

## 1. Identification

<b>Product identifier</b>	<b>DensDefy™ Liquid Flashing</b>
<b>Other means of identification</b>	None.
<b>Recommended use</b>	Liquid Flashing/Sealant for Dens® Gypsum products, specifically liquid flashing component of DensElement® Barrier System.
<b>Recommended restrictions</b>	None known.
<b>Manufacturer/Importer/Supplier/Distributor information</b>	
<b>Company name</b>	Georgia-Pacific Canada LP
<b>Address</b>	133 Peachtree Steet, NE Atlanta, GA 30303
<b>Telephone</b>	Technical Information: 800.225.6119 (M)SDS Request: 404.652.5119
<b>E-mail</b>	MSDSREQ@GAPAC.com
<b>Emergency phone number</b>	Chemtrec - Emergency: 800.424.9300

## 2. Hazard identification

<b>Physical hazards</b>	Not classified.	
<b>Health hazards</b>	Skin irritation	Category 2
	Serious eye damage	Category 1
<b>Environmental hazards</b>	Not classified.	
<b>Label elements</b>		



<b>Signal word</b>	Danger
<b>Hazard statement</b>	Causes skin irritation. Causes serious eye damage.
<b>Precautionary statement</b>	
<b>Prevention</b>	Wash thoroughly after handling. Wear eye protection/face protection. Wear protective gloves.
<b>Response</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE/doctor. IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. Specific treatment (see section 4 on the SDS).
<b>Storage</b>	Store away from incompatible materials (see Section 10 of the SDS).
<b>Disposal</b>	Dispose of waste and residues in accordance with local authority requirements.
<b>Other hazards</b>	None known.
<b>Supplemental information</b>	None.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	Common name and synonyms	CAS number	%
Calcium carbonate		471-34-1	15 - 40
LIMESTONE (CALCIUM CARBONATE)		1317-65-3	15 - 40
Titanium dioxide		13463-67-7	3 - 7
TRIMETHOXYVINYL SILANE		2768-02-7	3 - 7
BIS (2-ETHYLHEXYL) ADIPATE		103-23-1	0.1 - 1

Chemical name	Common name and synonyms	CAS number	%
METHYL ALCOHOL		67-56-1	0.1 - 1
Other components below reportable levels			15 - 40

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. The specific chemical identity and/or percentage of composition has been withheld as a trade secret.

#### 4. First-aid measures

<b>Inhalation</b>	Move to fresh air. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.
<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Coughing. Skin irritation. May cause redness and pain.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

#### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

#### 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.  Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.  Never return spills to original containers for re-use.
<b>Environmental precautions</b>	Avoid discharge into drains, water courses or onto the ground.

#### 7. Handling and storage

<b>Precautions for safe handling</b>	Do not get this material in contact with eyes. Avoid contact with eyes, skin, and clothing. Provide adequate ventilation. Use personal protection recommended in Section 8 of the SDS. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### ACGIH

Components	Type	Value	Form
Calcium carbonate (CAS 471-34-1)	TWA	3 mg/m <sup>3</sup>	Respirable particles.
LIMESTONE (CALCIUM CARBONATE) (CAS 1317-65-3)	TWA	3 mg/m <sup>3</sup>	Respirable fraction.

#### US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Calcium carbonate (CAS 471-34-1)	TWA	10 mg/m <sup>3</sup>	Inhalable particles.
LIMESTONE (CALCIUM CARBONATE) (CAS 1317-65-3)	TWA	10 mg/m <sup>3</sup>	Inhalable particles.
METHYL ALCOHOL (CAS 67-56-1)	STEL	250 ppm	
	TWA	200 ppm	
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m <sup>3</sup>	

#### Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value
Calcium carbonate (CAS 471-34-1)	TWA	10 mg/m <sup>3</sup>
LIMESTONE (CALCIUM CARBONATE) (CAS 1317-65-3)	TWA	10 mg/m <sup>3</sup>
METHYL ALCOHOL (CAS 67-56-1)	STEL	328 mg/m <sup>3</sup>
		250 ppm
	TWA	262 mg/m <sup>3</sup>
		200 ppm
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m <sup>3</sup>

#### Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value	Form
Calcium carbonate (CAS 471-34-1)	STEL	20 mg/m <sup>3</sup>	Total dust.
	TWA	3 mg/m <sup>3</sup>	Respirable fraction.
		10 mg/m <sup>3</sup>	Total dust.
LIMESTONE (CALCIUM CARBONATE) (CAS 1317-65-3)	STEL	20 mg/m <sup>3</sup>	Total dust.
	TWA	3 mg/m <sup>3</sup>	Respirable fraction.
		10 mg/m <sup>3</sup>	Total dust.
METHYL ALCOHOL (CAS 67-56-1)	STEL	250 ppm	
	TWA	200 ppm	
Titanium dioxide (CAS 13463-67-7)	TWA	3 mg/m <sup>3</sup>	Respirable fraction.
		10 mg/m <sup>3</sup>	Total dust.

**Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)**

Components	Type	Value	Form
Calcium carbonate (CAS 471-34-1)	TWA	10 mg/m3	Inhalable particles.
LIMESTONE (CALCIUM CARBONATE) (CAS 1317-65-3)	TWA	10 mg/m3	Inhalable particles.
METHYL ALCOHOL (CAS 67-56-1)	STEL	250 ppm	
	TWA	200 ppm	
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m3	

**Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)**

Components	Type	Value	
METHYL ALCOHOL (CAS 67-56-1)	STEL	250 ppm	
	TWA	200 ppm	
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m3	
TRIMETHOXYVINYL SILANE (CAS 2768-02-7)	STEL	60 mg/m3	
		10 ppm	

**Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety)**

Components	Type	Value	Form
Calcium carbonate (CAS 471-34-1)	TWA	10 mg/m3	Total dust.
LIMESTONE (CALCIUM CARBONATE) (CAS 1317-65-3)	TWA	10 mg/m3	Total dust.
METHYL ALCOHOL (CAS 67-56-1)	STEL	328 mg/m3	
		250 ppm	
	TWA	262 mg/m3	
Titanium dioxide (CAS 13463-67-7)		200 ppm	
	TWA	10 mg/m3	Total dust.

**Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21)**

Components	Type	Value	
Calcium carbonate (CAS 471-34-1)	15 minute	20 mg/m3	
	8 hour	10 mg/m3	
LIMESTONE (CALCIUM CARBONATE) (CAS 1317-65-3)	15 minute	20 mg/m3	
	8 hour	10 mg/m3	
METHYL ALCOHOL (CAS 67-56-1)	15 minute	250 ppm	
	8 hour	200 ppm	
Titanium dioxide (CAS 13463-67-7)	15 minute	20 mg/m3	
	8 hour	10 mg/m3	

## Biological limit values

### ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
METHYL ALCOHOL (CAS 67-56-1)	15 mg/l	Methanol	Urine	*

\* - For sampling details, please see the source document.

**Exposure guidelines** Occupational Exposure Limits are not relevant to the current physical form of the product.

#### Canada - Alberta OELs: Skin designation

METHYL ALCOHOL (CAS 67-56-1) Can be absorbed through the skin.

#### Canada - British Columbia OELs: Skin designation

METHYL ALCOHOL (CAS 67-56-1) Can be absorbed through the skin.

#### Canada - Manitoba OELs: Skin designation

METHYL ALCOHOL (CAS 67-56-1) Danger of cutaneous absorption

#### Canada - Ontario OELs: Skin designation

METHYL ALCOHOL (CAS 67-56-1) Can be absorbed through the skin.

#### Canada - Quebec OELs: Skin designation

METHYL ALCOHOL (CAS 67-56-1) Can be absorbed through the skin.

#### Canada - Saskatchewan OELs: Skin designation

METHYL ALCOHOL (CAS 67-56-1) Can be absorbed through the skin.

#### US ACGIH Threshold Limit Values: Skin designation

METHYL ALCOHOL (CAS 67-56-1) Danger of cutaneous absorption

#### 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. Provide eyewash station and safety shower.

#### Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear safety glasses with side shields (or goggles) and a face shield.

#### Skin protection

**Hand protection** Wear appropriate chemical resistant gloves.

**Other** Wear appropriate chemical resistant clothing.

**Respiratory protection** In case of insufficient ventilation, wear suitable respiratory equipment.

**Thermal hazards** Wear appropriate thermal protective clothing, when necessary.

#### 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.

## 9. Physical and chemical properties

### Appearance

**Physical state** Liquid.

**Form** Paste.

**Colour** Yellow.

**Odour** Not available.

**Odour threshold** Not available.

**pH** Not available.

**Melting point/freezing point** 956.15 °C (1753.07 °F) estimated

**Initial boiling point and boiling range** 1425 °C (2597 °F) estimated

**Flash point** > 100.0 °C (> 212.0 °F) estimated

**Evaporation rate** Not available.

**Flammability (solid, gas)** Not applicable.

#### Upper/lower flammability or explosive limits

**Flammability limit - lower (%)** Not available.

<b>Flammability limit - upper (%)</b>	Not available.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit – upper (%)</b>	Not available.
<b>Vapour pressure</b>	Not available.
<b>Vapour density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	395 °C (743 °F) estimated
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Explosive properties</b>	Not explosive.
<b>Flammability class</b>	Combustible IIIB estimated
<b>Oxidising properties</b>	Not oxidising.
<b>Percent volatile</b>	0.25 % estimated

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Contact with incompatible materials.
<b>Incompatible materials</b>	Fluorine. Acids. Strong oxidising agents.
<b>Hazardous decomposition products</b>	No hazardous decomposition products are known.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	No adverse effects due to inhalation are expected.
<b>Skin contact</b>	Causes skin irritation.
<b>Eye contact</b>	Causes serious eye damage.
<b>Ingestion</b>	Not applicable under normal conditions of use. May result in obstruction or temporary irritation of the digestive tract.

**Symptoms related to the physical, chemical and toxicological characteristics** Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. Coughing. Skin irritation. May cause redness and pain.

### Information on toxicological effects

**Acute toxicity** Not known.

<b>Product</b>	<b>Species</b>	<b>Test Results</b>
DensDefy™ Liquid Flashing		
<b>Acute</b>		
<b>Dermal</b>		
ATEmix		106000 mg/kg
<b>Inhalation</b>		
<i>Vapour</i>		
ATEmix		1177 mg/l

Product	Species	Test Results
<b>Oral</b> ATEmix		5367 mg/kg
<b>Components</b>	<b>Species</b>	<b>Test Results</b>
BIS (2-ETHYLHEXYL) ADIPATE (CAS 103-23-1)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	8410 mg/kg
<b>Oral</b>		
LD50	Rat	5600 mg/kg 5.6 g/kg
Calcium carbonate (CAS 471-34-1)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	> 2000 mg/kg
LIMESTONE (CALCIUM CARBONATE) (CAS 1317-65-3)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	6450 mg/kg
METHYL ALCOHOL (CAS 67-56-1)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	15800 mg/kg
<b>Inhalation</b>		
LC50	Rat	87.5 mg/l, 6 Hours
Titanium dioxide (CAS 13463-67-7)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	> 10000 mg/kg
<b>Skin corrosion/irritation</b>	Causes skin irritation.	
<b>Serious eye damage/eye irritation</b>	Causes serious eye damage.	
<b>Respiratory or skin sensitisation</b>		
<b>Canada - Alberta OELs: Irritant</b>		
Calcium carbonate (CAS 471-34-1)	Irritant	
LIMESTONE (CALCIUM CARBONATE) (CAS 1317-65-3)	Irritant	
Titanium dioxide (CAS 13463-67-7)	Irritant	
<b>Respiratory sensitisation</b>	Not a respiratory sensitizer.	
<b>Skin sensitisation</b>	This product is not expected to cause skin sensitisation.	
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
<b>Carcinogenicity</b>	Prolonged exposure to respirable titanium dioxide may cause cancer. However due to the physical form of this product (cured and uncured), exposures are not expected under normal condition of use.	
<b>ACGIH Carcinogens</b>		
Titanium dioxide (CAS 13463-67-7)	A4 Not classifiable as a human carcinogen.	
<b>Canada - Manitoba OELs: carcinogenicity</b>		
Titanium dioxide (CAS 13463-67-7)	Not classifiable as a human carcinogen.	
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>		
BIS (2-ETHYLHEXYL) ADIPATE (CAS 103-23-1)	3 Not classifiable as to carcinogenicity to humans.	
Titanium dioxide (CAS 13463-67-7)	2B Possibly carcinogenic to humans.	
<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects.	

<b>Specific target organ toxicity - single exposure</b>	Not classified.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not an aspiration hazard.
<b>Chronic effects</b>	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.

Product	Species		Test Results
DensDefy™ Liquid Flashing			
<b>Aquatic</b>			
Crustacea	EC50	Daphnia	18400.791 mg/l, 48 hours estimated
Fish	LC50	Fish	333.3333 % v/v, 96 hours estimated
Components	Species		Test Results
BIS (2-ETHYLHEXYL) ADIPATE (CAS 103-23-1)			
<b>Aquatic</b>			
Algae	IC50	Algae	500.0001 mg/l, 72 Hours
Crustacea	EC50	Daphnia	500.0001 mg/l, 48 Hours
Fish	LC50	Bluegill (Lepomis macrochirus)	0.48 - 0.85 mg/l, 96 hours
METHYL ALCOHOL (CAS 67-56-1)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Daphnia magna)	> 10000 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	> 100 mg/l, 96 hours
Titanium dioxide (CAS 13463-67-7)			
<b>Aquatic</b>			
Crustacea	EC50	Water flea (Daphnia magna)	> 1000 mg/l, 48 hours
Fish	LC50	Mummichog (Fundulus heteroclitus)	> 1000 mg/l, 96 hours

**Persistence and degradability** No data is available on the degradability of any ingredients in the mixture.

### Bioaccumulative potential

**Partition coefficient n-octanol / water (log Kow)**  
METHYL ALCOHOL -0.77

**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

<b>Disposal instructions</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>Contaminated packaging</b>	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

**TDG**  
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 established.**15. Regulatory information****Canadian regulations** This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.**Controlled Drugs and Substances Act**

Not regulated.

**Export Control List (CEPA 1999, Schedule 3)**

Not listed.

**Greenhouse Gases**

Not listed.

**Ontario. Toxic Substances. Toxic Reduction Act, 2009. Regulation 455/09 (July 1, 2011)**

METHYL ALCOHOL (CAS 67-56-1)

**Precursor Control Regulations**

Not regulated.

**International regulations****Stockholm Convention**

Not applicable.

**Rotterdam Convention**

Not applicable.

**Kyoto Protocol**

Not applicable.

**Montreal Protocol**

Not applicable.

**Basel Convention**

Not applicable.

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*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****Issue date** 12-04-2019**Revision date** 07-27-2022**Version No.** 02**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**

Composition / Information on Ingredients: Ingredients  
Composition/information on ingredients: Composition comments  
Toxicological information: Carcinogenicity