

1. Identification

Product identifier	DensDefy® Liquid Barrier
Other means of identification	None.
Recommended use	Not available.
Recommended restrictions	None known.

Manufacturer/Importer/Supplier/Distributor information

Company name	Georgia-Pacific Canada LP
Address	133 Peachtree Street, NE Atlanta, GA 30303
Telephone	Technical Information: 800.225.6119 (M)SDS Request: 404.652.5119
E-mail	MSDSREQ@GAPAC.com
Emergency phone number	Chemtrec - Emergency: 800.424.9300

2. Hazard identification

Physical hazards	Not classified.	
Health hazards	Sensitization, skin	Category 1
	Reproductive toxicity	Category 1B
	Specific target organ toxicity following repeated exposure	Category 2 (Respiratory tract)
Environmental hazards	Hazardous to the aquatic environment, long-term hazard	Category 3

Label elements



Signal word Danger

Hazard statement May cause an allergic skin reaction. May damage fertility or the unborn child. May cause damage to organs (Respiratory tract) through prolonged or repeated exposure. Harmful to aquatic life with long lasting effects.

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist/vapours. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. Avoid release to the environment.

Response IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. IF exposed or concerned: Get medical advice/attention. Specific treatment (see section 4 on the SDS).

Storage Store in a well-ventilated place. Keep container tightly closed. Store locked up. Store away from incompatible materials (see Section 10 of the SDS).

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Supplemental information None.

Other hazards None known.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
LIMESTONE (CALCIUM CARBONATE)		1317-65-3	15 - 40
N-[3-(TRIMETHYLOXYSILYL)PROPYL]-1,2-ETHANEDIAMINE		1760-24-3	1 - 5
Titanium dioxide		13463-67-7	1 - 5
DIBUTYLBIS(PENTANE-2,4-DIONATO-O,O')TIN		22673-19-4	0.1 - 1
Other components below reportable levels			60 - 80

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Inhalation

Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact

Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions.

Eye contact

Rinse with water. Get medical attention if irritation develops and persists.

Ingestion

Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed

Coughing. May cause an allergic skin reaction. Dermatitis. Rash. Prolonged exposure may cause chronic effects.

Indication of immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General information

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. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

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

Move containers from fire area if you can do so without risk.

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

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist/vapours. 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.

Methods and materials for containment and cleaning up

Prevent product from entering drains.

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. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe mist/vapours. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Provide adequate ventilation. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. 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

LIMESTONE (CALCIUM CARBONATE) (CAS 1317-65-3)

Type

TWA

Value

3 mg/m³

Form

Respirable fraction.

US. ACGIH Threshold Limit Values (TLV)

Components

LIMESTONE (CALCIUM CARBONATE) (CAS 1317-65-3)

Type

TWA

Value

10 mg/m³

Form

Inhalable particles.

Titanium dioxide (CAS 13463-67-7)

TWA

2.5 mg/m³

Respirable finescale particles

0.2 mg/m³

Respirable nanoscale particles

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

Components

LIMESTONE (CALCIUM CARBONATE) (CAS 1317-65-3)

Type

TWA

Value

10 mg/m³

Titanium dioxide (CAS 13463-67-7)

TWA

10 mg/m³

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

Components

LIMESTONE (CALCIUM CARBONATE) (CAS 1317-65-3)

Type

STEL

Value

20 mg/m³

Form

Total dust.

TWA

3 mg/m³

Respirable fraction.

10 mg/m³

Total dust.

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

Components	Type	Value	Form
Titanium dioxide (CAS 13463-67-7)	TWA	3 mg/m ³	Respirable fraction.
		10 mg/m ³	Total dust.

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

Components	Type	Value	Form
LIMESTONE (CALCIUM CARBONATE) (CAS 1317-65-3)	TWA	10 mg/m ³	Inhalable particles.
Titanium dioxide (CAS 13463-67-7)	TWA	2.5 mg/m ³	Respirable finescale particles
		0.2 mg/m ³	Respirable nanoscale particles

Canada. New Brunswick OELs: Threshold Limit Values (TLVs) Based on the 1991 and 1997 ACGIH TLVs and BEIs Publication (New Brunswick Regulation 91-191)

Components	Type	Value
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m ³

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents), as amended

Components	Type	Value
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m ³

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

Components	Type	Value	Form
LIMESTONE (CALCIUM CARBONATE) (CAS 1317-65-3)	TWA	10 mg/m ³	Total dust.
Titanium dioxide (CAS 13463-67-7)	TWA	10 mg/m ³	Total dust.

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

Components	Type	Value
LIMESTONE (CALCIUM CARBONATE) (CAS 1317-65-3)	15 minute	20 mg/m ³
	8 hour	10 mg/m ³
	15 minute	20 mg/m ³
Titanium dioxide (CAS 13463-67-7)	8 hour	10 mg/m ³

Biological limit values	No biological exposure limits noted for the ingredient(s).
Exposure guidelines	Occupational Exposure Limits are not relevant to the current physical form of the product.
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.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Wear safety glasses with side shields (or goggles). Face shield is recommended.
Skin protection	
Hand protection	Wear appropriate chemical resistant gloves.
Other	Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.
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. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Physical state Liquid.

Form Liquid.

Colour Not available.

Odour Not available.

Melting point/freezing point Not available.

Boiling point or initial boiling point and boiling range Not available.

Flammability Not applicable.

Upper/lower flammability or explosive limits

Explosive limit - lower (%) Not available.

Explosive limit – upper (%) Not available.

Flash point >100.0 °C (>212.0 °F) Open cup

Auto-ignition temperature Not available.

Decomposition temperature Not available.

pH Not available.

Kinematic viscosity Not available.

Solubility

Solubility (water) Not available.

Partition coefficient (n-octanol/water) (log value) Not available.

Vapour pressure Not available.

Density and/or relative density

Relative density 1.31

Vapour density Not available.

Particle characteristics Not available.

Other information

Explosive properties Not explosive.

Flammability class Combustible IIIB estimated

Oxidising properties Not oxidising.

VOC 0.004 % estimated

10. Stability and reactivity

Reactivity The 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.

Incompatible materials Strong oxidising agents. Acids.

Hazardous decomposition products No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation Prolonged inhalation may be harmful.

Skin contact May cause an allergic skin reaction.

Eye contact Direct contact with eyes may cause temporary irritation.

Ingestion Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics Coughing. May cause an allergic skin reaction. Dermatitis. Rash.

Information on toxicological effects

Acute toxicity Not known.

Components	Species	Test Results
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LIMESTONE (CALCIUM CARBONATE) (CAS 1317-65-3)

Acute

Oral

LD50	Rat	6450 mg/kg
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N-[3-(TRIMETHOXYSYLYL)PROPYL]-1,2-ETHANEDIAMINE (CAS 1760-24-3)

Acute

Dermal

LD50	Rabbit	> 2000 mg/kg
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Inhalation

Dust and mist.

LC50	Rat	1.49 - 2.44 mg/l, 4 hr
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Oral

LD50	Rat	2295 mg/kg
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Titanium dioxide (CAS 13463-67-7)

Acute

Dermal

LD50	Hamster	>= 10000 mg/kg
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Inhalation

Dust

LC50	Rat	3.43 - 6.8 mg/l
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Oral

Solid

LD50	Rat	> 5000 mg/kg
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Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye irritation Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitisation

Canada - Alberta OELs: Irritant

LIMESTONE (CALCIUM CARBONATE) (CAS 1317-65-3) Irritant

Titanium dioxide (CAS 13463-67-7) Irritant

Respiratory sensitisation Not a respiratory sensitiser.

Skin sensitisation 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.

Carcinogenicity 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.

ACGIH Carcinogens

Titanium dioxide (CAS 13463-67-7)	A3 Confirmed animal carcinogen with unknown relevance to humans.
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Canada - Manitoba OELs: carcinogenicity

Titanium dioxide (CAS 13463-67-7)

Confirmed animal carcinogen with unknown relevance to humans.

IARC Monographs. Overall Evaluation of Carcinogenicity

Titanium dioxide (CAS 13463-67-7)

2B Possibly carcinogenic to humans.

Reproductive toxicity	May damage fertility or the unborn child.
Specific target organ toxicity - single exposure	Not classified.
Specific target organ toxicity - repeated exposure	May cause damage to organs (Respiratory tract) through prolonged or repeated exposure.
Aspiration hazard	Not an aspiration hazard.
Chronic effects	Prolonged inhalation may be harmful. May cause damage to organs through prolonged or repeated exposure. Prolonged exposure may cause chronic effects.

12. Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects.

Product		Species	Test Results
DensDefy® Liquid Barrier			
Aquatic			
<i>Acute</i>			
Crustacea	EC50	Daphnia	68957.375 mg/l, 48 hours estimated
Fish	LC50	Fish	68954 mg/l, 96 hours estimated
Components		Species	Test Results
N-[3-(TRIMETHOXY-SILYL)PROPYL]-1,2-ETHANEDIAMINE (CAS 1760-24-3)			
Aquatic			
<i>Acute</i>			
Fish	EC50	Fish	1 - 10 mg/l
Titanium dioxide (CAS 13463-67-7)			
Aquatic			
<i>Acute</i>			
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

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 Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.

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. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.

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

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.

Canada Controlled Drugs and Substances Act, Schedule I

Not regulated.

Canada Controlled Drugs and Substances Act, Schedule II

Not regulated.

Canada Controlled Drugs and Substances Act, Schedule III

Not regulated.

Canada Controlled Drugs and Substances Act, Schedule IV

Not regulated.

Canada Controlled Drugs and Substances Act, Schedule V

Not regulated.

Canada Controlled Drugs and Substances Act, Schedule VI

Not regulated.

Canada Controlled Drugs and Substances Act, Schedule VII

Not regulated.

Canada Controlled Drugs and Substances Act, Schedule VIII

Not regulated.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

International regulations

Stockholm Convention

Not listed.

Rotterdam Convention

Not listed.

Kyoto Protocol

Not listed.

Montreal Protocol

Not applicable.

Basel Convention

Not applicable.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
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 12-12-2025

Version No. 01

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.