

1. Product and Company Identification

Material name	Mineral Core
Product use	Core for fire door and temperature rise metal doors
Product List	See Product List found in Section 16
Manufacturer information	Georgia-Pacific Gypsum LLC 133 Peachtree Street, NE Atlanta, GA 30303 MSDS Request 404.652.5119 Technical Information 800.225.6119 Chemtrec - Emergency 800.424.9300

2. Hazards Identification

Emergency overview	CAUTION! Sawing, sanding, drilling, or routing this product may generate dust. Dust can be irritating to the eyes, skin, and respiratory system.
Potential health effects	
Eyes	Dust may cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
Skin	Dust may produce itching, rash, and redness. Handling can cause dry skin.
Inhalation	Dust may cause respiratory tract irritation.
Ingestion	Not applicable under normal conditions of use. May result in obstruction or temporary irritation of the digestive tract.

3. Composition / Information on Ingredients

Components	CAS #	Percent/Wt
PERLITE	93763-70-3	40 - 70
GYPSUM (CALCIUM SULFATE)*	7778-18-9	15 - 40
SODIUM SILICATE***	1344-09-8	10 - 30
FIRECLAYS**	Varied	10 - 30
PORTLAND CEMENT*	65997-15-1	7 - 13
DIATOMACEOUS EARTH**	68855-54-9	5 - 10
CRISTOBALITE**	14464-46-1	3 - 7
CRYSTALLINE SILICA (QUARTZ)	14808-60-7	1 - 5
POLYVINYL ALCOHOL*	9002-89-5	1 - 5
CONTINUOUS FILAMENT GLASS FIBERS	65997-17-3	0.5 - 1.5

Composition comments	* - Contained only in White Core FD OR-001/MO-001 formulas. ** - Contained only in Blue Core FD OR-002 formula. *** - Contained only in White Core FD MO-001/Blue Core FD OR-002 formulas.
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Gypsum (calcium sulfate), Portland Cement, perlite, fireclays, and diatomaceous earth contain naturally occurring crystalline silica (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.

4. First Aid Measures

First aid procedures

Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. If irritation persists, seek medical attention.
Skin contact	For skin contact, wash immediately with soap and water. Get medical attention if irritation develops or persists.
Inhalation	Remove to fresh air. If symptoms persist, obtain medical attention.
Ingestion	May result in obstruction and irritation if ingested. Get medical attention.

5. Fire Fighting Measures

Flammable properties	Not flammable by OSHA/WHMIS criteria.
Extinguishing media	
Suitable extinguishing media	Treat for surrounding material.
Protection of firefighters	
Protective equipment and precautions for firefighters	Firefighters should wear full protective clothing including self contained breathing apparatus.
Explosion data	
Sensitivity to static discharge	Not applicable.
Sensitivity to mechanical impact	Not applicable.
Hazardous combustion products	May include, and are not limited to: calcium oxide and sulfur dioxide.

6. Accidental Release Measures

Personal precautions	Use personal protection recommended in Section 8. Keep unnecessary personnel away from the release.
Environmental precautions	Keep out of drains, sewers, ditches, and waterways.
Methods for containment	Pick up large pieces, then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use personal protection recommended in Section 8.
Methods for cleaning up	Sweep up or gather material and place in appropriate container for disposal.

7. Handling and Storage

Handling	Avoid contact with skin and eyes. Do not breathe dust. Use only in well-ventilated areas. Handle with care. Do not eat or drink while using the product. Wash hands before eating, drinking, or smoking.
Storage	Keep away from children. Store level and keep dry. Dewpoint or other conditions causing the presence of moisture can damage the product during storage.

8. Exposure Controls / Personal Protection

PERLITE (CAS # 93763-70-3)

	TWA	STEL	Ceiling
ACGIH	10 mg/m ³ TWA (inhalable fraction); 3 mg/m ³ TWA (respirable fraction)	Not established	Not established
OSHA	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)	Not established	Not established

GYPSUM (CALCIUM SULFATE)* (CAS # 7778-18-9)

	TWA	STEL	Ceiling
ACGIH	10 mg/m ³ TWA (inhalable fraction)	Not established	Not established
OSHA	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)	Not established	Not established

FIRECLAYS** (CAS # Varied)

	TWA	STEL	Ceiling
ACGIH	10 mg/m ³ TWA (inhalable fraction); 3 mg/m ³ TWA (respirable fraction)	Not established	Not established
OSHA	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)	Not established	Not established

DIATOMACEOUS EARTH** (CAS # 68855-54-9)

	TWA	STEL	Ceiling
ACGIH	10 mg/m ³ TWA (inhalable fraction); 3 mg/m ³ TWA (respirable fraction)	Not established	Not established
OSHA	(80 mg/m ³)/(%SiO ₂)	Not established	Not established

PORTLAND CEMENT* (CAS # 65997-15-1)

	TWA	STEL	Ceiling
ACGIH	10 mg/m ³ TWA (particulate matter containing no asbestos and <1% crystalline silica)	Not established	Not established
OSHA	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)	Not established	Not established

CRISTOBALITE** (CAS # 14464-46-1)

	TWA	STEL	Ceiling
ACGIH	0.025 mg/m ³ TWA (respirable fraction)	Not established	Not established
OSHA	1/2 ((10)/(%SiO ₂ + 2) mg/m ³ TWA (respirable)); 1/2 ((30)/(%SiO ₂ + 2) mg/m ³ TWA (total dust)); 1/2 ((250)/(%SiO ₂ + 5) mppcf TWA (respirable))	Not established	Not established

SODIUM SILICATE*** (CAS # 1344-09-8)

	TWA	STEL	Ceiling
ACGIH	10 mg/m ³ TWA (inhalable fraction); 3 mg/m ³ TWA (respirable fraction)	Not established	Not established

OSHA	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)	Not established	Not established
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POLYVINYL ALCOHOL* (CAS # 9002-89-5)

	TWA	STEL	Ceiling
ACGIH	10 mg/m ³ TWA (inhalable fraction); 3 mg/m ³ TWA (respirable fraction)	Not established	Not established
OSHA	15 mg/m ³ TWA (total dust); 5 mg/m ³ (respirable fraction)	Not established	Not established

CONTINUOUS FILAMENT GLASS FIBERS (CAS # 65997-17-3)

	TWA	STEL	Ceiling
ACGIH	1 fiber/cm ³ TWA (respirable fibers, length >5 µm, aspect ratio ≥3:1, as determined by the membrane filter method at 400-450X magnification [4-mm objective], using phase-contrast illumination); 5 mg/m ³ TWA (inhalable fraction)	Not established	Not established
OSHA	15 mg/m ³ TWA (total dust); 5 mg/m ³ TWA (respirable fraction)	Not established	Not established

CRYSTALLINE SILICA (QUARTZ) (CAS # 14808-60-7)

	TWA	STEL	Ceiling
ACGIH	0.025 mg/m ³ TWA (respirable fraction)	Not established	Not established
OSHA	((10)/(%SiO ₂ + 2) mg/m ³ TWA (respirable)); ((30)/(%SiO ₂ + 2) mg/m ³ TWA (total dust)); ((250)/(%SiO ₂ + 5) mppcf TWA (respirable))	Not established	Not established

Exposure guidelines

- * - Contained only in White Core FD OR-001/MO-001 formulas.
- ** - Contained only in Blue Core FD OR-002 formula.
- *** - Contained only in White Core FD MO-001/Blue Core FD OR-002 formulas.

Engineering controls

When sawing, sanding, drilling, or routing this product, provide local and general exhaust ventilation to keep airborne dust concentrations below exposure limits. Use wet methods, if appropriate, to reduce generation of dust.

Personal protective equipment

Eye / face protection

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. Safety shower/eye wash fountain must be readily available in the workplace area (29 CFR 1910.151(c)).

Skin protection

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

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)

9. Physical & Chemical Properties

Color	Grey, blue
Odor	Odorless
pH	7 - 9
Freezing point	Not applicable

Boiling point	Not applicable
Flash point	Not applicable
Flammability	Not Flammable
Flammability limits in air, upper, % by volume	Not applicable
Flammability limits in air, lower, % by volume	Not applicable
Vapor pressure	Not applicable
Vapor density	Not applicable
Specific gravity	0.5
Solubility (water)	<0.2 at 22°C
Auto-ignition temperature	Not applicable
VOC	Not available
Percent volatile	Not available

10. Chemical Stability & Reactivity Information

Chemical stability	Stable at normal conditions.
Conditions of Reactivity	None known.
Incompatible materials	None known.
Hazardous decomposition products	May include and are not limited to: calcium oxide and sulfur dioxide.

11. Toxicological Information

Toxicological information (Ingredients)

GYPSUM (CALCIUM SULFATE)* (CAS # 7778-18-9)

Toxicology Data - Selected LD50s and LC50s

Oral LD50 Mouse: 5824 mg/kg

Oral LD50 Rat: 3000 mg/kg

SODIUM SILICATE*** (CAS # 1344-09-8)

Toxicology Data - Selected LD50s and LC50s

Oral LD50 Rat: 1153 mg/kg

Dermal LD50 Rabbit: 4640 mg/kg

POLYVINYL ALCOHOL* (CAS # 9002-89-5)

Toxicology Data - Selected LD50s and LC50s

Oral LD50 Rat: 20000 mg/kg

CRYSTALLINE SILICA (QUARTZ) (CAS # 14808-60-7)

Toxicology Data - Selected LD50s and LC50s

Oral LD50 Rat: 500 mg/kg

Sensitization

Not expected to be hazardous by OSHA/WHMIS criteria.

Acute effects

In 1987, IARC classified continuous filament glass fibers as a Group 3 substance, "not classifiable as to its carcinogenicity to humans." In 2001, IARC reaffirmed this designation. Continuous filament glass fibers are not considered respirable due to their large diameter.

Chronic effects

Not expected to be hazardous by OSHA/WHMIS criteria.

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.

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.

Carcinogenicity Hazardous by OSHA/WHMIS criteria.

CRISTOBALITE (CAS # 14464-46-1)**

ACGIH - Threshold Limit Values - Carcinogens
IARC - Group 1 (Carcinogenic to Humans)

A2 - Suspected Human Carcinogen
Monograph 68 [1997] (listed under Crystalline silica inhaled in the form of quartz or cristobalite from occupational sources)
Known Carcinogen

NTP (National Toxicology Program) - Report on Carcinogens - Known Human Carcinogens

Present

U.S. - OSHA - Hazard Communication Carcinogens

CRYSTALLINE SILICA (QUARTZ) (CAS # 14808-60-7)

ACGIH - Threshold Limit Values - Carcinogens
IARC - Group 1 (Carcinogenic to Humans)

A2 - Suspected Human Carcinogen
Monograph 68 [1997] (listed under Crystalline silica inhaled in the form of quartz or cristobalite from occupational sources)
Known Human Carcinogen

NTP (National Toxicology Program) - Report on Carcinogens - Known Human Carcinogens

Present

U.S. - OSHA - Hazard Communication Carcinogens

Mutagenicity Not expected to be hazardous by OSHA/WHMIS criteria.

Reproductive effects Not expected to be hazardous by OSHA/WHMIS criteria.

Teratogenicity Not expected to be hazardous by OSHA/WHMIS criteria.

Synergistic materials Not available.

12. Ecological Information

Ecotoxicity Not considered to be harmful to aquatic life.

GYPSUM (CALCIUM SULFATE)* (CAS # 7778-18-9)

Ecotoxicity - Freshwater Fish Species Data

96 Hr LC50 Lepomis macrochirus: 2980 mg/L [static]; 96 Hr LC50 Pimephales promelas:>1970 mg/L [static]

SODIUM SILICATE* (CAS # 1344-09-8)**

Ecotoxicity - Freshwater Fish Species Data

96 Hr LC50 Lepomis macrochirus: 301-478 mg/L; 96 Hr LC50 Brachydanio rerio:3185 mg/L [semi-static]

13. Disposal Considerations

Disposal instructions This product, in its present state, when discarded or disposed of, is not a hazardous waste according to Federal regulations (40 CFR 261.4 (b)(4)). 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.

14. Transport Information

Department of Transportation (DOT) Requirements

This product is not regulated as a hazardous material by the United States (DOT) transportation regulations.

Canadian Transportation of Dangerous Goods (TDG) Requirements

Not regulated as dangerous goods.

15. Regulatory Information

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance No

Section 313 hazardous chemical No

Canadian regulations

CRISTOBALITE (CAS # 14464-46-1)**

Canada - WHMIS - Ingredient Disclosure List

1 %

CRYSTALLINE SILICA (QUARTZ) (CAS # 14808-60-7)

Canada - WHMIS - Ingredient Disclosure List

1 %

DIATOMACEOUS EARTH (CAS # 68855-54-9)**

Canada - WHMIS - Ingredient Disclosure List

1 %

16. Other Information

Product list

White Core FD	OR-001
Blue Core FD	OR-002
White Core FD	MO-001

HMIS® ratings

Health: 1
Flammability: 0
Physical hazard: 0

NFPA ratings

Health: 1
Flammability: 0
Instability: 0

Other information

Products on this MSDS do not contain asbestos.

Disclaimer

The information and data herein are believed to be accurate and have been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification. Buyer assumes all risk of use, storage and handling of the product in compliance with applicable federal, state and local laws and regulations. Georgia-Pacific and its subsidiaries make no warranty of any kind, expressed or implied, concerning the accuracy or completeness of the information and data herein. The implied warranties of merchantability and fitness for a particular purpose are specifically excluded. Georgia-Pacific and its subsidiaries will not be liable for claims relating to any party's use of or reliance on information and data contained herein regardless of whether it is claimed that the information and data are inaccurate, incomplete or otherwise misleading.

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