3M™ Specialty Label Material 7291 is a durable material that offers excellent thermal stability and moisture resistance. This label material utilizes 3M™ Permanent Acrylic Adhesive, which is designed for use in various applications.

**Features**
- Multi-ply biaxially-oriented white polypropylene facestock has a consistent caliper to help prevent registration problems on press.
- Smudgeproof Kimdura® is top coated for dot matrix, thermal transfer, and deposition.
- Polypropylene-based facestock has no plasticizers, so it resists shrinkage. Good weatherability and solvent resistance.
- Permanent acrylic adhesive offers high initial tack and is designed for use on a wide variety of substrates including low surface energy (LSE) plastics.
- Film stiffness is well suited for high-speed dispensing.

**Application Ideas**
- Ideal as a substitute for vinyl labels on rigid or semi-rigid containers.
- Drum labels.

### Technical Data

**Product Description**

3M™ Specialty Label Material 7291 is a durable material that offers excellent thermal stability and moisture resistance. This label material utilizes 3M™ Permanent Acrylic Adhesive, which is designed for use in various applications.

<table>
<thead>
<tr>
<th>Construction</th>
<th>Facestock</th>
<th>Adhesive</th>
<th>Liner</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.7 mils (94 microns)</td>
<td>0.9 mil (23 microns)</td>
<td>3.2 mils (80 microns)</td>
</tr>
<tr>
<td></td>
<td>White Smudgeproof Kimdura®</td>
<td>Permanent acrylic</td>
<td>#50 super calendered kraft sheet</td>
</tr>
</tbody>
</table>

(Calipers are nominal values)

September, 2007
Typical Physical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Method/Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peel Adhesion</td>
<td>2.2 lbs./in. (528 N/m)</td>
<td>TLMI Method, 180° Peel, 12”/min., 1” wide sample</td>
</tr>
<tr>
<td>Loop Tack</td>
<td>1.8 lbs./in. (316 N/m)</td>
<td>TLMI Method, 12”/min., 1” wide sample</td>
</tr>
<tr>
<td>Adhesive Coat Weight</td>
<td>1.75 g/100 in.² ± 10%</td>
<td>3M Method E10MFP01</td>
</tr>
<tr>
<td>Shear</td>
<td>4 hours</td>
<td>TLMI Method, 0.25 in.² x 500g</td>
</tr>
<tr>
<td>Release Range</td>
<td>15 to 50 g/2 in.</td>
<td>TLMI Method, 180° removal, 300 in./min.</td>
</tr>
<tr>
<td>Application Temperature</td>
<td>40°F to 120°F (5°C to 49°C)</td>
<td></td>
</tr>
<tr>
<td>Service Temperature</td>
<td>-20°F to 257°F (-29°C to 125°C)</td>
<td></td>
</tr>
<tr>
<td>Convertability</td>
<td>3M™ Permanent Acrylic Adhesive is specifically designed to be compatible with a variety of print methods and end use applications. Adhesive processing issues are not anticipated when proper roll tensions, handling and storage conditions are used. Please refer to the die cutting/converting section of this data page or the “Guide to Converting and Handling Label Products” technical bulletin for additional information.</td>
<td></td>
</tr>
</tbody>
</table>

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

Adhesion properties determined per TLMI Method using 1.0 mil polyester with 1.0 mil of adhesive on a polished stainless steel panel.

Application Techniques

- For maximum bond strength, surface should be clean and dry. A typical cleaning solvent is heptane or isopropyl alcohol.*

- For best bonding conditions, application surface should be at room temperature or slightly higher. Low temperature surfaces, below 50°F (10°C), cause the adhesive to become so firm that it will not develop maximum contact with the substrate.

- Higher initial bonds are achieved through increased rub down pressure. Use maximum laminating pressure for best results.

*Note: Consult the manufacturer’s Material Safety Data Sheet for proper handling and storage of solvents.

Printing

Top coated for improved ink adhesion with thermal transfer, flexo, letterpress and screen printing processes.

The following ribbons are recommended for thermal transfer printing of 3M™ Specialty Label Material 7291.

- Wax-based ribbons:
  Sony 4052
  Zebra 5030

- Hybrid ribbons:
  Sony TR 4080
  Zebra 5038

- Resin based:
  Sony TR 4041
  Astro-Med R-5
Die-cutting

Rotary or flat-bed process.

Storage Conditions

Store under normal conditions of 70°F (21°C) and 50% relative humidity. To minimize the effects of humidity on the products, package the die-cut and printed stock in polyethylene bags. Low density polyethylene (2-4 mils) can help prevent humidity penetration.

Shelf Life

To obtain best performance, use this product within two years from the date of manufacture.

Product Use

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