Laboratory Services for Textiles and Nonwovens
Textiles/Nonwovens Technical Services

- Fabric information and recommendations
- Product application
- Performance evaluation
- Formulation support
- Direct on-site customer support
Recommendations for Fabric Selection

• Supply background information on various textiles
• Communicate strengths and deficiencies
• Support customer fabric selection
• Provide application-based recommendations
Application Support Services

- Fabric preparation
- Treatment
- Drying
- Curing
- Ironing
Performance Evaluation Services

- Water repellency
- Oil repellency
- Spray performance
- Stain release
- Wash durability
- Hydrostatic testing
- Static decay
- Surface resistivity
Static Water Repellency: Drop Kit Test Method

- Three drops of the IPA and water solutions are placed on the fabric
- Fabric passes the test if no wetting is observed after ~15 seconds

### Kit Comparison

<table>
<thead>
<tr>
<th>3M Kit Test</th>
<th>Teflon® Kit Test</th>
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<tbody>
<tr>
<td>Grade</td>
<td>Isopropanol</td>
</tr>
<tr>
<td>W</td>
<td>0%</td>
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<tr>
<td>1</td>
<td>10%</td>
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<td>2</td>
<td>20%</td>
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<td>3</td>
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<td>9</td>
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<tr>
<td>10</td>
<td>100%</td>
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</tbody>
</table>
Oil Repellency: Drop Kit Test Method

• Three drops of the test grade are placed on the fabric
• Fabric passes the test if no wetting is observed after 15–30 seconds

<table>
<thead>
<tr>
<th>Oil Kit Test</th>
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<tbody>
<tr>
<td>Grade</td>
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<tr>
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</tr>
<tr>
<td>2</td>
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Dynamic Water Repellency: Spray Test Method

- 250 ml of tap water is sprayed over fabric
- Spray height = 15 cm
- Knock off the specimen
- Ratings: 0–100
Stain Release Test Method

Measures ability of fabric to release oily stains during home laundering

- Corn oil and mineral oil are applied to fabric
- Glassine surface is placed on top followed by a 2.27 kg weight for 60 seconds
- Surface and weight are removed and the fabric is washed
Wash Durability

• Allows fabric to be washed and dried as much as required
• Sample evaluation is completed again after the wash and dry cycles are completed
• Provides a numerical value for performance longevity
• Used in stain release evaluations
Hydrostatic Pressure Testing

- Equipment measures the force (kPa) and time required to force a liquid, usually water, through a piece of fabric.
- The greater the force and time required to penetrate the fabric, the more resistant the fabric is to that particular liquid.
- This equipment provides a means of quantitatively differentiating treatments that perform similarly in the testing discussed earlier.
Static Decay Testing

- Measures the time it takes for the charge applied to the fabric to dissipate
- Decay data is useful for medical garment and carpet customers
Surface Resistivity Testing

- Electrical resistance of the fabric surface is measured between two concentric rings
- Comparing the voltage gradient to the current density provides a numerical value of how much charge can build up on the surface of the fabric
Direct Customer Support

Available for:
- USA
- Mexico
- Canada
- South America

Customer

AGCCA
- Technical Service
- Customer Visit (Technical)

AGC
- Product Development
- Technical Assistance for AGCCA

Your Dreams, Our Challenge