ingestion	Not applicable under normal conditions of use. May cause gastrointestinal irritation if ingested.

Symptoms related to the physical, chemical and toxicological characteristics Dusts may irritate the respiratory tract, skin and eyes.

Information on toxicological effects

Acute toxicity

Product	Species	Test Results
Paper Faced Gypsum Panels		
Acute		
Dermal		
ATEmix		251300 mg/kg
Inhalation		
LC50	Rat	363.6 mg/l, 4 Hours
Oral		
ATEmix		1684 mg/kg

Components	Species	Test Results
BORIC ACID** (CAS 10043-35-3)		
Acute		
Inhalation		
LC50	Rat	> 2 mg/l, 4 Hours
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)		
Acute		
Oral		
LD50	Rat	> 1581 mg/kg
SILICATE COMPOUND*****		
Acute		
Dermal		
LD50	Rat	> 5000 mg/kg
Oral		
LD50	Rat	> 5000 mg/kg
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.	
Serious eye damage/eye irritation	Dust in the eyes will cause irritation.	
Respiratory or skin sensitization		
Respiratory sensitization	Not likely to cause respiratory sensitization.	
Skin sensitization	This product is not expected to cause skin sensitization.	
Germ cell mutagenicity	Not classified.	
Carcinogenicity	Not expected to be hazardous by OSHA/WHMIS criteria.	
<p>Exposure to respirable crystalline silica in the form of quartz or cristobalite from occupational sources is listed by IARC and NTP as a lung carcinogen. Prolonged exposure to respirable crystalline silica has been known to cause silicosis, a lung disease, which may be disabling. While there may be a factor of individual susceptibility to a given exposure to a respirable silica dust, the risk of contracting silicosis and the severity of the disease is clearly related to the amount of respirable crystalline silica exposure and the length of time (usually years) of exposure.</p>		
IARC Monographs. Overall Evaluation of Carcinogenicity		
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7) 1 Carcinogenic to humans.		
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)		
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7) Cancer		
US. National Toxicology Program (NTP) Report on Carcinogens		
CONTINUOUS FILAMENT GLASS FIBERS*** Reasonably Anticipated to be a Human Carcinogen.		
(CAS 65997-17-3)		
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7) Known To Be Human Carcinogen.		
Reproductive toxicity	Not classified.	
Specific target organ toxicity - single exposure	Not classified.	
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	Not classified.	
Chronic effects	Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects. Not hazardous under normal conditions of use.	
Further information	*Testing conducted by Georgia-Pacific did not detect respirable crystalline silica during activities associated with the normal use of this product; however, jobsite air monitoring should be conducted to determine actual exposure when permissible exposure limits may be exceeded.	
12. Ecological information		
Ecotoxicity	Not considered to be harmful to aquatic life.	

Components	Species	Test Results
BORIC ACID** (CAS 10043-35-3)		
Aquatic		
Crustacea	EC50	Daphnia 766.5 mg/L, 48 Hours
Fish	LC50	Razorback sucker (<i>Xyrauchen texanus</i>) > 100 mg/l, 96 hours
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)		
Aquatic		
<i>Acute</i>		
Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>) > 1970 mg/l, 96 hours
CONTINUOUS FILAMENT GLASS FIBERS*** (CAS 65997-17-3)		
Aquatic		
<i>Acute</i>		
Fish	LC50	Zebra danio (<i>Danio rerio</i>) > 1000 mg/l, 96 hours ECHA
CRYSTALLINE SILICA (QUARTZ)* (CAS 14808-60-7)		
Aquatic		
<i>Acute</i>		
Fish	LC50	Zebra danio (<i>Danio rerio</i>) > 10000 mg/l, 96 Hours OECD SIDS

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available.

Partition coefficient n-octanol / water (log Kow)

BORIC ACID** 0.175

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations.

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

US federal regulations This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Toxic Substances Control Act (TSCA) All components of the mixture on the TSCA 8(b) inventory are designated "active".

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

Disclaimer

This SDS is intended to quickly provide useful information to the user(s) of this material or product. It is not intended to serve as a comprehensive discussion of all possible risks or hazards, and it assumes a reasonable use of the product. The information contained in this SDS is believed to be accurate as of the date of preparation of this SDS and has been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification. The user or handler (or their employer) should consider the specific conditions in which this material will be used, handled, or stored and determine what specific safety or other precautions are required. Employers should ensure that their employees, agents, contractors, and customers who will use the product receive adequate warnings and safe handling procedures, including a current SDS. Product users or handlers (or their employer) who are unsure of what specific precautions are required should consult their employer, product supplier, or safety or health professionals before handling or working with this product. Please notify us immediately if you believe this SDS or other safety and health information about this product is inaccurate or incomplete.

Revision information

This document has undergone significant changes and should be reviewed in its entirety.