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

1.1. Product Identifier

Product Name: BOSTIK ALPHAGRIP
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 SA
Immeuble "Le Jade" 253 Avenue du President Wilson 93211 La Plaine Saint Denis
France
Tel: +33 (0)1 55 99 90 00
Fax: +33 (0)1 55 99 90 01

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

| Acute toxicity - Inhalation (Dusts/Mists) | Category 4 (6.1D) |
| Skin Corrosion/Irritation | Category 2 (6.3A) |
| Serious Eye Damage/Eye Irritation | Category 2A (6.4A) |
| Respiratory sensitization | Category 1 (6.5A) |
| Skin sensitization | Category 1 (6.5B) |
| Carcinogenicity | Category 2 (6.7B) |
| STOT - Single Exposure | Category 3 (1) |
| Specific target organ toxicity (repeated exposure) | Category 2 (6.9B) |

ERMA Group: HSR002679

2.2. Label Elements

Signal Word: DANGER

Hazard statements
H351 - Suspected of causing cancer
H317 - May cause an allergic skin reaction
Precautionary Statements - Prevention
P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P281 - Use personal protective equipment as required
P271 - Use only outdoors or in a well-ventilated area
P264 - Wash face, hands and any exposed skin thoroughly after handling
P265 - In case of inadequate ventilation wear respiratory protection
P272 - Contaminated work clothing should not be allowed out of the workplace
P280 - Wear protective gloves
P260 - Do not breathe dust/fume/gas/mist/vapors/spray

Precautionary Statements - Response
P321 - Specific treatment (see supplemental first aid instructions on this label)
Inhalation
P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician
Skin
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
P362 - Take off contaminated clothing and wash before reuse
P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention
Eyes
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P337 + P313 - If eye irritation persists: Get medical advice/attention

Precautionary Statements - Storage
P405 - Store locked up
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

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

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>4,4'-Methylene diphenyl diisocyanate, oligmers</td>
<td>25686-28-6</td>
<td>40 - &lt;80</td>
</tr>
<tr>
<td>Benzene, 1,1'-methylenebis[4-isocyanato-homopolymer, polymer with 1,2-ethanediamine, methyloloxirane and oxirane]</td>
<td>--</td>
<td>40 - &lt;80</td>
</tr>
<tr>
<td>Benzene, 1,1'-methylenebis[4isocyanato-homopolymer, polymer with alpha-hydro-omega-hydroxyxypoly(oxy(methyl-1,2-ethanediyl))]</td>
<td>--</td>
<td>10 - &lt;20</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
May cause sensitization of susceptible persons. May cause sensitization by inhalation and 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
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media
No information available.

5.2. Special hazards arising from the substance or mixture
Specific Hazards Arising from the Chemical
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
Wear self-contained breathing apparatus and protective suit.

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 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**  
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. Use personal protective equipment as required. Dam up. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

### 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**  
When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended.

**Storage Conditions**  

**Incompatible Materials**  
Water Alcohols Strong bases Strong oxidizing agents Finely powdered metals

### 7.3. Specific end use(s)

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

Engineering Controls
Ensure adequate ventilation, especially in confined areas.

PPE - Personal Protection Equipment

<table>
<thead>
<tr>
<th>Eye/Face Protection</th>
<th>Wear safety glasses with side shields (or goggles).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin and Body Protection</td>
<td>Wear suitable protective clothing. No special technical protective measures are necessary under normal conditions.</td>
</tr>
<tr>
<td>Hand Protection</td>
<td>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.</td>
</tr>
<tr>
<td>Respiratory Protection</td>
<td>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.</td>
</tr>
<tr>
<td>General Hygiene Considerations</td>
<td>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.</td>
</tr>
</tbody>
</table>

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>Colorless to yellow</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>171 °C / 340 °F</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>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>Insoluble in water</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>30 mm²/s @ 40°C</td>
<td></td>
</tr>
<tr>
<td>Dynamic Viscosity</td>
<td>275 Pa.s @ 20 °C</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

Softening Point
No information available
Section 10: STABILITY AND REACTIVITY

10.1. Reactivity
Reactivity None under normal use conditions.

10.2. Chemical stability

10.3. Possibility of hazardous reactions
Possibility of Hazardous Reactions None under normal processing.
Hazardous Polymerization Hazardous polymerization may occur.

10.4. Conditions to avoid
Conditions to avoid Keep from any possible contact with water. Extremes of temperature and direct sunlight. Storage near to reactive materials. Protect from moisture. Product cures with moisture.

10.5. Incompatible materials

10.6. Hazardous decomposition products
Hazardous decomposition products 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.
Skin Contact No data available.
Ingestion No data available.

Numerical measures of toxicity
Unknown acute toxicity
56.22 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
56.22 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
56.22 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
56.22 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

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>4,4’-Methylene diphenyl diisocyanate, oligomers 25686-28-6</td>
<td>LD50 &gt;5000 mg/Kg Rat</td>
<td>LD50 &gt;9400 mg/Kg (Rabbit)</td>
<td>LC50 (4h) = 0.367 mg/l (Rat) OECD 403</td>
</tr>
</tbody>
</table>
Delayed and immediate effects as well as chronic effects from short and long-term exposure

<table>
<thead>
<tr>
<th>Effect</th>
<th>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>Sensitization</td>
<td>No information available.</td>
</tr>
<tr>
<td>Germ Cell Mutagenicity</td>
<td>No information available.</td>
</tr>
<tr>
<td>Reproductive Toxicity</td>
<td>No information available.</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>Respiratory system, Eyes, Skin, Central nervous system.</td>
</tr>
<tr>
<td>Aspiration hazard</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>
<tr>
<td>Reproductive Toxicity</td>
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<tr>
<td>Target Organ Effects</td>
<td>Respiratory system, Eyes, Skin, Central nervous system.</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>No information available.</td>
</tr>
</tbody>
</table>

IARC (International Agency for Research on Cancer) Group 3 - Not Classifiable as to Carcinogenicity in Humans

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecotoxicity

Product Information
None known.

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>4,4’-Methylene(phenyl diocyanate, oligmers 25686-28-6</td>
<td>EC50 (72h) &gt;1640 mg/L (Algae)</td>
<td>LC50 (96h) &gt;1000 mg/L Fish</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
Disposal should be in accordance with applicable regional, national and local laws and regulations.
Section 14: TRANSPORTATION INFORMATION

IMDG
Not regulated

IATA
Not regulated

ADR
Not regulated

Section 15: REGULATORY INFORMATION

National Regulations

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
05-Mar-2018

Revision Note
Not applicable.

Training Advice
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