Product Description

LP1020P is a refined polyethylene homopolymer wax derived from the unique HDPE process by Thai Polyethylene Co., Ltd., a subsidiary of SCG Chemicals Co., Ltd. Under the operational excellent along with the high technology (close loop refinery), LP1020P is guaranteed its high quality for various applications.

Typical Application

- Hot melt adhesive
- PVC compound
- Color masterbatch
- Thermoplastic road marking
- Plastic additive
- Petroleum wax blend
- Rubber
- Cable filling compound
- Candle

Product Characteristics

- High melting and softening point
- Low viscosity
- Excellent heat resistance and thermal stability
- High hardness level
- Excellent chemical resistance
- Excellent compatibility with other waxes
- Excellent lubrication

International Compliance

- US FDA 21 CFR 175.105
- US FDA 21 CFR 178.3720
- Directive 2002/95/EC (RoHS) and Directive 2011/65/EU (RoHS Recast)
- Regulation (EC) No.1907/2006 (REACH)
- Directive 94/62/EC (Packaging and Packaging Waste)

Physical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Test Method</th>
<th>Typical Value</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viscosity @ 149 °C</td>
<td>ASTM D3236</td>
<td>0-20</td>
<td>cPs</td>
</tr>
<tr>
<td>Density</td>
<td>ASTM D1505</td>
<td>0.94</td>
<td>g/cm³</td>
</tr>
<tr>
<td>Penetration Hardness</td>
<td>ASTM D1321</td>
<td>2</td>
<td>d.mm</td>
</tr>
<tr>
<td>Dropping Point</td>
<td>ASTM D3954</td>
<td>116</td>
<td>°C</td>
</tr>
</tbody>
</table>

Note: the given values are typical value measured on the product. Values herein are not to be constructed as a product specification.
Processing Guidelines

The recommended melt temperature is 130 - 150 °C. It is recommended to use mixing machine giving good homogenization. The recommend dosage depends on the intended applications which are shown below:

<table>
<thead>
<tr>
<th>Applications</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hot melt adhesive</td>
<td>20 - 30% is recommended to reduce viscosity and adjust setting time of polyolefins, EVA base.</td>
</tr>
<tr>
<td>PVC compound</td>
<td>0.5 - 1.5 phr is recommended to be external lubricant for rigid PVC.</td>
</tr>
<tr>
<td>Color masterbatch</td>
<td>5 - 30% is recommended to improve pigment dispersion in polyolefins bases.</td>
</tr>
<tr>
<td>Thermoplastic road</td>
<td>1 - 3% is recommended to reduce viscosity for hydrocarbon resin base.</td>
</tr>
<tr>
<td>marking</td>
<td></td>
</tr>
<tr>
<td>Plastic additive</td>
<td>5 - 8% is recommended to improve filler dispersion in polyolefins bases.</td>
</tr>
<tr>
<td>Petroleum wax blend</td>
<td>3 - 5% is recommended to add into a paraffin wax to increase softening point and hardness.</td>
</tr>
<tr>
<td>Rubber</td>
<td>2 - 10% is recommended to improve processability and additives dispersion.</td>
</tr>
<tr>
<td>Cable filling compound</td>
<td>5 - 10 phr is recommended to improve moisture barrier property.</td>
</tr>
<tr>
<td>Candle</td>
<td>1 - 5% is recommended to improve gloss, hardness and prolong candle life.</td>
</tr>
</tbody>
</table>

Product Technical Assistance

For technical assistance or further information on this product or any other SCG Chemicals' products contact your SCG Chemicals technical service at the address or telephone number as specified below.

Product Available Form

- White powder

Product Packaging

- 20 kg loose bag
- 20 kg bag on pallet (pelletized wrap)

Storage

- Store in original container in tidy according to the manual of Handling and Storage from Thai Polyethylene Company Limited/ Thai Polypropylene Company Limited.
- Product(s) should be stored in dry and dust free location at temperature below 50°C and protected from direct sunlight and/or heat, well-ventilated area, away from incompatible materials and food and drink, as this
may lead to quality deterioration, which results in odour generation and colour changes and can have negative effects on the physical properties of this product.

- Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.
- The storage area should be stable and not be slopped.

**Safety**

- The product is not classified as a hazardous material.
- Please see our Material Safety Data Sheet for details on various aspects of safety, recovery, and disposal of the products; for more information, contact your SCG Plastics/SCG Performance Chemicals technical service.

**Recycling**

- The product is suitable for recycling using modern methods of shredding and cleaning. In-house production waste should be kept clean to facilitate direct recycling.
- Please see our Material Safety Datasheet for details on various aspects of safety, recovery and disposal of the products; for more information, contact your SCG Plastics/SCG Performance Chemicals technical service.

**Related**

- The latest version of this document will be available at our website, www.scgchemicals.com, or can be obtained from the SCG Plastics/SCG Performance Chemicals technical service.
- The following related documents are available on request, and represent various aspects on the usability, safety, recovery and disposal of the product.
  - Material Safety Datasheet
  - Statement on compliance to food contact regulations

**Disclaimer**

- The Applications specified herein is for reference only.
- It is customer’s responsibilities to inspect and test the product for suitability of the customer’s own use and purpose. The customer is responsible for appropriate, safe, legal use, processing and handling of the product.
- To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication. We however do not assume any liability whatsoever for the accuracy and completeness of the information contained herein.
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