SAFETY DATA SHEET



1. Identification

Product identifier FireDefender® STC 3-ply Banded FS II MDF

None.

Other means of identification

Not available. Recommended use

Recommended restrictions Workers (and your customers or users in the case of resale) should be informed of the potential

presence of respirable dust and respirable crystalline silica as well as their potential hazards. Appropriate training in the proper use and handling of this material should be provided as required

under applicable regulations.

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

MSDSREQ@GAPAC.COM E-mail

Emergency phone number Chemtrec - Emergency 800.424.9300

2. Hazard(s) identification

Emergency overview This product is not hazardous in the form in which it is shipped by the manufacturer but may

> become hazardous by downstream activities such as cutting, sanding, or otherwise working with this product that generate large amount of dusts. Those hazards associated with large amount of

dusts are described below.

Physical hazards Not classified.

Health hazards Eye irritation Category 2B

> Sensitization, respiratory Category 1 Sensitization, skin Category 1A Carcinogenicity Category 1A Category 1 (lung)

Specific target organ toxicity, repeated

exposure

Not classified. **Environmental hazards OSHA** defined hazards Not classified.

Label elements



Signal word

May cause an allergic skin reaction. Causes eye irritation. May cause allergy or asthma symptoms **Hazard statement**

or breathing difficulties if inhaled. May cause cancer. Causes damage to organs (lung) through

prolonged or repeated exposure.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read

and understood. Do not breathe dust. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection. Wear respiratory

protection.

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If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and Response

easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If on skin: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse. If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center/doctor. If exposed or concerned: Get medical advice/attention. Specific treatment (see

section 4 on the SDS).

Store away from incompatible materials (see Section 10 of the SDS). Storage **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	60 - 100
CRYSTALLINE SILICA (QUARTZ)		14808-60-7	0.9 - < 5
CELLULOSE		9004-34-6	5 - 10
CONTINUOUS FILAMENT GLASS FIBERS		65997-17-3	1 - 5
VERMICULITE		1318-00-9	1 - 5
WOOD/WOOD DUST		Not Assigned	1 - 5
UREA, POYLMER WITH FORMALDEHYDE		9011-05-6	< 0.6
METHYLENE BISPHENYL ISOCYANATE (MDI)		101-68-8	< 0.2

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

4. First-aid measures

Inhalation If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.

> Oxygen or artificial respiration if needed. Do not use mouth-to-mouth method if victim inhaled the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. If experiencing respiratory symptoms: Call a

POISON CENTER or doctor/physician.

Remove contaminated clothing immediately and wash skin with soap and water. In case of Skin contact

eczema or other skin disorders: Seek medical attention and take along these instructions.

Do not rub eyes. Immediately flush eyes with plenty of water for at least 15 minutes. Remove Eye contact

contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation

develops and persists.

Rinse mouth. Get medical attention if symptoms occur. Ingestion

Most important

symptoms/effects, acute and

delayed

Causes eye irritation. Exposed individuals may experience eye tearing, redness, and discomfort. Dusts may irritate the respiratory tract, skin and eyes. Coughing. Discomfort in the chest. Difficulty in breathing. Shortness of breath. May cause an allergic skin reaction. Dermatitis. Rash. Prolonged

exposure may cause chronic effects.

Indication of immediate medical attention and special

treatment needed **General information** Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media Use extinguishing measures that are appropriate to local circumstances and the surrounding

environment.

Unsuitable extinguishing

None known.

Specific hazards arising from

During fire, gases hazardous to health may be formed.

the chemical

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.

Specific methodsUse 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

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

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

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. Observe good industrial hygiene practices. 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 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

US OSHA Table Z-3: Time Weight Components	ed Average (TWA) (mg/m3) Type	Value	Form
VERMICULITE (CAS 1318-00-9)	TWA	5 mg/m3	Respirable fraction.
,		15 mg/m3	Total dust.
US. OSHA Table Z-1 Limits for Air	*	•	_
Components	Type	Value	Form
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	PEL	5 mg/m3	Respirable fraction.
,		15 mg/m3	Total dust.
CELLULOSE (CAS 9004-34-6)	PEL	5 mg/m3	Respirable fraction.
,		15 mg/m3	Total dust.
CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7)	PEL	0.05 mg/m3	
METHYLENE BISPHENYL ISOCYANATE (MDI) (CAS 101-68-8)	Ceiling	0.2 mg/m3	
		0.02 ppm	
ACGIH			
Components	Туре	Value	Form
CONTINUOUS FILAMENT GLASS FIBERS (CAS 65997-17-3)	TWA	5 mg/m3	Inhalable fraction.
WOOD/WOOD DUST	TWA	1 mg/m3	Inhalable fraction.
US ACGIH Threshold Limit Values	s: Time Weighted Average (TW	•	
Components	Туре	Value	Form
CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)	TWA	10 mg/m3	Inhalable fraction.

US ACGIH Threshold Limit Components	Values: Time Weighted Average (TW. Type	A): mg/m3, non-standard unite Value	s Form
CELLULOSE (CAS	TWA	10 mg/m3	
9004-34-6) 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.
US. ACGIH Threshold Limit Components	Type	Value	
METHYLENE BISPHENYL ISOCYANATE (MDI) (CAS 101-68-8)	TWA	0.005 ppm	
US. NIOSH: Pocket Guide to Components	o Chemical Hazards Type	Value	Form
CALCIUM SULFATE	TWA	5 mg/m3	Respirable.
DIHYDRATE (CAS 10101-41-4)	11111	o mg/mo	Тоорпаме.
,		10 mg/m3	Total
CELLULOSE (CAS 9004-34-6)	TWA	5 mg/m3	Respirable.
•		10 mg/m3	Total
CONTINUOUS FILAMENT GLASS FIBERS (CAS 65997-17-3)	TWA	5 mg/m3	Fiber, total
CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7)	TWA	0.05 mg/m3	Respirable dust.
METHYLENE BISPHENYL ISOCYANATE (MDI) (CAS 101-68-8)	Ceiling	0.2 mg/m3	
101-00-0)		0.02 ppm	
	TWA	0.05 mg/m3 0.005 ppm	
WOOD/WOOD DUST	TWA	1 mg/m3	Dust.
ological limit values	No biological exposure limits noted for the ingredient(s).		
posure guidelines	Occupational exposure to nuisance dust (total and respirable) and respirable crystalline silica should be monitored and controlled.		
propriate engineering ntrols	When sawing, sanding, drilling, or routing this product, provide local and general exhaust ventilation to keep airborne dust concentrations below exposure limits.		
lividual protection measures,	, such as personal protective equipm	ent	
Eye/face protection	Wear safety glasses with side shields (or goggles). Ensure compliance with OSHA's PPE standard (29 CFR 1910.132 and .133) for eye and face protection. Provide an emergency eye wash fountai and quick drench shower in the immediate work area.		
Skin protection Hand protection	For prolonged or repeated skin conta	ct use suitable protective gloves	3.
Other	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 filte when permissible exposure limits ma under the direction of a trained health OSHA's respirator standard (29 CFR (Z88.2).	y be exceeded. Respirators sho and safety professional following	ould be selected by and used ng requirements found in
Thermal hazards	Not applicable.		
neral hygiene nsiderations	Always observe good personal hygier and before eating, drinking, and/or sn equipment to remove contaminants.	moking. Routinely wash work clo	othing and protective

9. Physical and chemical properties

Appearance Composite core door panel

Physical state Solid.
Form Powder.
Color White or gray
Odor Odorless
Odor threshold Not available.
pH Not available.

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

er

(%)

Flammability limit - upper

Not applicable

Not applicable

(%)

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure Not applicable

Vapor density Not available

Relative density Not available

Solubility(ies)

Solubility (water) <0.2 at 22°C

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperatureNot applicableDecomposition temperatureNot available.ViscosityNot available.

Other information

Explosive properties

Flash point class

Oxidizing properties

Percent volatile

Specific gravity

VOC

Not explosive.

Not flammable

Not oxidizing.

Not available

1 - 1.5

Not available

10. Stability and reactivity

ReactivityThe product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Contact with incompatible materials. Avoid dispersal of dust in the air (i.e., clearing dust surfaces

with compressed air).

Incompatible materials Acids.

Hazardous decomposition

products

May include and are not limited to: calcium oxide and sulfur dioxide.

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11. Toxicological information

Information on likely routes of exposure

May cause damage to organs through prolonged or repeated exposure by inhalation. May cause Inhalation

allergy or asthma symptoms or breathing difficulties if inhaled. Dust may irritate respiratory

system.

Dust or powder may irritate the skin. May cause an allergic skin reaction. Skin contact

Eye contact Causes eye irritation.

Not applicable under normal conditions of use. May cause gastrointestinal irritation if ingested. Ingestion

Symptoms related to the physical, chemical and toxicological characteristics Causes eye irritation. Exposed individuals may experience eye tearing, redness, and discomfort. Dusts may irritate the respiratory tract, skin and eyes. Coughing. Discomfort in the chest. Difficulty

in breathing. Shortness of breath. May cause an allergic skin reaction. Dermatitis. Rash.

Information on toxicological effects

Acute toxicity

Components	Species	Test Results		
CALCIUM SULFATE DIH	YDRATE (CAS 10101-41-4)			
<u>Acute</u>				
Oral				
LD50	Rat	> 1581 mg/kg		
METHYLENE BISPHENYL ISOCYANATE (MDI) (CAS 101-68-8)				
<u>Acute</u>				
Dermal				
LD50	Rabbit	> 10000 mg/kg		
Inhalation				
Vapor				
LC50		0.178 mg/l		
LC50	Rat	0.369 mg/l, 4 Hours		
Oral				
LD50	Rat	> 10000 mg/kg		

Skin corrosion/irritation

Serious eye damage/eye

irritation

Prolonged skin contact may cause temporary irritation.

Causes eye irritation.

Respiratory or skin sensitization

May cause allergy or asthma symptoms or breathing difficulties if inhaled. Respiratory sensitization

Skin sensitization May cause an allergic skin reaction.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Exposure to respirable crystalline silica in the form of quartz or cristobalite from occupational Carcinogenicity

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.

Wood dust generated from sawing, sanding or machining this product may cause nasal dryness, irritation, coughing and sinusitis. The International Agency for Research on Cancer (IARC), and National Toxicology Program (NTP) classifies wood dust as a carcinogen. This classification is based on the increased occurrence of adenocarcinomas of the nasal cavities and paranasal sinuses associated with exposure to wood dust. The evaluation noted insufficient evidence to associate cancers of the oropharynx, hypopharynx, lung, lymphatic and hematopoietic systems, stomach, colon, or rectum with exposure to wood dust.

IARC Monographs. Overall Evaluation of Carcinogenicity

CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7) 1 Carcinogenic to humans.

METHYLENE BISPHENYL ISOCYANATE (MDI) (CAS 3 Not classifiable as to carcinogenicity to humans.

WOOD/WOOD DUST (CAS Not Assigned) 1 Carcinogenic to humans.

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SDS US

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

CRYSTALLINE SILICA (QUARTZ) (CAS 14808-60-7) Known To Be Human Carcinogen. WOOD/WOOD DUST (CAS Not Assigned) Known To Be Human Carcinogen.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Causes damage to organs (lung) through prolonged or repeated exposure.

Not an aspiration hazard. **Aspiration hazard**

Chronic effects Causes damage to organs through prolonged or repeated exposure. Prolonged inhalation may be

harmful. Prolonged exposure may cause chronic effects.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components **Test Results**

CALCIUM SULFATE DIHYDRATE (CAS 10101-41-4)

Aquatic

Acute

LC50 Fathead minnow (Pimephales promelas) > 1970 mg/l, 96 hours Fish

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

Aquatic

Acute

Fish LC50 Zebra danio (Danio rerio) > 10000 mg/l, 96 Hours OECD SIDS

METHYLENE BISPHENYL ISOCYANATE (MDI) (CAS 101-68-8)

Aquatic

Acute

Fish LC50 Fish > 1000 mg/kg, 14 days No data is available on the degradability of this product.

Persistence and degradability

Bioaccumulative potential

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. Dispose of contents/container in

accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

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

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations.

Contaminated packaging Not available.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

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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 hazardous in the form in which it is sold and shipped by the manufacturer. However, the large amount of dusts generated by downstream activities such as cutting, sanding, or otherwise working with this product is considered hazardous and is regulated under the Hazard Communication Standard 29 CFR 1910.1200.

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

Not regulated.

TSCA Chemical Action Plans, Chemicals of Concern

METHYLENE BISPHENYL ISOCYANATE (MDI) (CAS 101-68-8)

Methylene Diphenyl Diisocyanate (MDI) And Related Compounds Action Plan [RIN 2070-ZA15]

CERCLA Hazardous Substance List (40 CFR 302.4)

METHYLENE BISPHENYL ISOCYANATE (MDI) (CAS Listed. 101-68-8)

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes

> Delayed Hazard - Yes Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous Yes

chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

METHYLENE BISPHENYL ISOCYANATE (MDI) (CAS 101-68-8)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

US state regulations

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd.

(a))

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

METHYLENE BISPHENYL ISOCYANATE (MDI) (CAS 101-68-8)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

CRYSTALLINE SILICA (QUARTZ) (CAS Listed: October 1, 1988

14808-60-7)

FORMALDEHYDE (CAS 50-00-0) Listed: January 1, 1988 WOOD/WOOD DUST (CAS Not Assigned) Listed: December 18, 2009

International Inventories

Country(s) or region Inventory name On inventory (yes/no)*

Canada Domestic Substances List (DSL) Yes

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On inventory (yes/no)* Country(s) or region Inventory name

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s) A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

June-24-2015 Issue date **Revision date** May-26-2017

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HMIS® ratings Health: 3*

Flammability: 1 Physical hazard: 0

Health: 2 NFPA ratings

Flammability: 1 Instability: 0

This SDS is intended to quickly provide useful information to the user(s) of this material or product. **Disclaimer**

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.

Material name: FireDefender® STC 3-ply Banded FS II MDF