1. Identification

1.1. Product Identifier

Product Name: GREENFORCE(TM)

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

Recommended use: Adhesives and/or sealants.
Uses advised against: No information available

1.3. Details of the supplier of the safety data sheet

Responsible Party:
Bostik Inc.
11320 W. Watertown Plank Road
Wauwatosa, Wisconsin 53226 USA
Phone: +1 (800) 843-0844 (Domestic Toll Free)
Phone: +1 (414) 774-2250 (International)
Fax: +1 (414) 774-8075
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

<table>
<thead>
<tr>
<th>Substance</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin sensitization</td>
<td>Category 1</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>Category 1B</td>
</tr>
</tbody>
</table>

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
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

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

*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 contact
Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. May cause sensitization by
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 Products
Carbon monoxide. Carbon dioxide (CO2).

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
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 containment: Contain 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 up: Use 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
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 protection
Wear suitable chemical resistant gloves. The selection of suitable gloves does not only
Respiratory protection depend on the material, but also on further marks of quality and various manufacturers. 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 and clothing is recommended.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Paste</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Cream</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Fruity</td>
<td></td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Melting point / freezing point</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>&gt; 110 °C / &gt; 230 °F</td>
<td>ASTM D3278</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper flammability or explosive limits</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Lower flammability or explosive limits</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor Density</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Relative Density</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Water Solubility</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Solubility in Other Solvents</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Kinematic Viscosity</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Dynamic Viscosity</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No information available</td>
<td></td>
</tr>
</tbody>
</table>

### 9.2. Other information

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Softening Point</td>
<td>No information available</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>No information available</td>
</tr>
<tr>
<td>Solvent content (%)</td>
<td>No information available</td>
</tr>
<tr>
<td>Solid content (%)</td>
<td>96.8</td>
</tr>
<tr>
<td>Density</td>
<td>1.710 g/cm³</td>
</tr>
<tr>
<td>VOC (volatile organic compound)</td>
<td>0 g/L /</td>
</tr>
</tbody>
</table>

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity
10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid


10.5. Incompatible materials

Water.

10.6. Hazardous decomposition products

Carbon oxides.

Section 11: TOXICOLOGY INFORMATION

11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Component Information</th>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Limestone</td>
<td>&gt;5000 mg/kg (rat)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>1317-65-3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Carbonic acid, calcium salt (1:1)</td>
<td>LD50 &gt; 2000 mg/kg (Rat) OECD 420</td>
<td>LD50 &gt;2000 mg/kg (Rat) OECD 402</td>
<td>LC50 (4h) &gt;3mg/ml (Rat)</td>
</tr>
<tr>
<td></td>
<td>471-34-1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Silane, ethenyltrimethoxy-2768-02-7</td>
<td>LD 50 = 7120 -7236 mg/kg ( Rat ) OECD 401</td>
<td>= 3360 µL/Kg ( Rabbit )</td>
<td>LC50 (4hr) 16.8 mg/l (rat) OECD TG403</td>
</tr>
<tr>
<td></td>
<td>N-[3-(Trimethoxyxyl)propyl]-1,2-ethanediamine 1760-24-3</td>
<td>= 2295 mg/kg ( Rat )</td>
<td>&gt;2000 mg/Kg (Rat)</td>
<td>LC50 4H (Aerosol)1.5 - 2.44 mg/L air</td>
</tr>
<tr>
<td></td>
<td>Quartz 14808-60-7</td>
<td>&gt;20000 mg/kg</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Tin, dibutylbis(2,4-pentanedionato-O,O')- - (OC-6-11)-22673-19-4</td>
<td>LD50 = 1864 mg/kg (Rat) OECD 401</td>
<td>LD50 &gt; 2000 mg/kg (Rat) OECD 402</td>
<td>-</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>No information available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin corrosion/irritation</td>
<td>No information available.</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>No information available.</td>
</tr>
<tr>
<td>Irritation</td>
<td>No information available.</td>
</tr>
<tr>
<td>Corrosivity</td>
<td>No information available.</td>
</tr>
<tr>
<td>Sensitization</td>
<td>No information available.</td>
</tr>
<tr>
<td>Germ Cell Mutagenicity</td>
<td>No information available.</td>
</tr>
</tbody>
</table>
Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Toxicity to Microorganisms</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limestone</td>
<td>CE50 (72h) &gt;200mg/L Algae (Desmodesmus subspicatus)</td>
<td>CL50 (96h)&gt;1000mg/L Fish (Oncorhyncus mykiss)</td>
<td>CE50 (48h) &gt;1000 mg/L Daphnia Magna</td>
<td></td>
</tr>
<tr>
<td>Carbonic acid, calcium salt (1:1)</td>
<td>IC50 72H Algae &gt;1000 mg/l</td>
<td>CL50 96H Fish &gt;1000 mg/l</td>
<td>EC50 48H Daphnia &gt;1000 mg/l</td>
<td></td>
</tr>
<tr>
<td>Silane, ethenyltrimethoxy-2768-02-7</td>
<td>EC 50 (72h) &gt; 957 mg/l (Desmodesmus subspicatus) EU Method C.3</td>
<td>LC50 (96h) = 191 mg/l (Oncorhycnus mykiss)</td>
<td>EC50(48hr)=168.7mg/l (Daphnia magna)</td>
<td></td>
</tr>
<tr>
<td>N-[3-(Trimethoxyxysilyl)propyl]-1,2-ethanediameine 1760-24-3</td>
<td>&gt;2.0 mg/l</td>
<td>&gt;2.0 mg/l</td>
<td>EC50 (48h) =81mg/L Daphnia magna Static</td>
<td></td>
</tr>
<tr>
<td>Tin, dibutylbis(2,4-pentanedionat b-O,O')- (OC-6-11)- 22672-19-4</td>
<td>LC50 (96H) =597 mg/L Fish (Danio rerio)Semi-static</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

No information available.
No information available.

**Other adverse effects**

No information available

### Section 13: DISPOSAL CONSIDERATIONS

#### 13.1. Waste treatment methods

**Disposal of Wastes**

It 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
- **IATA**: Not regulated
- **IMDG**: Not regulated

### Section 15: REGULATORY INFORMATION

#### Global Inventories

<table>
<thead>
<tr>
<th>TSCA</th>
<th>Listed</th>
</tr>
</thead>
<tbody>
<tr>
<td>DSL</td>
<td>Listed</td>
</tr>
</tbody>
</table>

**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**

<table>
<thead>
<tr>
<th>Hazard Category</th>
<th>Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Health Hazard</td>
<td>Yes</td>
</tr>
<tr>
<td>Chronic Health Hazard</td>
<td>Yes</td>
</tr>
<tr>
<td>Fire hazard</td>
<td>No</td>
</tr>
<tr>
<td>Sudden release of pressure hazard</td>
<td>No</td>
</tr>
<tr>
<td>Reactive Hazard</td>
<td>No</td>
</tr>
</tbody>
</table>

**Europe**

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