1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: PHL4162

Company Name: H.B. FULLER COMPANY (ABN 003 638 435)
Address: 16-22 Red Gum Drive Dandenong South Victoria 3175 Australia
Emergency Tel.: AUS: 1800 033111 (or IDD +61 3 9663 2130), NZ: 0800 734 607 (Or IDD +64 473 4607)
Telephone/Fax Number: Tel: Customer Service Toll Free Numbers: Australia 1800 423 855; New Zealand: 0800 555 072
Recommended Use: Hot melt adhesive.

Other Information: This MSDS summarises as of issue our best knowledge of the health and safety hazard information of the product, and in particular, how to safely handle and use the product in the workplace. Since H.B. Fuller Company Australia Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this MSDS in the context of how the user intends to handle and use the product in the workplace. If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company. Our responsibility for the products sold is subject to our standard terms and conditions, a copy of which is sent to our customer and is also available on request.

2. HAZARDS IDENTIFICATION

Australia: Not classified as Hazardous according to criteria of National Occupational Health & Safety Commission, Australia (NOHSC).
Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

New Zealand:
Not classified as Hazardous according to the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001, New Zealand.
S36 Wear suitable protective clothing.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paraffin Wax</td>
<td>8002-74-2</td>
<td>10-30 %</td>
</tr>
<tr>
<td>Mineral oil</td>
<td>Proprietary</td>
<td>10-30 %</td>
</tr>
<tr>
<td>White Mineral Oil</td>
<td>8042-47-5</td>
<td>&lt;10 %</td>
</tr>
<tr>
<td>Ingredients determined: not to be hazardous</td>
<td>Balance</td>
<td></td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

Inhalation: If inhaled, remove affected person from contaminated area. Keep at rest until recovered. If symptoms persist seek medical attention.
Ingestion: Not an anticipated route of exposure. However, if ingested, rinse mouth with water. Do NOT induce vomiting. Seek medical attention.
Skin: Wash affected area thoroughly with soap and water. Remove contaminated clothing and wash before reuse or discard. If symptoms develop seek medical attention. If molten material adheres to skin, do not attempt to remove. Cool with cold water, wrap loosely with bandage or cloth and immediately seek trained medical attention.
Eye: If in eyes, hold eyelids apart and flush the eyes continuously with running water.
First Aid Facilities
Continue flushing for several minutes until all contaminants are washed out completely. If symptoms develop and persist seek medical attention. Normal washroom facilities.

Advice to Doctor
Treat symptomatically.

Other Information
For advice in an emergency, contact a Poisons Information Centre (Phone Australia 13 1126; New Zealand 0800 POISON / 0800 764 766) or a doctor at once.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media
Use carbon dioxide, dry chemical, foam, water mist or water spray.

Under fire conditions this product may emit toxic and/or irritating fumes and gases including carbon monoxide and carbon dioxide.

Combustible material. This product will readily burn under fire conditions.

Fire fighters should wear Self-Contained Breathing Apparatus (SCBA) operated in positive pressure mode and full protective clothing to prevent exposure to vapours or fumes. Water spray may be used to cool down heat-exposed containers.

Unsuitable Extinguishing Media
Do not use water jet.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures
Allow molten material to solidify before disposal. Wear appropriate personal protective equipment and clothing to prevent exposure. Extinguish or remove all sources of ignition and stop leak if safe to do so. Increase ventilation. Evacuate all unprotected personnel. If possible contain the spill. Place inert absorbent, non-combustible material onto spillage. Use clean non-sparking tools to collect the material and place into suitable labelled containers for subsequent recycling or disposal. Dispose of waste according to the applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.

7. HANDLING AND STORAGE

Precautions for Safe Handling
Prevent contact with molten product. Use only in a well ventilated area. Keep containers sealed when not in use. Prevent the build up of mists or vapours in the work atmosphere. Avoid inhalation of vapours and mists, and skin or eye contact. Do not use near ignition sources. Do not pressurise, cut, heat or weld containers as they may contain hazardous residues. Maintain high standards of personal hygiene i.e. Washing hands prior to eating, drinking, smoking or using toilet facilities.

Conditions for Safe Storage
Store in a cool, dry, well-ventilated area away from sources of ignition, oxidising agents, strong acids, foodstuffs, and clothing. Keep containers closed when not in use and securely sealed and protected against physical damage. Inspect regularly for deficiencies such as damage or leaks. Have appropriate fire extinguishers available in and near the storage area. Take precautions against static electricity discharges. Use proper grounding procedures.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards
No exposure value assigned for this material by Safe Work, Australia or the Occupational Safety and Health Service (OSH) of the New Zealand Department of Labour. However, the available exposure limits for ingredients are listed below:

<table>
<thead>
<tr>
<th>Substance</th>
<th>TWA</th>
<th>STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ppm</td>
<td>mg/m³</td>
</tr>
</tbody>
</table>

NOTICES
Material Safety Data Sheet

Product Name: PHL4162

Oil mist 5
Paraffin wax (fume) 2

New Zealand Occupational Safety and Health Service (OSH) Workplace Exposure Standards:

<table>
<thead>
<tr>
<th>Substance</th>
<th>TWA  ppm</th>
<th>TWA  mg/m³</th>
<th>STEL ppm</th>
<th>STEL mg/m³</th>
<th>NOTICES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil mist</td>
<td></td>
<td>5</td>
<td>10</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Paraffin wax (fume)</td>
<td></td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day week.

STEL (Short Term Exposure Limit): The average airborne concentration over a 15 minute period which should not be exceeded at any time during a normal eight-hour workday.

No biological limits allocated.

9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance**
Light amber solid

**Odour**
Neutral odour

**Melting Point**
Not available

**Boiling Point**
Not available

**Solubility in Water**
Not available

**Solubility in Organic Solvents**
Not available

**Specific Gravity**
0.970

**pH Value**
Not available

**Vapour Pressure**
Not available

**Vapour Density** (Air=1)
Not available
<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coefficient Water/Oil Distr.</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>&gt;204°C</td>
</tr>
<tr>
<td>Flammability</td>
<td>Combustible</td>
</tr>
<tr>
<td>Auto-Ignition Temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammable Limits - Lower</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammable Limits - Upper</td>
<td>Not available</td>
</tr>
</tbody>
</table>

### 10. STABILITY AND REACTIVITY

**Chemical Stability**
Stable under normal conditions of storage and handling.

**Conditions to Avoid**
Heat, flames and other sources of ignition.

**Incompatible Materials**
Strong oxidising agents.

**Hazardous Decomposition**
Thermal decomposition may result in the release of toxic and/or irritating fumes including carbon monoxide and carbon dioxide.

**Hazardous Polymerization**
Will not occur.

### 11. TOXICOLOGICAL INFORMATION

**Toxicology Information**
No toxicity data available for this product.

**Inhalation**
Inhalation may cause irritation of the nose, throat and respiratory system.

**Ingestion**
Ingestion of this product may irritate the gastric tract causing nausea and vomiting.

**Skin**
May be irritating to skin. The symptoms may include redness, itching and swelling. Contact with molten product can cause severe irritation and thermal burns with permanent scarring of tissue.

**Eye**
May be irritating to eyes. The symptoms may include redness, itching and tearing. Contact with molten product can cause severe irritation and thermal burns with permanent scarring of tissue.

**Chronic Effects**
Not available

### 12. ECOLOGICAL INFORMATION

**Ecotoxicity**
No ecological data are available for this material.

**Persistence / Degradability**
Not available

**Mobility**
Not available

**Bioaccumulative Potential**
Not available

**Environ. Protection**
Prevent this material entering waterways, drains and sewers.

### 13. DISPOSAL CONSIDERATIONS

**Disposal Considerations**

**Australia:**
The disposal of the spilled or waste material must be done in accordance with applicable local and national regulations.

**New Zealand:**
Product Disposal:
Product wastes are controlled wastes and should be disposed of in accordance with all applicable local and national regulations. This product can be disposed through a licensed commercial waste collection service. In this specific case the product is a combustible substance and therefore can be sent to an approved high temperature incineration plant for disposal. Personal protective clothing and equipment as specified in Section 8 of this SDS must be worn during handling and disposal of this product. The ventilation requirements as specified in the same section must also be followed, and the precautions given in Section 7 of this SDS regarding handling must also be followed.

Do not dispose into the sewerage system. Do not discharge into drains or watercourses or dispose where ground or surface waters may be affected.

In New Zealand, the disposal agency or contractor must comply with the New Zealand Hazardous Substances (Disposal) Regulations 2001. Further details regarding disposal can be obtained on the EPA New Zealand website under specific group standards.

Container Disposal:
The container or packaging must be cleaned and rendered incapable of holding any substance. It can then be disposed of in a manner consistent with that of the substance it contained. In this instance the packaging can be disposed through a commercial waste collection service. Alternatively, the container or packaging can be recycled if the hazardous residues have been thoroughly cleaned or rendered non-hazardous.

In New Zealand, the packaging (that may or may not hold any residual substance) that is lawfully disposed of by householders or other consumers through a public or commercial waste collection service is a means of compliance with regulations.

14. TRANSPORT INFORMATION

Transport Information
Road and Rail Transport:
- Australia: Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

Marine Transport (IMO/IMDG):
- Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Air Transport (ICAO/IATA):
- Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

IMDG Marine Pollutant (MP)
No

15. REGULATORY INFORMATION

Regulatory Information
Australia:
- Not classified as Hazardous according to criteria of National Occupational Health & Safety Commission (NOHSC), Australia.
- Not classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Poisons Schedule
Not Scheduled

National and or International Regulatory Information
New Zealand:
- Not classified as Hazardous according to the New Zealand Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001.
- The listed chemicals of this product are listed on the New Zealand Inventory of Chemicals (NZIoC) or exempted.
AICS (Australia) The listed chemicals are included in Australian Inventory of Chemical Substances (AICS) or otherwise notified under NICNAS.

16. OTHER INFORMATION

MSDS Created: September 2013

For advice in an emergency contact:
Australia: 1800 033 111 (or IDD +61 3 9663 2130).
New Zealand: 0800 734 607 (or IDD +64 4 473 4607)

Contact Person/Point Australia:

Literature References

Standard for the Uniform Scheduling of Medicines and Poisons.
Approved criteria for classifying hazardous substances [NOHSC:1008(2004)].
Australian Code for the Transport of Dangerous Goods by Road & Rail.
Model Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.
Workplace exposure standards for airborne contaminants, Safe work Australia.
American Conference of Industrial Hygienists (ACGIH).

New Zealand:
Workplace Exposure Standards and Biological Exposure Indices, Department of Labour, Health & Safety.
Transport of Dangerous goods on land NZS 5433.
Preparation of Safety Data Sheets – Approved Code of Practice Under the HSNO Act 1996 (HSNO CoP 8-1 09-06).
Assigning a hazardous substance to a group standard.
American Conference of Industrial Hygienists (ACGIH).

...End Of MSDS...