The attached SDS was prepared in accordance with EC Directive 91/155/EEC and is internationally recognised as the EU format. This face-sheet provides additional information to make this document an MSDS that complies with the requirements of the Australian National Code of Practice for the Preparation of Material Safety Data Sheets [NOHSC:2011(2003)]. This face-sheet is an integral part of the attached SDS. It and must not be detached and must be read in conjunction with the SDS. In the event of contradictory information between the face sheet and the body of the SDS the information in the face sheet takes precedence.

F1. SDS REFERENCE

Printing Date: 5/6/12
Revision/Version No.: 24/1/12
Number of Pages: 6

F2. Annex to Section I. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

SUPPLIER
Company: H. B. Fuller Company Australia
Address: 16-20 Red Gum Drive, Dandenong South, VIC 3175
Telephone: (03) 9797 6222
Emergency Telephone No: 1800 033 111

PRODUCT
Product Name: Advantra PHO 0006
Other Names: Hot melt adhesive
Manufacturer’s Code: None

USE
Used to bond PP caps on metal tins. Also suitable for bonding caps onto Tetra briks®. Used in an industrial environment and applied by spray nozzle with purpose built machinery.

F3. Annex to Section II. COMPOSITION /INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>MIXTURE</th>
<th>CHEMICAL ENTITY</th>
<th>CAS No</th>
<th>PROPORTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixture</td>
<td>Polyolefin plastomer</td>
<td>26221-73-8</td>
<td>30 - &lt;60%</td>
</tr>
<tr>
<td></td>
<td>Hydrocarbon resin</td>
<td>68132-00-3</td>
<td>10 - &lt; 30%</td>
</tr>
<tr>
<td></td>
<td>Paraffin wax</td>
<td>64742-43-4</td>
<td>&lt; 10%</td>
</tr>
<tr>
<td></td>
<td>Other ingredients determined not to be hazardous</td>
<td>Not applicable</td>
<td>to 100</td>
</tr>
</tbody>
</table>

F4. Annex to Section III. HAZARDS IDENTIFICATION

HAZARD CLASSIFICATION
NOHSC Classification: Non-Hazardous Substance
ADG Classification: Non-Dangerous Goods
SUSMMP Classification: Not Scheduled

RISK PHRASES
None

SAFETY PHRASES
None

F5. Annex to Section VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE STANDARDS
An Australian Exposure Standard for this mixture has not been set by NOHSC. The inhalation hazard for this mixture in a solid state is very low. However the mixture does contain paraffin wax the exposure standards for which has been set by NOHSC as shown below. The nature and composition of the vapours, gases and mists given off the heated material are unknown and hence an overall atmospheric exposure limit can not be given for them.

<table>
<thead>
<tr>
<th>Exposure Standard (HSIS Jun12)</th>
<th>TWA</th>
<th>STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paraffin wax (fume)</td>
<td>2 mg/m³</td>
<td>No data</td>
</tr>
</tbody>
</table>

BIOLOGICAL LIMIT VALUES
Not regulated

Issued: June 20012
Replaces: None
F6. Annex to Section XIV. AUSTRALIAN DANGEROUS GOODS TRANSPORT REGULATIONS

This mixture has not been classified as Dangerous Goods. It is not subject to the following transport regulations: ADG Code, IMDG/IMO, ICAO/IATA and UN.

F7. Annex to Section XV. REGULATORY INFORMATION

AICS All ingredients of this mixture are listed on the AICS
SUSDP Not Scheduled

F8. Annex to Section XVI. OTHER INFORMATION

MSDS Issue Number: 01
FACE Date of Issue: June 2012
SHEET Replaces Issue: None
Changes made to the previous issue: Not applicable
1 Identification of the substance/mixture and of the company/undertaking

- Product identifier
- Trade name ADVANTRA PHO 0006
- Relevant identified uses of the substance or mixture and uses advised against
- Product category PC1 Adhesives, sealants
- Application of the substance / the preparation Adhesives

Details of the supplier of the safety data sheet
- Manufacturer/Supplier: H.B. FULLER Deutschland Produktions GmbH
  An der Roten Bleiche 2-3
  D 21335 Lueneburg
  Tel.: +49 (0) 4131/7277-0
  Fax: +49 (0) 4131/7277-227
  EU-MSDS@hbfuller.com
- Informing department: Regulatory department
- Emergency telephone number: +44 (0) 1235 239 670 (24 hours)

2 Hazards identification

- Classification of the substance or mixture
- Classification according to Directive 67/548/EEC or Directive 1999/45/EC void
- Information concerning particular hazards for human and environment:
  The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- Classification system:
  The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

- Label elements
- Labelling according to EU guidelines:
  Observe the normal safety regulations when handling chemicals
  The product is not subject to identification regulations under EC Directives and the Chemicals (Hazard Information and Packaging for Supply)(CHIP) Regulations.

- Other hazards
- Results of PBT and vPvB assessment
  PBT: Not applicable.
  vPvB: Not applicable.

3 Composition/information on ingredients

- Chemical characterization: Mixtures
- Description: Hot melt adhesive
- Dangerous components: Void
- Additional information For the wording of the listed risk phrases refer to section 16.
4 First aid measures

· Description of first aid measures
· General information
  No special measures required.
  Only the molten, hot material has to be considered as dangerous.
  Risk of burn with molten material.
· After inhalation Supply fresh air; consult doctor in case of symptoms.
· After skin contact
  After contact with the molten product, cool rapidly with cold water.
  Do not pull solidified product away from the skin.
  Seek medical treatment.
· After eye contact
  Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.
· After swallowing Do not induce vomiting; instantly call for medical help.
· Information for doctor
  · Most important symptoms and effects, both acute and delayed
    No further relevant information available.
  · Indication of any immediate medical attention and special treatment needed
    No further relevant information available.

5 Firefighting measures

· Extinguishing media
· Suitable extinguishing agents
  Water haze
  Fire-extinguishing powder
  Carbon dioxide
· Special hazards arising from the substance or mixture
  No further relevant information available.
· Advice for firefighters
· Protective equipment: No special measures required.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures
  Not required.
· Environmental precautions: Do not allow product to reach sewage system or water bodies.
· Methods and material for containment and cleaning up: Collect mechanically.
· Reference to other sections
  No dangerous materials are released.
  See Section 7 for information on safe handling
  See Section 8 for information on personal protection equipment.
  See Section 13 for information on disposal.

7 Handling and storage

· Handling
· Precautions for safe handling
  No special measures required.
· Information about protection against explosions and fires: No special measures required.
Trade name ADVANTRA PHO 0006

- Conditions for safe storage, including any incompatibilities
- Storage
  Requirements to be met by storerooms and containers: Keep dark, cool and dry.
  Information about storage in one common storage facility: Not required.
  Further information about storage conditions: None.
  Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see item 7.
- Control parameters
- Components with critical values that require monitoring at the workplace:
  The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- Additional information: Based on information valid at the time of writing.
- Exposure controls
- Personal protective equipment
- General protective and hygienic measures Avoid skin contact with the liquefied material.
- Breathing equipment: Not required.
- Protection of hands:
  Heat protection gloves
  The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
  Material of gloves Heat protection gloves
  Penetration time of glove material
  The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- Eye protection: Safety glasses

9 Physical and chemical properties

- Information on basic physical and chemical properties
- General Information
  Appearance:
    Form: Solid.
    Colour: According to product specification
    Smell: Characteristic
    Odour threshold: Not determined.
  pH-value: Not applicable.

- Change in condition
  Melting point/Melting range: Not determined
  Boiling point/Boiling range: Not determined

- Flash point: > 200°C

- Inflammability (solid, gaseous) Not determined.

- Ignition temperature:
  Decomposition temperature: Not determined.
Trade name ADVANTRA PHO 0006

<table>
<thead>
<tr>
<th>· Self-inflammability:</th>
<th>Product is not selfigniting.</th>
</tr>
</thead>
<tbody>
<tr>
<td>· Danger of explosion:</td>
<td>Product is not explosive.</td>
</tr>
<tr>
<td>· Critical values for explosion:</td>
<td></td>
</tr>
<tr>
<td>Lower:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Upper:</td>
<td>Not determined.</td>
</tr>
<tr>
<td>· Vapour pressure:</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>· Density</td>
<td>Not determined</td>
</tr>
<tr>
<td>· Relative density</td>
<td>Not determined.</td>
</tr>
<tr>
<td>· Vapour density</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>· Evaporation rate</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>· Water:</td>
<td>Insoluble</td>
</tr>
<tr>
<td>· Segregation coefficient (n-octanol/water):</td>
<td>Not determined.</td>
</tr>
<tr>
<td>· Viscosity:</td>
<td></td>
</tr>
<tr>
<td>dynamic:</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>kinematic:</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>· Solvent content:</td>
<td></td>
</tr>
<tr>
<td>Organic solvents:</td>
<td>0.0 %</td>
</tr>
<tr>
<td>Solids content:</td>
<td>100.0 %</td>
</tr>
<tr>
<td>· Other information</td>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>

**10 Stability and reactivity**

| · Reactivity | |
| · Chemical stability | |
| · Thermal decomposition / conditions to be avoided: | No decomposition if used according to specifications. |
| · Possibility of hazardous reactions | No dangerous reactions known |
| · Conditions to avoid | No further relevant information available. |
| · Incompatible materials: | No further relevant information available. |
| · Hazardous decomposition products: | No dangerous decomposition products known |

**11 Toxicological information**

| · Information on toxicological effects | |
| · Acute toxicity: | |
| · Primary irritant effect: | |
| on the skin: | No irritant effect. |
| on the eye: | No irritant effect. |
| · Sensitization: | No sensitizing effect known. |
| · Additional toxicological information: | The product is not subject to classification according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version: |
| | When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us. |
### 12 Ecological information

- **Toxicity**
  - Aquatic toxicity: No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
  - Bioaccumulative potential: No further relevant information available.
  - Mobility in soil: No further relevant information available.
- **Additional ecological information:**
  - General notes: Generally not hazardous for water.
  - Results of PBT and vPvB assessment
    - PBT: Not applicable.
    - vPvB: Not applicable.
- **Other adverse effects** No further relevant information available.

### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
  - Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
  - Incineration under approved, controlled conditions using incinerators suitable or designed for the disposal of hazardous chemical wastes, is the preferred method for disposal.
- **European waste catalogue**
  - 08 04 10 waste adhesives and sealants other than those mentioned in 08 04 09
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

- **UN-Number**
- **ADR, ADN, IMDG, IATA** Void
- **UN proper shipping name**
- **ADR, ADN, IMDG, IATA** Void
- **Transport hazard class(es)**
  - **ADR, IMDG, IATA**
    - Class Void
    - Not regulated.
  - ADN/R Class: Void
- **Packing group**
- **ADR, IMDG, IATA** Void
- **Environmental hazards:**
  - Marine pollutant: No
- **Special precautions for user** Not applicable.
34.0.4 · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture
· National regulations
· Other regulations, limitations and prohibitive regulations
· VOC (EU) in %: 0.00 %
· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. The information provided about the product on this Safety Sheet has been compiled from knowledge of the individual constituent. The data given here only applies when product used for proper application(s). The product is not sold as suitable for other applications - usage in such may cause risks not mentioned in this sheet. Do not use for other application(s) without seeking advice from manufacturer.

· Department issuing data sheet: Regulatory department
· Contact: EU-MSDS@hbfuller.com
· * Data compared to the previous version altered.