Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product Identifier

Product Name: BOSTIK SAFE FIX
Pure substance/mixture: Mixture

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

Recommended use: Adhesives.
Uses advised against: No information available.

1.3. Details of the supplier of the safety data sheet

Company Name: Bostik New Zealand Limited
19 Eastern Hutt Road Wingate,
Lower Hutt, New Zealand
Tel: 04-567 5119
Fax: 04-567 5412

Manufacturer: Bostik GmbH
An der Bundesstrasse 16
33829 Borgholzhausen, Germany
Tel: +49 (0) 5425 / 801 0
Fax: +49 (0) 5425 / 801 140

1.4. Emergency telephone number

Emergency Telephone:
24 Hr: 0800 243 622
+64 4 917 9888
Poison Centre: 0800 764 766

E-mail address: SDS.AP@Bostik.com

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

<table>
<thead>
<tr>
<th>Class</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin sensitization</td>
<td>Category 1 (6.5B)</td>
</tr>
<tr>
<td>Flammable liquids</td>
<td>Category 4 (3.1D)</td>
</tr>
</tbody>
</table>

2.2. Label Elements

Signal word: Warning

Hazard statements:
H317 - May cause an allergic skin reaction
H227 - Combustible liquid

Prevention:
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
P272 - Contaminated work clothing should not be allowed out of the workplace
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P280 - Wear protective gloves/protective clothing/eye protection/face protection

Skin:
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
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P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention
P363 - Wash contaminated clothing before reuse

Fire
P370 + P378 - In case of fire: Use dry chemical, CO2, water spray or alcohol-resistant foam to extinguish

Storage
P403 + P235 - Store in a well-ventilated place. Keep cool

Disposal
P501 - Dispose of contents/container to an approved waste disposal plant

2.3. Other Hazards
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
Not applicable

3.2 Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS No.</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Octadecanoic acid, 12-hydroxy-, reaction products</td>
<td>100545-48-0</td>
<td>1 - &lt;3</td>
</tr>
<tr>
<td>with ethylenediamine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Silane, ethenyltrimethoxy-</td>
<td>2768-02-7</td>
<td>1 - &lt;3</td>
</tr>
<tr>
<td>N-(3-(trimethoxysilyl)propyl)ethylenediamine</td>
<td>1760-24-3</td>
<td>0.1 - &lt;1</td>
</tr>
<tr>
<td>Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate</td>
<td>52829-07-9</td>
<td>0.1 - &lt;1</td>
</tr>
</tbody>
</table>

*** Any remaining ingredients are not hazardous

**Section 4: FIRST AID MEASURES**

4.1. Description of first aid measures

General advice
If medical advice is needed, have product container or label at hand. Remove contaminated clothing and shoes.

Inhalation
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Skin contact
Wash off immediately with soap and plenty of water. In the case of skin irritation or allergic reactions see a physician.

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 a physician.

Ingestion
If swallowed, rinse mouth with water (only if the person is conscious). If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

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. Treat symptomatically.

4.4. Reference to Other Sections
Section 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media
- Carbon dioxide (CO2). Extinguishing powder. Water spray or fog. Alcohol resistant foam.

Large fire
- When a large quantity of this material is involved in a major fire, consider an initial evacuation distance of 300 meters (1000 feet) in all directions.

Unsuitable extinguishing media
- No information available.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical

Hazardous combustion products
- Carbon monoxide. Carbon dioxide (CO2).

5.3. Advice for firefighters

Special protective equipment for fire-fighters
- In the event of fire, wear self-contained breathing apparatus. Do not allow run-off from fire-fighting to enter drains or water courses. Wear self contained breathing apparatus for fire fighting if necessary.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions
- Use personal protection equipment. Avoid contact with skin, eyes or clothing. Do not touch or walk through spilled material.

6.2. Environmental precautions

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

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).

Methods for cleaning up
- Take up mechanically, placing in appropriate containers for disposal. Soak up with inert absorbent material. Dam up. Pick up and transfer to properly labeled containers. Take precautionary measures against static discharges.

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. Avoid contact with skin, eyes or clothing. Fire prevention measures. No special measures are necessary.
7.2. Conditions for safe storage, including any incompatibilities

**General hygiene considerations**  Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Take off contaminated clothing and wash before reuse. Avoid contact with skin, eyes or clothing.

**Storage Conditions**  Keep container tightly closed and dry. Product cures with moisture.

**Incompatible materials**  Water

7.3. Specific end use(s)

**Specific Use(s)**  Sealant.

**Other information**  No information available.

7.4. References to Other Sections

**Reference to other sections**  Section 13: DISPOSAL CONSIDERATIONS. Section 10: STABILITY AND REACTIVITY.

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**Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

8.1. Control parameters

**Exposure Limits**
This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

**Derived No Effect Level (DNEL)**  No information available

**Predicted No Effect Concentration (PNEC)**  No information available

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

8.2. Exposure controls

**Engineering controls**  Ensure adequate ventilation, especially in confined areas.

**PPE - Personal Protection Equipment**

| Eye/face protection | Wear safety glasses with side shields (or goggles). |
| Skin and body protection | Wear suitable protective clothing. No special technical protective measures are necessary under normal conditions. |
| Hand protection | Wear suitable chemical resistant gloves. The selection of suitable gloves does not only depend on the material, but also on further marks of quality and various manufacturers. |
| Respiratory protection | No protective equipment is needed under normal use conditions. Respiratory protection required in insufficiently ventilated working areas and during spraying. An air-fed mask, or for short periods of work, a combination of professional filter is recommended. |
| General hygiene considerations | Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Avoid contact with skin, eyes or clothing. Take off contaminated clothing and wash before reuse. |

**Environmental exposure controls**  Do not allow uncontrolled discharge of product into the environment.

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**Section 9: PHYSICAL AND CHEMICAL PROPERTIES**

9.1. Information on basic physical and chemical properties

**Appearance**  Fibers Paste
Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

Reactivity  Product cures with moisture.

10.2. Chemical stability

Stability  Stable under normal conditions

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions  None known.

Hazardous polymerization  None under normal processing.

10.4. Conditions to avoid

Conditions to avoid  Protect from moisture. Product cures with moisture.

10.5. Incompatible materials

Incompatible materials  Water.

10.6. Hazardous decomposition products
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Supersedes Date: 26-Mar-2018

Hazardous decomposition products
None under normal use conditions.

Section 11: TOXICOLOGY INFORMATION

11.1. Information on toxicological effects

Acute Toxicity

Product Information

<table>
<thead>
<tr>
<th>Inhalation</th>
<th>Based on available data, the classification criteria are not met.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye contact</td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td>Skin contact</td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
</tbody>
</table>

Component Information

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine 100545-48-0</td>
<td>LD50 &gt;2000 mg/kg (Rat)</td>
<td>-</td>
<td>LC50 =5.05 mg/kg (Rat)</td>
</tr>
<tr>
<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 TG 403</td>
</tr>
<tr>
<td>N-(3-(trimethoxysilyl)propyl)ethylenediamine 1760-24-3</td>
<td>LD50 = 2295 mg/kg (rat) EPA OPPTS 870.1100</td>
<td>LD50 &gt; 2000 mg/kg (rabbit) EPA OPPTS 870.1200</td>
<td></td>
</tr>
<tr>
<td>Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate 52829-07-9</td>
<td>LD50 (rat)&gt; 2000 mg/kg OECD 423</td>
<td>LD50 (rat) &gt; 3 170 mg/kg OECD 402</td>
<td>= 500 mg/m^3 ( Rat ) 4 h</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Skin corrosion/irritation</th>
<th>Based on available data, the classification criteria are not met.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td>Sensitization</td>
<td>May produce an allergic reaction.</td>
</tr>
<tr>
<td>Germ cell mutagenicity</td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td>STOT - single exposure</td>
<td>No information available.</td>
</tr>
<tr>
<td>STOT - repeated exposure</td>
<td>No information available.</td>
</tr>
<tr>
<td>Target organ effects</td>
<td>Eyes, Lungs, retina, Skin.</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>Based on available data, the classification criteria are not met.</td>
</tr>
<tr>
<td>IARC (International Agency for Research on Cancer)</td>
<td>Group 2B - Possibly Carcinogenic to Humans</td>
</tr>
</tbody>
</table>

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity

Product Information
Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Component Information

Data obtained on the component(s) include

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Octadecanoic acid, 12-hydroxy-, reaction products with</td>
<td>EL50 (72h) &gt;100 mg/L Algae (Pseudokirchneriella subcapitata)</td>
<td>LL50 (96h) &gt;10mg/L Fish (Onchorynchus mykiss)</td>
<td>EL50 (48h) &gt;10mg/L Daphnia (Daphnia magna)</td>
</tr>
</tbody>
</table>
12.2. Persistence and degradability

No information available.

Component Information

Silane, ethenyltrimethoxy- (2768-02-7)

<table>
<thead>
<tr>
<th>Method</th>
<th>Exposure time</th>
<th>Value</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>OECD Test No. 301F: Ready Biodegradability: Manometric Respirometry Test (TG 301 F)</td>
<td>28 days</td>
<td>BOD</td>
<td>51 % Not readily biodegradable</td>
</tr>
</tbody>
</table>

Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate (52829-07-9)

<table>
<thead>
<tr>
<th>Method</th>
<th>Exposure time</th>
<th>Value</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>OECD Test No. 303: Simulation Test - Aerobic Sewage Treatment -- A: Activated Sludge Units; B: Biofilms</td>
<td>28 days</td>
<td>Total organic carbon (TOC)</td>
<td>24 % Moderate</td>
</tr>
</tbody>
</table>

12.3. Bioaccumulative potential

There is no data for this product.

Component Information

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Partition coefficient</th>
<th>Bioconcentration factor (BCF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silane, ethenyltrimethoxy-2768-02-7</td>
<td>1.1</td>
<td>-</td>
</tr>
<tr>
<td>N-(3-(trimethoxysilyl)propyl)ethylenediamine 1760-24-3</td>
<td>-0.3</td>
<td>-</td>
</tr>
<tr>
<td>Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 52829-07-9</td>
<td>0.35</td>
<td>-</td>
</tr>
</tbody>
</table>

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>PBT and vPvB assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine 100545-48-0</td>
<td>The substance is not PBT / vPvB</td>
</tr>
<tr>
<td>Silane, ethenyltrimethoxy-2768-02-7</td>
<td>The substance is not PBT / vPvB</td>
</tr>
<tr>
<td>N-(3-(trimethoxysilyl)propyl)ethylenediamine 1760-24-3</td>
<td>The substance is not PBT / vPvB</td>
</tr>
<tr>
<td>Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate 52829-07-9</td>
<td>The substance is not PBT / vPvB</td>
</tr>
</tbody>
</table>

12.6. Other adverse effects
Section 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from residues/unused products
Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging
Handle contaminated packages in the same way as the product itself.

Section 14: TRANSPORT INFORMATION

IMDG
Not regulated

IATA
Not regulated

ADR
Not regulated

Section 15: REGULATORY INFORMATION

National Regulations
ERMA Group HSR2657

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
01-Aug-2019

Revision note
SDS sections updated, 2, 3, 15.

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

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