SAFETY DATA SHEET

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

1.1. Product Identifier

Product Name: BOSTIK SAFE SEAL Black
Pure substance/mixture: Mixture

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

Recommended use: Sealant.
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>Property</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin corrosion/irritation</td>
<td>Category 3 (6.3B)</td>
</tr>
<tr>
<td>Skin sensitization</td>
<td>Category 1 (6.5B)</td>
</tr>
</tbody>
</table>

Classification in parenthesis is applicable for New Zealand Hazard Classification

2.2. Label Elements

Signal word: Warning

Hazard statements:
H316 - Causes mild skin irritation
H317 - May cause an allergic skin reaction

Precautionary Statements - General
P101 - If medical advice is needed, have product container or label at hand
P102 - Keep out of reach of children
Prevention:
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
P272 - Contaminated work clothing should not be allowed out of the workplace
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 with ethylenediamine</td>
<td>100545-48-0</td>
<td>1 - &lt;3</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>
<tr>
<td>3-(Triethoxysilyl) propylamine</td>
<td>919-30-2</td>
<td>0.1 - &lt;1</td>
</tr>
<tr>
<td>N-(3-(trimethoxysilyl)propyl)ethylenediamine</td>
<td>1760-24-3</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 an physician.

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.

4.4. Reference to Other Sections
Reference to other sections
Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION. Section 11:
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 firefighters  
In the event of fire, wear self-contained breathing apparatus. Do not allow run-off from fire-fighting to enter drains or water courses.

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. 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).

Methods for cleaning up  
Take up mechanically, placing in appropriate containers for disposal. Soak up with inert absorbent material.

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  
Do not eat, drink or smoke when using this product. Wash hands thoroughly after
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Revision date 28-Jul-2019
Supersedes Date: 26-Mar-2018

handling. Take off contaminated clothing and wash before reuse. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing.

Storage Conditions
Keep away from food, drink and animal feeding stuffs. Protect from moisture. Keep/store only in original container. Protect from sunlight. Store in a well-ventilated place. Keep at temperatures between 41 and 95 °F. Keep container tightly closed and dry. Product cures with moisture.

Incompatible materials
Water

7.3. Specific end use(s)
Sealant.

Other information
No information available.

7.4. References to Other Sections
Section 13: DISPOSAL CONSIDERATIONS. Section 10: STABILITY AND REACTIVITY.

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.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties
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Revision date 28-Jul-2019
Supersedes Date: 26-Mar-2018

Appearance: Paste
Color: Black
Odor: Slight Characteristic
Odor threshold: No information available

Property | Values | Remarks • Method
--- | --- | ---
pH | No data available | Not applicable
Melting point / freezing point | No data available | Not applicable
Boiling point / boiling range | No data available | Not applicable
Flash point | | Not applicable
Evaporation rate | No data available | ""
Flammability (solid, gas) | Not applicable for liquids | ""
Flammability Limit in Air
Upper flammability or explosive limits | No data available | ""
Lower flammability or explosive limits | No data available | ""
Vapor pressure | < 1100 hPa @ 50 °C | ""
Vapor density | No data available | ""
Relative density | 1.45 - 1.55 | None known
Water solubility | Slightly soluble | ""
Solubility(ies) | No data available | ""
Partition coefficient | No data available | ""
Autoignition temperature | No data available | ""
Decomposition temperature | No data available | ""
Kinematic viscosity | No data available | ""
Dynamic viscosity | 7000 - 13000 Pa.s | Spindle 4 @ 1 rpm @ 23 °C
Explosive properties | No information available | ""
Oxidizing properties | No information available | ""

9.2. Other information
Softening Point | No information available | ""
Molecular weight | No information available | ""
Solvent content (%) | No information available | ""
Solid content (%) | No information available | ""
Density | ca. 1.5 g/cm³ | @20°C
Bulk density | No information available | ""
VOC Content (%) | No information available | ""

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. Keep away from heat, sparks and flames.

10.5. Incompatible materials
Incompatible materials: Water.
10.6. Hazardous decomposition products

Hazardous decomposition products

None under normal use conditions.

Section 11: TOXICOLOGY INFORMATION

11.1. Information on toxicological effects

Acute Toxicity

Product Information

Inhalation

Based on available data, the classification criteria are not met.

Eye contact

Based on available data, the classification criteria are not met.

Skin contact

Based on available data, the classification criteria are not met.

Ingestion

Based on available data, the classification criteria are not met.

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>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/m³ (Rat ) 4 h</td>
</tr>
<tr>
<td>3-(Triethoxysilyl) propylamine 919-30-2</td>
<td>LD50 = 1490 mg/kg (Rat, female) EPA OTS 798.1175</td>
<td>LD50 = 4075 mg/kg (Rabbit) EPA OTS 798.1100</td>
<td>LC50 &gt;144 mg/L (6h) Rat (Vapour)</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>
</tbody>
</table>

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

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation

Based on available data, the classification criteria are not met.

Sensitization

May produce an allergic reaction.

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Reproductive toxicity

Based on available data, the classification criteria are not met.

STOT - single exposure

No information available.

STOT - repeated exposure

No information available.

Target organ effects

Eyes, Lungs, retina, Skin.

Aspiration hazard

Not applicable.

Carcinogenicity

Based on available data, the classification criteria are not met.

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

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 ethylenediamine 100545-48-0</td>
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<td></td>
</tr>
</tbody>
</table>
Octadecanoic acid, 12-hydroxy-, reaction products with ethylenediamine (100545-48-0)

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Partition coefficient</th>
<th>Bioconcentration factor (BCF)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate (52829-07-9)</td>
<td>0.35</td>
<td>-</td>
</tr>
<tr>
<td>3-(Triethoxysilyl) propylamine 919-30-2</td>
<td>1.7</td>
<td>3.4</td>
</tr>
<tr>
<td>N-(3-(trimethoxysilyl)propyl)ethylenediamine 1760-24-3</td>
<td>-0.3</td>
<td>-</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

There is no data for this product.

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>Bis(2,2,6,6-tetramethyl-4-piperidyl) sebacate (52829-07-9)</td>
<td>The substance is not PBT / vPvB</td>
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<td>The substance is not PBT / vPvB</td>
</tr>
</tbody>
</table>

12.6. Other adverse effects

No information available.

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: HSR002670

Section 16: OTHER INFORMATION

Chronic Hazard Star Legend: * = Chronic Health Hazard

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: 28-Jul-2019
Revision note: SDS sections updated, 3, 8, 11.
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