

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: Mineral Core
Product Number: (See product list found in section 16)
Product Use: Core for fire door and temperature rise metal doors
Manufacturer/Supplier: Georgia-Pacific Gypsum LLC
133 Peachtree Street, N.E., Atlanta, GA 30303
Phone Number: (800) 225-6119 (Technical Information)
(404) 652-5119 (MSDS Request)
Emergency Phone: CHEMTREC (800) 424-9300
Date of Preparation: December 18, 2007

Section 2: HAZARDS IDENTIFICATION**EMERGENCY OVERVIEW****CAUTION**

Cutting, sanding, or otherwise working with this product may generate large amounts of dust. Dust can be irritating to the eyes, skin, and respiratory system.

Likely Routes of Exposure: Skin contact, eye contact, and inhalation.

Potential Health Effects:

- Eye:** Dust may cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.
- Skin:** Dust and glass fibers may produce itching, rash, and redness. Handling can cause dry skin.
- Ingestion:** Not applicable under normal conditions of use. May result in obstruction and temporary irritation of the digestive tract.
- Inhalation:** May cause respiratory tract irritation.

Medical Conditions Aggravated By Exposure: Because of its irritating properties, dust and glass fibers may aggravate preexisting skin, eye, and respiratory conditions.

Target Organs: Skin, eyes and respiratory system.

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	CAS #	Wt. %
Perlite	93763-70-3	40 - 70
Gypsum (calcium sulfate)*	7778-18-9	15 - 40
Sodium silicate***	6834-92-0	10 - 30
Fireclays**	Various	10 - 30
Portland cement*	65997-15-1	7 - 13
Diatomaceous earth**	68855-54-9	5 - 10
Silica, crystalline, cristobalite**	14464-46-1	3 - 7
Silica, crystalline, quartz	14808-60-7	1 - 5
Polyvinyl alcohol*	9002-89-5	1 - 5
Continuous filament glass fibers	65997-17-3	0.5 - 1.5

* 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 MO-001 / Blue Core FD OR-002 formulas.

Gypsum, perlite, Portland cement, fireclays, and diatomaceous earth contain naturally occurring silica crystalline (quartz), which is listed as a lung carcinogen. See section 8 for exposure information.

Section 4: FIRST AID MEASURES

- Eye Contact:** In case of contact, immediately flush eyes with plenty of water. Remove contact lenses, if worn. If irritation persists, get medical attention.
- Skin Contact:** In case of contact, immediately flush skin with plenty of water. Call a physician if irritation develops and persists.
- Inhalation:** Remove to fresh air. If symptoms persist, obtain medical attention.
- Ingestion:** May result in obstruction and irritation if ingested. Get medical attention.

Section 5: FIRE FIGHTING MEASURES

Flammability: Not flammable by OSHA/WHMIS criteria.

Flammable Limits: This product is fire resistant and has the following surface burning characteristics reported by nationally recognized laboratories. Flame Spread, 0 - 25, and Smoke Development, 0.

Means of Extinction:

Suitable Extinguishing Media: Treat for surrounding material.

Unsuitable Extinguishing Media: Not applicable.

Products of Combustion: May include, and are not limited to: calcium oxide and sulfur dioxide.

Explosion Data:

Sensitivity to Mechanical Impact: Not applicable.

Sensitivity to Static Discharge: Not applicable.

Protection of Firefighters: Firefighters should wear full protective clothing including self contained breathing apparatus.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use personal protection recommended in Section 8.

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 appropriate Personal Protective Equipment (PPE).

Methods for Clean-Up: Scoop up material and place in a disposal container. Use wet methods, if appropriate, to reduce the generation of dust.

Section 7: HANDLING AND STORAGE**Handling:**

Avoid contact with skin and eyes. Do not breathe dust. Use only in well-ventilated areas. Launder contaminated clothing before reuse. Wear appropriate NIOSH approved dust mask or filtering facepiece when permissible exposure limits may be exceeded. When using do not eat or drink. Wash hands before eating, drinking, or smoking.

Storage:

Keep out of the reach of children. Store level and keep dry. Dewpoint or other conditions causing the presence of moisture can damage the product during storage.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION
Exposure Guidelines

		Exposure Limits	
Ingredient	CAS #	OSHA-PEL	ACGIH-TLV
Perlite	93763-70-3	15 mg/m ³ (total); 5 mg/m ³ (resp)	10 mg/m ³
Gypsum (CaSO ₄)	7778-18-9	15 mg/m ³ (total); 5 mg/m ³ (resp)	10 mg/m ³ (total)
Sodium silicate	6834-92-0	15 mg/m ³ (total); 5 mg/m ³ (resp)	10 mg/m ³ (total)
Fireclays	Various	15 mg/m ³ , 5 mg/m ³ (resp)	10 mg/m ³
Portland cement	65997-15-1	15 mg/m ³ (total); 5 mg/m ³ (resp)	10 mg/m ³ (total)
Diatomaceous earth	68855-54-9	80 mg/m ³ /%SiO ₂	10 mg/m ³
Silica, crystalline, cristobalite	14464-46-1	½((10 mg/m ³)/(%SiO ₂ +2) TWA (resp)); ½((30 mg/m ³)/(%SiO ₂ +2) TWA (total)); ½((250)/(%SiO ₂ +5) mppcf TWA (resp))	0.025 mg/m ³
Silica, crystalline, quartz	14808-60-7	((10 mg/m ³)/(%SiO ₂ +2) TWA (resp)); ((30 mg/m ³)/(%SiO ₂ +2) TWA (total)); ((250)/(%SiO ₂ +5) mppcf TWA (resp))	0.025 mg/m ³
Polyvinyl alcohol	9002-89-5	Not available.	Not available.
Continuous filament glass fibers	65997-17-3	Not available.	1 f/cc TWA (respirable fibers: length > 5 µm, aspect ratio equal to or greater than 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) related to continuous filament glass fibers).

Engineering Controls: When cutting, sanding, or otherwise machining this 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.

Personal Protective Equipment:

Eye/Face Protection: Safety glasses or goggles are recommended when working with the product. Ensure compliance with OSHA's PPE standards (29 CFR 1910.132 (general) and 133 (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 hands. Ensure compliance with OSHA's PPE standards (29 CFR 1910.132 (general) and 138 (hand protection)). Safety shower/eye wash fountain must be readily available 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).

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Composite core door panel.

Color: Gray, blue.

Odor:	No odor.
Odor Threshold:	Not available.
Physical State:	Solid.
pH:	7-9
Viscosity:	Not applicable.
Freezing Point:	Not applicable.
Boiling Point:	Not applicable.
Flash Point:	Not applicable.
Evaporation Rate:	Not available.
Lower Flammability Limit:	Not applicable.
Upper Flammability Limit:	Not applicable.
Vapor Pressure:	Not applicable.
Vapor Density:	Not applicable.
Specific Gravity:	0.5
Solubility in Water:	< 0.2% @ 22°C
Coefficient of Water/Oil Distribution:	Not available.
Auto-ignition Temperature:	Not applicable.
Percent Volatile, wt. %:	Not available.
VOC content, wt. %:	Not available.

Section 10: STABILITY AND REACTIVITY

Stability: Stable under normal storage conditions.

Conditions of Reactivity: Contact with strong acids produces carbon dioxide.

Incompatible Materials: None known.

Hazardous Decomposition Products: May include, and are not limited to: calcium oxide and sulfur dioxide.

Section 11: TOXICOLOGY INFORMATION

EFFECTS OF ACUTE EXPOSURE

Component Analysis

Ingredient	LD₅₀ (oral)	LC₅₀
Perlite	12960 mg/kg, mouse	Not available.
Gypsum (calcium sulfate)	5824 mg/kg, mouse; 3000 mg/kg, rat	Not available.
Sodium silicate	1153 mg/kg, rat	Not available.
Fireclays	Not available.	Not available.
Portland cement	Not available.	Not available.
Diatomaceous earth	Not available.	Not available.
Silica, crystalline, cristobalite	Not available.	Not available.
Silica, crystalline, quartz	500 mg/kg, rat	Not available.
Polyvinyl alcohol	23854 mg/kg, rat	Not available.
Continuous filament glass fibers	Not available.	Not available.

EFFECTS OF CHRONIC EXPOSURE

Target Organs: Lungs.

Chronic Effects: Hazardous by OSHA/WHMIS criteria.

Exposure to respirable crystalline silica in the form of quartz or cristobalite from occupational sources is listed by the International Agency for Research on Cancer (IARC) and National Toxicology Program (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 respirable silica dust, the risk of contracting silicosis and the severity of the disease is clearly related to the amount of dust exposure and the length of time (usually years) of exposure.

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.

Carcinogenicity: Hazardous by OSHA/WHMIS criteria.

Ingredient	Chemical Listed as Carcinogen or Potential Carcinogen
Silica, crystalline, cristobalite	ACGIH - A2 - Suspected human carcinogen; IARC - 1 - The agent is carcinogenic to humans; NTP - 1 - Known to be carcinogens;
Silica, crystalline, quartz	ACGIH - A2 - Suspected human carcinogen; IARC - 1 - The agent is carcinogenic to humans; NTP - 1 - Known to be carcinogens

Mutagenicity; Reproductive Effects; Teratogenicity; Embryotoxicity; Respiratory Sensitization; Skin Sensitization: Not hazardous by OSHA/WHMIS criteria.

Toxicologically Synergistic Materials: Not available.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: Not considered to be harmful to aquatic life.

		LC/EC ₅₀
Freshwater Fish Species Data:		
Gypsum (calcium sulfate)	7778-18-9	96 Hr LC50 <i>Lepomis macrochirus</i> : 2980 mg/L (static)
Water Flea Data:		
Gypsum (calcium sulfate)	7778-18-9	120 Hr EC50 <i>Nitscheria linearis</i> : 3200 mg/L

Section 13: DISPOSAL CONSIDERATIONS

Disposal Instructions:

This product, if discarded as supplied, is not considered a hazardous waste under Federal Waste Regulations 40 CFR 261. If processing, use, or contamination alters the material, the waste must be tested using methods described in 40 CFR 261 to determine if it meets applicable definition of hazardous waste.

Section 14: TRANSPORTATION INFORMATION

DOT Classification

Not regulated

TDG Classification

Not regulated

Section 15: REGULATORY INFORMATION

Federal Regulations

Canadian: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

US: MSDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200).

SARA Title III

Ingredient	Section 302 (EHS) TPQ (lbs.)	Section 304 EHS RQ (lbs.)	CERCLA RQ (lbs.)	Section 313
Perlite	Not listed.	Not listed.	Not listed.	Not listed.
Gypsum (calcium sulfate)	Not listed.	Not listed.	Not listed.	Not listed.
Sodium silicate	Not listed.	Not listed.	Not listed.	Not listed.
Fireclays	Not listed.	Not listed.	Not listed.	Not listed.
Portland cement	Not listed.	Not listed.	Not listed.	Not listed.
Diatomaceous earth	Not listed.	Not listed.	Not listed.	Not listed.
Silica, crystalline, cristobalite	Not listed.	Not listed.	Not listed.	Not listed.
Silica, crystalline, quartz	Not listed.	Not listed.	Not listed.	Not listed.
Polyvinyl alcohol	Not listed.	Not listed.	Not listed.	Not listed.
Continuous filament glass fibers	Not listed.	Not listed.	Not listed.	Not listed.

Section 311-312: Delayed (chronic) health hazard.

Global Inventories

Ingredient	Canada DSL/NDSL	USA TSCA
Perlite	DSL	Yes.
Gypsum (calcium sulfate)	DSL	Yes.
Sodium silicate	DSL	Yes.
Fireclays	DSL	Yes.
Portland cement	DSL	Yes.
Diatomaceous earth	DSL	Yes.
Silica, crystalline, cristobalite	DSL	Yes.
Silica, crystalline, quartz	DSL	Yes.
Polyvinyl alcohol	DSL	Yes.
Continuous filament glass fibers	DSL	Yes.

HMIS - Hazardous Materials Identification System

Health - 1* **Flammability - 0** **Physical Hazard - 0**

NFPA - National Fire Protection Association:

Health - 1 **Fire - 0** **Reactivity - 0**

Hazard Rating: 0 = minimal, 1 = slight, 2 = moderate, 3 = severe, 4 = extreme

WHMIS Classification(s):

Class D2A - Carcinogenicity
Class D2A - Chronic Toxic Effects

WHMIS Hazard Symbols:**Section 16: OTHER INFORMATION****Other Information:**

Products on this MSDS do not contain asbestos.

Product List:

White Core FD OR-001

Blue Core FD OR-002

White Core FD MO-001

Disclaimer:

IMPORTANT: 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 that the information and data are inaccurate, incomplete or otherwise misleading.

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