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

1.1. Product Identifier

Product Name                SEAL N FLEX 1 BLACK
Pure substance/mixture      Mixture

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

Recommended use             Joint sealants.
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 Australia Pty Ltd
                             51-71 High street, Thomastown Victoria Australia
                             Tel: 613 9279-9333
                             Fax: 613 9279-9342

ABN: 79 003 893 838

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: HAZARD IDENTIFICATION

2.1. Classification of the substance or mixture

<table>
<thead>
<tr>
<th>Classification</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity - Inhalation (Vapors)</td>
<td>3 (6.1C)</td>
</tr>
<tr>
<td>Skin Corrosion/Irritation</td>
<td>3 (6.3B)</td>
</tr>
<tr>
<td>Respiratory sensitization</td>
<td>1 (6.5A)</td>
</tr>
<tr>
<td>Skin sensitization</td>
<td>1 (6.5B)</td>
</tr>
<tr>
<td>Acute aquatic toxicity</td>
<td>1 (9.1A)</td>
</tr>
</tbody>
</table>

Classification in parenthesis is applicable for New Zealand Hazard Classification

ERMA Group                  HSR002675

2.2. Label Elements

Signal Word                 DANGER

Hazard statements
H317 - May cause an allergic skin reaction
H316 - Causes mild skin irritation
H331 - Toxic if inhaled
Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Mixtures

3.2 Mixtures

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xylenes (o-, m-, p- isomers)</td>
<td>1330-20-7</td>
<td>5 - &lt;10</td>
</tr>
<tr>
<td>Urea,</td>
<td>77703-56-1</td>
<td>1 - &lt;5</td>
</tr>
<tr>
<td>N,N''-(methylenedi-4,1-phenylene)bis[N'-butyl]-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benzenesulfonyl isocyanate, 4-methyl-</td>
<td>4083-64-1</td>
<td>0.1 - &lt;1</td>
</tr>
<tr>
<td>Benzene, 1,3-disocyanatomethyl-</td>
<td>26471-62-5</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 symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing.

Inhalation
Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Call a physician. Artificial respiration and/or oxygen may be necessary. Oxygen or artificial respiration if needed. Immediate medical attention is not required. Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician.

Skin Contact
Consult a physician if necessary. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. Wash off immediately with plenty of water. If skin irritation persists, call a
physician. Wash off immediately with soap and plenty of water. Immediate medical attention is not required.

**Eye contact**
Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.

**Ingestion**
Do NOT induce vomiting. Drink plenty of water. If symptoms persist, call a physician. Rinse mouth. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician.

**Self-Protection of the First Aider**
Use personal protective equipment as required.

**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**
None. May cause sensitization of susceptible persons. May cause sensitization by inhalation and skin contact. Treat symptomatically. 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: 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**
No information available.

**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). Nitrogen oxides (NOx). In the event of fire and/or explosion do not breathe fumes. May cause sensitization by inhalation and skin contact. Thermal decomposition can lead to release of irritating and toxic gases and vapors. Thermal decomposition can lead to release of irritating and toxic gases and vapors.

**5.3. Advice for firefighters**

**Special Protective Equipment for Fire-fighters**
In case 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**
Avoid contact with skin, eyes or clothing. Use personal protection equipment. Avoid breathing vapors or mists. Remove all sources of ignition. Use personal protective equipment as required. Evacuate personnel to safe areas. Do not touch or walk through spilled material. Keep people away from and upwind of spill/leak.

**6.2. Environmental precautions**

**Environmental Precautions**
Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. 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). If possible, turn leaking containers so that gas escapes rather than liquid. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Transport to well ventilated area and treat with neutralizing solution: mixture of 80% water and 20% non-ionic surfactant Tergitol TMN-10; or 90% water, 3-8% concentrated ammonia and 2% detergent. Add about 10 parts of neutralizer per part of isocyanate, with mixing. Allow substance to evaporate.

**Methods for cleaning up**

Cover liquid spill with sand, earth or other non-combustible absorbent material. Cover powder spill with plastic sheet or tarp to minimize spreading. Pick up and transfer to properly labeled containers. Soak up with inert absorbent material. Dam up. Avoid creating dust. Sweep up and shovel into suitable containers for disposal. After cleaning, flush away traces with water. 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**

Avoid contact with skin, eyes or clothing. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray. Use with local exhaust ventilation.

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. Avoid contact with skin, eyes or clothing. Take off contaminated clothing and wash before reuse. When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended.

**Storage Conditions**


**Incompatible Materials**

Finely powdered metals Exothermic reaction with radical initiators organic peroxide Bases Hazardous polymerization may occur Water Alcohols Strong bases Strong oxidizing agents

7.3. Specific end use(s)

**Specific Use(s)**

Adhesives. Observe technical data sheet.

**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 Limits**
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. Provide local exhaust ventilation, in the case of spray application.

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 into any sewer, on the ground or into any body of water.

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>Appearance</td>
<td>Paste</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Black</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Characteristic</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 information available</td>
<td></td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>No information available</td>
<td></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>No information available</td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit:</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Lower flammability limit:</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>&gt; 1</td>
<td></td>
</tr>
</tbody>
</table>
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Supersedes Date: 28-Jun-2017

<table>
<thead>
<tr>
<th>Property</th>
<th>Information Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explosive Properties</td>
<td>No information available</td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>No information available</td>
</tr>
<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>No information available</td>
</tr>
<tr>
<td>Density</td>
<td>1.6 g/cm³</td>
</tr>
<tr>
<td>Bulk Density</td>
<td>No information available</td>
</tr>
<tr>
<td>VOC</td>
<td>No information available</td>
</tr>
</tbody>
</table>

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: 1.6 g/cm³
Bulk Density: No information available
VOC: No information available

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity
Reactivity: Product reacts / cures under exposure of light.

10.2. Chemical stability
Stability: Stable under normal conditions

10.3. Possibility of hazardous reactions
Possibility of Hazardous Reactions: None known.

10.4. Conditions to avoid

10.5. Incompatible materials

10.6. Hazardous decomposition products
Hazardous decomposition products: None under normal use and recommended storage conditions. Carbon monoxide. Carbon dioxide (CO2). Nitrogen oxides (NOx). Hydrogen cyanide. Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Section 11: TOXICOLOGY INFORMATION

11.1. Information on toxicological effects
Acute Toxicity
Product Information: Product does not present an acute toxicity hazard based on known or supplied information.

Inhalation: No data available.
Eye contact: No data available.
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Skin Contact  No data available.
Ingestion  No data available.

Numerical measures of toxicity

Unknown acute toxicity
30.89411483 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
30.89411483 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
50.27068483 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
43.10112483 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
31.99551483 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xylenes (o-, m-, p- isomers) 1330-20-7</td>
<td>= 3500 mg/kg (Rat)</td>
<td>&gt; 1700 mg/kg (Rabbit) &gt; 4350 mg/kg (Rabbit)</td>
<td>&gt;47635 mg/L (Rat) 4 h = &gt;5000 ppm (Rat) 4 h</td>
</tr>
<tr>
<td>Benzenesulfonyl isocyanate, 4-methyl-4083-64-1</td>
<td>= 2234 mg/kg (Rat)</td>
<td>-</td>
<td>&gt;640 ppm (Rat) 1 h</td>
</tr>
<tr>
<td>Benzene, 1,3-disocyanatomethyl-26471-62-5</td>
<td>= 3060 mg/kg (Rat)</td>
<td>= 10000 mg/kg (Rabbit)</td>
<td>= 0.107 mg/L (Rat) 4 h (Vapour)</td>
</tr>
</tbody>
</table>

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

Skin Corrosion/Irritation  Irritant effect on the skin.
Serious Eye Damage/Eye Irritation  Severe eye irritation.
Sensitization  May cause sensitization by skin contact. People who suffer from skin sensitization problems, asthma, allergies, chronic or recurring respiratory illnesses should not be deployed in any process using this preparation.
Germ Cell Mutagenicity  No information available.
Reproductive Toxicity  No information available.
STOT - Single Exposure  No information available.
STOT - Repeated Exposure  No information available.
Target Organ Effects  Respiratory system, Eyes, Skin, Central nervous system, Lymphatic System.
Aspiration hazard  Not applicable.
Carcinogenicity  The following substance(s) are classified in Annex VI CLP (1272/2008) as carcinogenic.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>IARC</th>
<th>China</th>
<th>Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xylenes (o-, m-, p- isomers)</td>
<td>Group 3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Benzene, 1,3-disocyanatomethyl-</td>
<td>Group 2B</td>
<td>-</td>
<td>Group 2B</td>
</tr>
<tr>
<td>IARC (International Agency for Research on Cancer)</td>
<td>Group 1 - Carcinogenic to Humans Group 2B - Possibly Carcinogenic to Humans Group 3 - Not Classifiable as to Carcinogenicity in Humans</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity

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

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>Xylenes (o-, m-, p- isomers) 1330-20-7</td>
<td>-</td>
<td>LC50 96 h 2.6 mg/L (Oncorhynchus mykiss ) (OECD 203)</td>
<td>EC50 48 h = 3.4 mg/L (water flea )</td>
</tr>
<tr>
<td>Urea, N,N'-(methylene-4,1-phenylene)</td>
<td>EC50 (72h) &gt;100 mg/L Algae</td>
<td>LC50 (96h) &gt;250 mg/L Fish (Brachydanio rerio)</td>
<td>EC50 (48h) &gt;100 mg/L Daphnia magna</td>
</tr>
<tr>
<td>bis[N'-butyl-77703-56-1</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.

12.5. Results of PBT and vPvB assessment
The components in this formulation do not meet the criteria for classification as PBT or vPvB.

12.6. Other adverse effects
No information available.

Endocrine Disruptor Information

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: TRANSPORTATION INFORMATION

IMDG
Not regulated

IATA
Not regulated

ADR
Not regulated

Section 15: REGULATORY INFORMATION

National Regulations

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
09-May-2018

Revision Note
Not applicable.

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