

GREENGRIP(TM)
Revision Number 3

Revision Date 15-Feb-2019 Supersedes Date: 14-Dec-2018

1. Identification

1.1. Product Identifier

Product Name GREENGRIP(TM)

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended useUses advised against
Adhesives and/or sealants.
No information available

1.3. Details of the supplier of the safety data sheet

Responsible Party

Bostik Inc.

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E-mail msds@bostik.com

1.4. Emergency telephone number

Telephone: 1-800-227-0332 (Outside U.S.) 1-703-527-3887

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Skin sensitization	Category 1
Reproductive toxicity	Category 1B

2.2. Label Elements

EMERGENCY OVERVIEW

DANGER

Hazard statements

May cause an allergic skin reaction May damage fertility or the unborn child



Appearance Paste Physical State Liquid

Odor Fruity

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Precautionary Statements - Prevention

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Use personal protective equipment as required

Avoid breathing dust/fume/gas/mist/vapors/spray

Contaminated work clothing should not be allowed out of the workplace

Wear protective gloves

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards Not Otherwise Classified (HNOC)

Not applicable

Unknown acute toxicity

5 % of the mixture consists of ingredient(s) of unknown toxicity

2.3. Other Information

Small amounts of methanol (CAS 67-56-1) are formed by hydrolysis and released upon curing.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Mixture

3.2 Mixtures

Chemical Name	CAS No.	Weight-%
Limestone	1317-65-3	40 - 70
Carbonic acid, calcium salt (1:1)	471-34-1	3 - 7
Silane, ethenyltrimethoxy-	2768-02-7	1 - 5
N-[3-(Trimethyoxysilyl)propyl]-1,2-ethanediamine	1760-24-3	0.1 - 1
Quartz	14808-60-7	0.1 - 1
Tin, dibutylbis(2,4-pentanedionato-O,O')-, (OC-6-11)-	22673-19-4	0.1 - 1

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

General advice Remove contaminated clothing and shoes. If medical advice is needed, have product

container or label at hand.

Eye contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and

continue flushing for at least 15 minutes. Hold eyelids apart and consult an physician.

Skin contactWash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Wash contaminated clothing before reuse. May cause sensitization by

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skin contact. In the case of skin irritation or allergic reactions see a physician.

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get

medical attention if symptoms occur.

Ingestion If swallowed, do not induce vomiting: seek medical advice immediately and show this

container or label. If swallowed, rinse mouth with water (only if the person is conscious).

Self-protection of the first aider First aider: Pay attention to self-protection!.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms None known.

4.3. Indication of any immediate medical attention and special treatment needed

Note to physicians Small amounts of methanol (CAS 67-56-1) are formed by hydrolysis and released upon

curing. May cause sensitization of susceptible persons. May cause sensitization by skin

contact. Treat symptomatically.

4.4. Reference to Other Sections

Reference to other sections Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Section 11: TOXICOLOGY INFORMATION

Section 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO2). Extinguishing powder. Water spray or fog. Alcohol resistant foam.

Unsuitable extinguishing media

Strong water jet.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical

Thermal decomposition can lead to release of toxic/corrosive gases and vapors. Carbon monoxide. Carbon dioxide (CO2). Halogenated hydrocarbons. Nitrogen oxides (NOx). Product is or contains a sensitizer. May cause sensitization by skin contact.

Hazardous Combustion Carbon monoxide. Carbon dioxide (CO2).

Products

Explosion Data

Sensitivity to mechanical impact None.
Sensitivity to static discharge None.

5.3. Advice for firefighters

Protective equipment and precautions for firefighters

Do not allow run-off from fire-fighting to enter drains or water courses. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protection equipment. Do not touch or walk through spilled material. Ensure

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adequate ventilation, especially in confined areas. Avoid contact with skin, eyes or clothing.

6.2. Environmental precautions

Environmental precautions Prevent entry into waterways, sewers, basements or confined areas. Do not allow to enter

into soil/subsoil. See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for containmentContain and collect spillage with non-combustible absorbent material, (e.g. sand, earth,

diatomaceous earth, vermiculite) and place in container for disposal according to local /

national regulations (see Section 13). Protect from moisture.

Methods for cleaning upUse personal protective equipment as required. Dam up. Soak up with inert absorbent

material. Pick up and transfer to properly labeled containers. Clean contaminated surface

thoroughly.

6.4. Reference to other sections

Reference to other sections Section 7: HANDLING AND STORAGE

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Section 13: DISPOSAL CONSIDERATIONS

Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling Use personal protective equipment as required. Handle in accordance with good industrial

hygiene and safety practice. Do not eat, drink or smoke when using this product. Ensure adequate ventilation, especially in confined areas. Avoid contact with skin, eyes or clothing.

After contact with skin, wash immediately with plenty of water and soap. Wash

contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep/store only in original container. Keep away from food, drink and animal feeding stuffs.

Protect from sunlight. Store in a well-ventilated place. Keep at temperatures between 41

and 95 °F. Protect from direct contact with water or excessive moisture.

Incompatible materials Water.

7.3. Specific end use(s)

Specific Use(s)

Adhesives and/or sealants.

Other information No information available.

7.4. References to Other Sections

Reference to other sections Section 13: DISPOSAL CONSIDERATIONS

Section 10: STABILITY AND REACTIVITY

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure Guidelines Small amounts of methanol (CAS 67-56-1) are formed by hydrolysis and released upon

curing. This product contains substances which in their raw state are powder form, however

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in this product they are in a non-respirable form. Inhalation of powder/dust particles is

in this product they are in a non-respirable form. Inhalation of powder/dust particles is unlikely to occur from exposure to this product.

Chemical Name	ACGIH TLV	NIOSH IDLH	OSHA PEL	Mexico
Limestone 1317-65-3	-	TWA: 10 mg/m³ total dust TWA: 5 mg/m³ respirable dust	TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable fraction	TWA: 10 mg/m³ STEL: 20 mg/m³
Carbonic acid, calcium salt (1:1) 471-34-1	-	TWA: 10 mg/m³ total dust TWA: 5 mg/m³ respirable dust	-	-
Quartz 14808-60-7	TWA: 0.025 mg/m³ respirable particulate matter	IDLH: 50 mg/m³ respirable dust TWA: 0.05 mg/m³ respirable dust	TWA: 50 μg/m³ TWA: 50 μg/m³ excludes construction work, agricultural operations, and exposures that result from the processing of sorptive clays : (250)/(%SiO2 + 5) mppcf TWA respirable fraction : (10)/(%SiO2 + 2) mg/m³ TWA respirable fraction	TWA: 0.1 mg/m³
Tin, dibutylbis(2,4-pentanedionat o-O,O')-, (OC-6-11)- 22673-19-4	STEL: 0.2 mg/m³ Sn TWA: 0.1 mg/m³ Sn S*	IDLH: 25 mg/m³ Sn TWA: 0.1 mg/m³ except Cyhexatin Sn	TWA: 0.1 mg/m³ Sn	TWA: 0.1 mg/m³ STEL: 0.2 mg/m³

Chemical Name	Argentina	Brazil	Chile	Venezuela
Limestone	TWA: 10 mg/m ³	-	TWA: 7 mg/m ³	-
1317-65-3				
Carbonic acid, calcium salt	-	-	-	TWA: 10 mg/m ³
(1:1)				
471-34-1				
Quartz	TWA: 0.05 mg/m ³	-	TWA: 0.08 mg/m ³	TWA: 0.025 mg/m ³
14808-60-7				
Tin,	TWA: 0.1 mg/m ³	-	TWA: 0.09 mg/m ³	Skin
dibutylbis(2,4-pentanedionat	Skin		Skin	STEL: 0.2 mg/m ³
o-O,O')-, (OC-6-11)-	STEL: 0.2 mg/m ³			TWA: 0.1 mg/m ³
22673-19-4				

Chemical Name	ACGIH TLV	NIOSH IDLH	OSHA PEL	Mexico
Methyl alcohol	STEL: 250 ppm	IDLH: 6000 ppm	TWA: 200 ppm	TWA: 200 ppm
67-56-1	TWA: 200 ppm	TWA: 200 ppm	TWA: 260 mg/m ³	TWA: 260 mg/m ³
	S* · ·	TWA: 260 mg/m ³		STEL: 250 ppm
		STEL: 250 ppm		STEL: 310 mg/m ³
		STEL: 325 mg/m ³		Š .

Chemical Name	Argentina	Brazil	Chile	Venezuela
Methyl alcohol	TWA: 200 ppm	TWA: 156 ppm	TWA: 175 ppm	Skin
67-56-1	Skin	TWA: 200 mg/m ³	TWA: 229 mg/m ³	STEL: 250 ppm
	STEL: 250 ppm	Skin	Skin	TWA: 200 ppm

8.2. Exposure controls

OTHER INFORMATION Small amounts of methanol (CAS 67-56-1) are formed by hydrolysis and released upon

curing.

Engineering controls Showers

Eyewash stations Ventilation systems.

Personal protective equipment [PPE]

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin and body protectionWear suitable chemical resistant gloves. The selection of suitable gloves does not only

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depend on the material, but also on further marks of quality and various manufacturers.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved

respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

provided in accordance with current local regulations.

General hygiene considerations Use personal protective equipment as required. Handle in accordance with good industrial

hygiene and safety practice. Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes or clothing. Wash hands thoroughly after handling. Take off contaminated clothing and wash before reuse. Regular cleaning of equipment, work area

ASTM D3278

and clothing is recommended.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical StateLiquidAppearancePasteColorCreamOdorFruity

Odor Threshold No information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH No information available

Melting point / freezing point No data available
Boiling point / boiling range No data available

Flash Point > 110 °C / > 230 °F

Evaporation RateFlammability (solid, gas)
No information available
No information available

Flammability Limit in Air

Upper flammability or explosive No information available

limits

Lower flammability or explosive No information available

limits

Vapor PressureNo information availableVapor DensityNo information availableRelative DensityNo information availableWater SolubilityNo information available

Solubility in Other Solvents

Partition coefficient
Autoignition Temperature
Decomposition Temperature
Kinematic Viscosity

No information available
No information available
No information available

Dynamic Viscosity No information available

Explosive propertiesNo information available
No information available

9.2. Other information

Softening PointNo information availableMolecular WeightNo information availableSolvent content (%)No information available

Solid content (%) 96.8

Density 1.710 g/cm³

VOC (volatile organic compound) 0 g/L /

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

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Product cures with moisture.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Extremes of temperature and direct sunlight. Keep from freezing. Protect from moisture. Product cures with moisture.

10.5. Incompatible materials

Water.

10.6. Hazardous decomposition products

Carbon oxides.

Section 11: TOXICOLOGY INFORMATION

11.1. Information on toxicological effects

Product informationNo data availableInhalationNo data availableEye contactNo data available

Skin contact May cause sensitization by skin contact.

Ingestion No data available.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Limestone 1317-65-3	>5000 mg/kg (rat)	-	-
Carbonic acid, calcium salt (1:1) 471-34-1	LD50 > 2000 mg/kg (Rat) OECD 420	LD50 >2000 mg/kg (Rat) OECD 402	LC50 (4h) >3mg/ml (Rat)
Silane, ethenyltrimethoxy- 2768-02-7	LD 50 = 7120 -7236 mg/kg (Rat) OECD 401	= 3360 μL/kg (Rabbit)	LC50 (4hr) 16.8 mg/l (rat) OECD TG 403
N-[3-(Trimethyoxysilyl)propyl]-1,2-et hanediamine 1760-24-3	= 2295 mg/kg (Rat)	>2000 mg/Kg (Rat)	LC50 4H (Aerosol)1.5 - 2.44 mg/L air
Quartz 14808-60-7	>20000 mg/kg	-	-
Tin, dibutylbis(2,4-pentanedionato-O,O') -, (OC-6-11)- 22673-19-4	LD50 = 1864 mg/kg (Rat) OECD 401	LD50 > 2000 mg/kg (Rat) OECD 402	-

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Symptoms
Skin corrosion/irritation
Serious eye damage/eye irritation
Irritation
Corrosivity
Sensitization
Germ Cell Mutagenicity
No information available.

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Reproductive ToxicityProduct is or contains a chemical which is a known or suspected reproductive hazard. **Developmental Toxicity**No information available.

Teratogenicity
STOT - single exposure
STOT - repeated exposure
Chronic Toxicity
Target Organ Effects
No information available.
No information available.
No information available.
Eyes, Respiratory system, Skin.

Aspiration hazard Not applicable.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

As Quartz (14808-60-7) is inextricably bound in the polymer matrix, it is not expected to be available as an airborne hazard (dust, mist, or spray) under normal condition of uses.

Chemical Name	ACGIH	IARC	NTP	OSHA
Quartz	A2	Group 1	Known	X
14808-60-7		•		

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans NTP (National Toxicology Program) Known - Known Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Chemical Name	Algae/aquatic plants	Fish	Toxicity to Microorganisms	Crustacea
Limestone 1317-65-3	CE50 (72h) >200mg/L Algae (Desmondesmus subspicatus)	CL50 (96h)>10000mg/L Fish (Oncorhynchus mykiss)		CE50 (48h) >1000 mg/L Daphnia Magna
Carbonic acid, calcium salt (1:1) 471-34-1	IC50 72H Algae >1000 mg/l	CL50 96H Fish >1000 mg/l		EC50 48H Daphnia >1000 mg/l
Silane, ethenyltrimethoxy- 2768-02-7	EC 50 (72h) > 957 mg/l (Desmodesmus subspicatus) EU Method C.3	LC50 (96h) = 191 mg/l (Oncorhynchus mykiss)		EC50(48hr) 168.7mg/l (Daphnia magna)
N-[3-(Trimethyoxysilyl)propyl]-1,2-ethanediamine 1760-24-3		LC50 (96H) =597 mg/L Fish (Danio rerio)Semi-static		EC50 (48h) =81mg/L Daphnia magna Static
Tin, dibutylbis(2,4-pentanedionat o-O,O')-, (OC-6-11)- 22673-19-4	>2.0 mg/l	>2.0 mg/l		EC50 0.0036 mg/l 48Hr (Daphnia magna)

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

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No information available.

Other adverse effects

No information available

Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Disposal of WastesIt is the responsibility of the waste generator to determine the toxicity and physical

properties of the material generated to determine the proper waste identification and

disposal methods in compliance with applicable regulations

Contaminated packaging Dispose of in accordance with federal, state and local regulations

Section 14: TRANSPORT INFORMATION

DOT Not regulated

<u>IATA</u> Not regulated

IMDG Not regulated

Section 15: REGULATORY INFORMATION

Global Inventories

TSCA	Listed
DSL	Listed

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL - Canadian Domestic Substances List

Listed - The components of this product are either listed or exempt from listing on inventory.

Not Listed - One or more components of this product are not listed on inventory.

United States of America

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute Health Hazard Yes
Chronic Health Hazard Yes
Fire hazard No
Sudden release of pressure hazard No
Reactive Hazard No

Europe

Restrictions of Use of Hazardous Substances (RoHS) Directive 2011/65/EU

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This product does not contain Lead (7439-92-1), Cadmium (7440-43-9), Mercury (7439-97-6), Hexavalent chromium (7440-47-3), Polybrominated biphenyls (PBB), and Polybrominated diphenyl ethers (PBDE) above the regulated limit mentioned in this regulation

EU-REACH (1907/2006) - Candidate List of Substances of Very High Concern (SVHC) for Authorization in accordance with Article 59

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

Section 16: OTHER INFORMATION

Key or legend to abbreviations and acronyms used in the safety data sheet

No information available

Key Literature References and Sources for Data

No information available

Prepared By Product Safety & Regulatory Affairs

Revision Date 15-Feb-2019

Revision note SDS sections updated, 2, 7, 8, 11.

Training Advice When working with hazardous materials, regular training of operators is required by law

Further information No information available

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet