You can expect more choices from Arkema Coating Resins. And we deliver.
Our wide range of choices helps you optimize performance and value in coatings for textiles and related products.

• Global Support
Arkema Coating Resins operates globally to ensure you have access to product and technical support wherever you operate.

• Product Development
If your application has special needs that cannot be met through one of our existing products, contact your Arkema representative to discuss joint product development opportunities.

• Sustainability and Quality
Arkema Coating Resins is committed to meet the quality and sustainability needs of its customers, and to operate in a manner that helps protect the safety and health of customers, employees and members of the communities where we manufacture and market our products. For full information on quality, human health, safety and sustainability visit our web site: www.arkemacoatingresins.com.

Delivering more choice.

Our goal is to help you identify a product from our ENCOR® technology platform that enables you to formulate a competitive advantage into your product line. This product guide presents the ENCOR® product range of waterborne polymers for textile coatings, nonwovens and related products and introduces new products developed in response to demanding and dynamic market needs.

• Choose from 100% acrylic, styrene acrylic or vinylic chemistries.
• Improve Health, Safety & Environmental profile of your coatings without compromising performances by using our innovative formaldehyde free self-crosslinking binders.

<table>
<thead>
<tr>
<th>Table of Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Textile Coatings</td>
</tr>
<tr>
<td>Nonwovens and Waddings</td>
</tr>
<tr>
<td>Pigment Printing</td>
</tr>
<tr>
<td>Glass Fibers</td>
</tr>
<tr>
<td>Leather</td>
</tr>
</tbody>
</table>

Textile Coatings

Nonwovens & Waddings

Pigment Printing

Glass Fibers

Leather
Textile Coatings

Formulations based on ENCOR® binders can be applied to fabrics as paste or as foam, regardless of the application process (knife coating, rotary screen coating, etc.) and provide durability, protection and enhanced appearance across a wide range of textile surfaces. Binder selection can be optimised depending on the type of textile and the end-use performance requirements, such as tensile and tear strengths, abrasion resistance, stiffness, dimensional stability, chemical resistance and water repellency or permeability.

### Properties

<table>
<thead>
<tr>
<th>Reference</th>
<th>Flaking</th>
<th>Coating</th>
<th>Lamination</th>
<th>Chemical Nature</th>
<th>Stabilizing System</th>
<th>Tg (°C)</th>
<th>Solids (%)</th>
<th>pH</th>
<th>Brookfield Viscosity [mPa.s @ 23°C]</th>
<th>Washing Resistance</th>
<th>Abrasion Resistance</th>
<th>Dry Cleaning Resistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENCOR® 1103 S</td>
<td>•</td>
<td>ACR</td>
<td>A</td>
<td>- 29</td>
<td>45.0</td>
<td>8.0</td>
<td>&lt; 100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENCOR® 1107 S</td>
<td>•</td>
<td>S/A</td>
<td>A</td>
<td>- 25</td>
<td>45.0</td>
<td>6.0</td>
<td>&lt; 500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENCOR® 1130 S</td>
<td>•</td>
<td>ACR</td>
<td>A/NI</td>
<td>- 16</td>
<td>45.0</td>
<td>7.0</td>
<td>&lt; 200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENCOR® 1217 S</td>
<td>•</td>
<td>•</td>
<td>ACR</td>
<td>A/NI</td>
<td>- 13</td>
<td>59.0</td>
<td>7.5</td>
<td>&lt; 500</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENCOR® 1219</td>
<td>•</td>
<td>ACR</td>
<td>A</td>
<td>- 12</td>
<td>50.0</td>
<td>3.5</td>
<td>&lt; 200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENCOR® 1269 S</td>
<td>•</td>
<td>•</td>
<td>ACR</td>
<td>Ni</td>
<td>- 12</td>
<td>45.0</td>
<td>2.5</td>
<td>&lt; 200</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENCOR® 1221 S</td>
<td>•</td>
<td>ACR</td>
<td>A/NI</td>
<td>- 10</td>
<td>45.0</td>
<td>6.5</td>
<td>&lt; 250</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENCOR® 1115</td>
<td>•</td>
<td>V/A</td>
<td>A/NI</td>
<td>- 3</td>
<td>50.0</td>
<td>4.0</td>
<td>&lt; 200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENCOR® 1222 S</td>
<td>•</td>
<td>•</td>
<td>ACR</td>
<td>A/NI</td>
<td>+2</td>
<td>60.0</td>
<td>7.5</td>
<td>&lt; 350</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENCOR® 1248 S</td>
<td>•</td>
<td>•</td>
<td>ACR</td>
<td>A/NI</td>
<td>+13</td>
<td>45.0</td>
<td>4.5</td>
<td>&lt; 150</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENCOR® 1370</td>
<td>•</td>
<td>V/V</td>
<td>HEC</td>
<td>+17</td>
<td>40.0</td>
<td>5.0</td>
<td>&lt; 900</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENCOR® 1753 S</td>
<td>•</td>
<td>ACR</td>
<td>A/NI</td>
<td>+35</td>
<td>50.0</td>
<td>2.5</td>
<td>&lt; 250</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENCOR® 1736</td>
<td>•</td>
<td>VAC</td>
<td>PVOnH</td>
<td>+39</td>
<td>55.0</td>
<td>4.5</td>
<td>&lt; 3000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENCOR® 1736</td>
<td>•</td>
<td>ACR</td>
<td>A/NI</td>
<td>+47</td>
<td>50.0</td>
<td>7.5</td>
<td>&lt; 150</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Main Applications**

- **S:** Self-crosslinking Binder
- **VAC:** Vinyl Acetate Homopolymer
- **ACR:** Acrylic Copolymer
- **S/A:** Styrene-acrylic Copolymer
- **V/V:** Vinyl-versatate Copolymer
- **V/A:** Vinyl-acrylic Copolymer
- **V:** Vinyl-esterate Copolymer
- **V/A:** Vinyl-acrylic Copolymer

**Properties**

- **Chemical Nature:**
  - A: Anionic Surfactant(s)
  - NI: Non-ionic Surfactant(s)
  - PVOnH: Polyvinyl Alcohol(s)
  - HEC: Hydroxyethylcellulose

- **Stabilizing System:**
  - A: Anionic
  - NI: Non-ionic

- **Tg (°C):** Glass transition temperature
- **Solids (%):** Solid content
- **pH:** pH value
- **Brookfield Viscosity [mPa.s @ 23°C]:** Viscosity measurement

- **Washing Resistance:**
  - **Highly Recommended:**
  - **Suitable:**

- **Abrasion Resistance:**
  - **High solid content:**

- **Dry Cleaning Resistance:**
  - **High solid content:**

- **Specific Features and Benefits:**
  - **Ideally suited for blackout coatings:**
  - **High hydrophobicity:**
  - **Zero formaldehyde self-crosslinking binder:**
  - **High solid content:**
  - **Good compatibility with fluorocarbons:**
  - **High solid content:**
  - **Ideally suited for decorative foils:**
  - **Excellent adhesion on hydrophobic substrates:**
  - **Ideally suited for carpet backing:**
  - **Heat sealable:**

**Textile Coatings**

- **Nonwovens & Waddings**
- **Pigment Printing**
- **Glass Fibers**
- **Leather**

**Arkema Innovative Chemistry**
Nonwovens & Waddings

For Nonwoven applications, ENCOR® binders are used for chemical web bonding and finishing treatment and help to improve the mechanical and chemical properties of these highly versatile substrates.

Nonwovens are used in automotive, construction, civil engineering and geotextile, household, hygiene, filtration, cable wrapping and packaging applications. Binder selection can be optimised depending on type of nonwoven and end-use performance requirements such as tear and abrasion resistance, thermal dimensional stability, water absorbency or repellency, resilience and softness.

### Main Applications, Properties, and Specific Features and Benefits

<table>
<thead>
<tr>
<th>Reference</th>
<th>Wipes</th>
<th>Automotive</th>
<th>Interlining</th>
<th>Geotextile</th>
<th>Wadding</th>
<th>Filtration</th>
<th>Chemical Nature</th>
<th>Tg (°C)</th>
<th>Solids (%)</th>
<th>pH</th>
<th>Brookfield Viscosity (mPa.s @ 23°C)</th>
<th>Dry Tensile Strength</th>
<th>Wet Tensile Strength</th>
<th>Alcohol Tensile Strength</th>
<th>Hydrophily</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENCOR® 1103 S</td>
<td></td>
<td>● ●</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ACR</td>
<td>- 29</td>
<td>45.0</td>
<td>8.0</td>
<td>&lt; 100</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>++</td>
</tr>
<tr>
<td>ENCOR® 1107 S</td>
<td></td>
<td></td>
<td>● ●</td>
<td></td>
<td></td>
<td></td>
<td>S/A</td>
<td>- 25</td>
<td>45.0</td>
<td>6.0</td>
<td>&lt; 500</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>--</td>
</tr>
<tr>
<td>ENCOR® 1130 S</td>
<td></td>
<td>● ●</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ACR</td>
<td>- 16</td>
<td>45.0</td>
<td>7.0</td>
<td>&lt; 200</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>+</td>
</tr>
<tr>
<td>ENCOR® 1217 S</td>
<td>● ●</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ACR</td>
<td>- 13</td>
<td>59.0</td>
<td>7.5</td>
<td>&lt; 500</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>++</td>
</tr>
<tr>
<td>ENCOR® 1219</td>
<td></td>
<td>● ●</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ACR</td>
<td>- 12</td>
<td>50.0</td>
<td>3.5</td>
<td>&lt; 200</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>+++</td>
</tr>
<tr>
<td>ENCOR® 1269 S</td>
<td></td>
<td>● ●</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ACR</td>
<td>- 12</td>
<td>45.0</td>
<td>2.5</td>
<td>&lt; 200</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>–</td>
</tr>
<tr>
<td>ENCOR® 1221 S</td>
<td>●</td>
<td></td>
<td>● ●</td>
<td></td>
<td></td>
<td></td>
<td>ACR</td>
<td>- 10</td>
<td>45.0</td>
<td>6.5</td>
<td>&lt; 250</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>++</td>
</tr>
<tr>
<td>ENCOR® 1350 S</td>
<td>● ●</td>
<td>● ●</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>V/A</td>
<td>- 6</td>
<td>45.0</td>
<td>4.0</td>
<td>&lt; 500</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>++</td>
</tr>
<tr>
<td>ENCOR® 1106 S</td>
<td>● ●</td>
<td>● ●</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ACR</td>
<td>- 5</td>
<td>42.0</td>
<td>5.5</td>
<td>&lt; 500</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>+++</td>
</tr>
<tr>
<td>ENCOR® 1237 S</td>
<td>●</td>
<td>● ● ● ● ●</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ACR</td>
<td>+11</td>
<td>45.0</td>
<td>5.5</td>
<td>&lt; 250</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>+++</td>
</tr>
<tr>
<td>ENCOR® 1239 S</td>
<td>● ●</td>
<td>● ● ● ● ●</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ACR</td>
<td>+25</td>
<td>47.0</td>
<td>4.0</td>
<td>&lt; 200</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>+++</td>
</tr>
<tr>
<td>ENCOR® 1241 S</td>
<td>● ●</td>
<td>● ●</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ACR</td>
<td>+35</td>
<td>50.0</td>
<td>2.5</td>
<td>&lt; 250</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>+++</td>
</tr>
<tr>
<td>ENCOR® 1432 S</td>
<td>●</td>
<td>● ●</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>S/A</td>
<td>+33</td>
<td>50.0</td>
<td>8.0</td>
<td>&lt; 5 000</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>–</td>
</tr>
<tr>
<td>ENCOR® 1753 S</td>
<td>● ●</td>
<td>● ●</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ACR</td>
<td>+35</td>
<td>50.0</td>
<td>2.5</td>
<td>&lt; 250</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>+++</td>
</tr>
<tr>
<td>ENCOR® 1770 S</td>
<td>● ●</td>
<td>● ●</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ACR</td>
<td>+35</td>
<td>50.0</td>
<td>2.5</td>
<td>&lt; 200</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>+</td>
</tr>
<tr>
<td>ENCOR® 1345 S</td>
<td>● ●</td>
<td>● ●</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>V/A</td>
<td>+36</td>
<td>45.0</td>
<td>4.0</td>
<td>&lt; 100</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>+</td>
</tr>
<tr>
<td>ENCOR® 1309</td>
<td></td>
<td>● ●</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>VAC</td>
<td>+37</td>
<td>54.0</td>
<td>4.5</td>
<td>&lt; 3 000</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>++</td>
</tr>
<tr>
<td>ENCOR® 1149 S</td>
<td>● ●</td>
<td>● ●</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>S/A</td>
<td>+40</td>
<td>40.0</td>
<td>4.0</td>
<td>&lt; 100</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>✓ ✓ ✓</td>
<td>–</td>
</tr>
</tbody>
</table>

**S**: Self-crosslinking Binder  
**ACR**: Acrylic Copolymer  
**S/A**: Styrene-acrylic Copolymer  
**VAC**: Vinyl Acetate Homopolymer  
**V/A**: Vinyl-acrylic Copolymer

<table>
<thead>
<tr>
<th><strong>Highly Recommended</strong></th>
<th><strong>Recommended</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>S: Self-crosslinking Binder</td>
<td>++</td>
</tr>
<tr>
<td>ACR: Acrylic Copolymer</td>
<td>++</td>
</tr>
<tr>
<td>S/A: Styrene-acrylic Copolymer</td>
<td>+</td>
</tr>
<tr>
<td>VAC: Vinyl Acetate Homopolymer</td>
<td>++</td>
</tr>
<tr>
<td>V/A: Vinyl-acrylic Copolymer</td>
<td>+</td>
</tr>
</tbody>
</table>

- **Very high softness, however not tacky.**
- **Recommended for specialty papers.**
- **Formaldehyde free self-crosslinking binder.**
- **Formaldehyde free self-crosslinking binder. Excellent resistance against alkali.**
- **Recommended for wall covering.**
- **Good compatibility with fire retardant products.**
- **Advised when thermoforming is involved. Very good thermal dimensional stability.**
**Pigment Printing**

When used in pigment pastes, ENCOR® binders provide excellent crackfastness (rubbing resistance), good colour rendering plus outstanding washing and dry cleaning resistance to printed fabrics. ENCOR® binders are designed to have the lowest possible thickener requirement helping to reduce overall costs while optimising fabric feel and soft touch properties.

<table>
<thead>
<tr>
<th>Reference</th>
<th>Standard Fabric</th>
<th>Chemical Nature</th>
<th>Stabilising System</th>
<th>Tg (°C)</th>
<th>Solids (%)</th>
<th>pH</th>
<th>Brookfield Viscosity (mPa.s @ 23°C)</th>
<th>Washing Resistance</th>
<th>Dry Cleaning Resistance</th>
<th>General Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENCOR® 1103 S</td>
<td>ACR A</td>
<td>-29</td>
<td>45.0</td>
<td>8.0</td>
<td>&lt;100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENCOR® 1130 S</td>
<td>ACR A/NI</td>
<td>-16</td>
<td>45.0</td>
<td>7.0</td>
<td>&lt;200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENCOR® 1138 S</td>
<td>S/A A/NI</td>
<td>-15</td>
<td>45.0</td>
<td>8.0</td>
<td>&lt;300</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENCOR® 1133 S</td>
<td>ACR A/NI</td>
<td>-12</td>
<td>56.0</td>
<td>7.0</td>
<td>&lt;2000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENCOR® 1221 S</td>
<td>ACR A/NI</td>
<td>-10</td>
<td>45.0</td>
<td>6.5</td>
<td>&lt;250</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENCOR® 1131</td>
<td>ACR Ni</td>
<td>-7</td>
<td>45.0</td>
<td>6.0</td>
<td>&lt;200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENCOR® 1106 S</td>
<td>ACR A/NI</td>
<td>-5</td>
<td>42.0</td>
<td>5.5</td>
<td>&lt;500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Applications**

- **ENCOR® 1103 S • ACR A - 29**
  - Highly Recommended
  - Best suited on knitted cotton fabrics. Very high softness, however not tacky.

- **ENCOR® 1130 S • ACR A/NI - 16**
  - Highly Recommended
  - Formaldehyde free self-crosslinking binder.

- **ENCOR® 1138 S • S/A A/NI - 15**
  - Highly Recommended
  - Very low thickener consumption.

- **ENCOR® 1133 S • ACR A/NI - 12**
  - Highly Recommended
  - Formaldehyde free self-crosslinking binder. High flexibility.

- **ENCOR® 1221 S • ACR A/NI - 10**
  - Highly Recommended
  - Formaldehyde free self-crosslinking binder. High flexibility.

- **ENCOR® 1131 • ACR Ni - 7**
  - Highly Recommended
  - High flexibility.

- **ENCOR® 1106 S • ACR A/NI - 5**
  - Highly Recommended
  - High solvent resistance.

- **ENCOR® 1131 • ACR Ni - 7**
  - Highly Recommended
  - High flexibility.

- **ENCOR® 1106 S • ACR A/NI - 5**
  - Highly Recommended
  - High solvent resistance.

**Specific Features and Benefits**

- **ENCOR® 1103 S • ACR A - 29**
  - Highly Recommended
  - Best suited on knitted cotton fabrics. Very high softness, however not tacky.

- **ENCOR® 1130 S • ACR A/NI - 16**
  - Highly Recommended
  - Formaldehyde free self-crosslinking binder.

- **ENCOR® 1138 S • S/A A/NI - 15**
  - Highly Recommended
  - Very low thickener consumption.

- **ENCOR® 1133 S • ACR A/NI - 12**
  - Highly Recommended
  - Formaldehyde free self-crosslinking binder. High flexibility.

- **ENCOR® 1221 S • ACR A/NI - 10**
  - Highly Recommended
  - Formaldehyde free self-crosslinking binder. High flexibility.

- **ENCOR® 1131 • ACR Ni - 7**
  - Highly Recommended
  - High flexibility.

- **ENCOR® 1106 S • ACR A/NI - 5**
  - Highly Recommended
  - High solvent resistance.
Arkema Coating Resins offers a range of binders designed to meet the specific requirements of Glass Fiber applications, including building insulation, roofing membranes and roof insulations, filtration media, and mats. Innovative products such as ENCOR® 1432 S, a self-crosslinking binder that contains no formaldehyde release agents but retains outstanding performance properties, can help meet your sustainability goals.

<table>
<thead>
<tr>
<th>Reference</th>
<th>Sizing</th>
<th>Glass Mat</th>
<th>Facades Cladding</th>
<th>Wall Coating</th>
<th>Chemical Nature</th>
<th>Tg (°C)</th>
<th>Solids (%)</th>
<th>pH</th>
<th>Brookfield Viscosity (mPa.s @ 23°C)</th>
<th>Specific Features and Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENCOR® 1222 S</td>
<td>●</td>
<td></td>
<td></td>
<td></td>
<td>ACR</td>
<td>+2</td>
<td>60.0</td>
<td>7.5</td>
<td>&lt; 350</td>
<td>Best suited for filtration applications.</td>
</tr>
<tr>
<td>ENCOR® 1432 S</td>
<td>●</td>
<td></td>
<td></td>
<td></td>
<td>S/A</td>
<td>+33</td>
<td>50.0</td>
<td>8.0</td>
<td>&lt; 5000</td>
<td>Formaldehyde free self-crosslinking binder. Excellent resistance to water &amp; alkali.</td>
</tr>
<tr>
<td>ENCOR® 1770 S</td>
<td>●</td>
<td></td>
<td></td>
<td></td>
<td>ACR</td>
<td>+35</td>
<td>50.0</td>
<td>2.5</td>
<td>&lt; 200</td>
<td></td>
</tr>
<tr>
<td>ENCOR® 1310</td>
<td>●</td>
<td></td>
<td></td>
<td></td>
<td>VAC</td>
<td>+37</td>
<td>55.0</td>
<td>4.5</td>
<td>&lt; 2000</td>
<td>Good affinity to polyester resins.</td>
</tr>
</tbody>
</table>

S: Self-crosslinking Binder  
VAC: Vinyl Acetate Homopolymer  
ACR: Acrylic Copolymer  
S/A: Styrene-acrylic Copolymer  

- Highly Recommended  
- Suitable

Glass Fibers

Arkema Coating Resins offers a range of binders designed to meet the specific requirements of Glass Fiber applications, including building insulation, roofing membranes and roof insulations, filtration media, and mats. Innovative products such as ENCOR® 1432 S, a self-crosslinking binder that contains no formaldehyde release agents but retains outstanding performance properties, can help meet your sustainability goals.
Leather Wet End

Leather retanning baths based on ENCOR® polymer solutions, are suitable for a variety of wet-blue leathers, showing very good stability over a wide pH range and giving durable fullness and softness. Binder selection can be optimised depending on type of leather and end-use performance requirements.

<table>
<thead>
<tr>
<th>Leather Type</th>
<th>Properties</th>
<th>Specific Features and Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENCOR® 3300</td>
<td>• VAC</td>
<td>Stabilized with PVOH. High filling effect. Avoids skin sticking.</td>
</tr>
<tr>
<td>ENCOR® 3875</td>
<td>• ACR +90</td>
<td>Stable at any pH. Gives full hand.</td>
</tr>
<tr>
<td>ENCOR® 3876</td>
<td>• ACR +90</td>
<td>Stable at any pH. Gives full hand.</td>
</tr>
<tr>
<td>ENCOR® 3879</td>
<td>• ACR +80</td>
<td>Gives full hand and very good dyeing yield.</td>
</tr>
</tbody>
</table>

VAC: Vinyl Acetate Homopolymer
ACR: Acrylic Copolymer
PVOH: Polyvinyl Alcohol

Leather Finishing

IMPREGNATION
Formulations based on ENCOR® binders show high wetting and impregnation properties and improve the grain resistance and the finishing adhesion in full grain leather.

EMBOSSING BASE COAT
Compositions based on ENCOR® binders provide high softness, easy plate release, good embossing retention and cut-through resistance. Coatings based on ENCOR® resins are widely used in leathers for upholstery, furniture and automotive trim.

TOP COAT
Compounds containing ENCOR® binders show very high wet and dry abrasion as well as flexion resistance in shoe upper, upholstery and automotive applications, while retaining a softer touch. These compounds can be further crosslinked with aliphatic di-isocyanates or polyaziridines. Binder selection can be optimised depending on type of leather and end-use performance requirements.

<table>
<thead>
<tr>
<th>Applications</th>
<th>Properties</th>
<th>Specific Features and Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENCOR® 3135</td>
<td>•</td>
<td>A  -40 37.0 8.0 50</td>
</tr>
<tr>
<td>ENCOR® 3255</td>
<td>•</td>
<td>A  -17 37.0 8.0 50</td>
</tr>
<tr>
<td>ENCOR® 3130</td>
<td>•</td>
<td>A/NI -12 50.0 8.0 150</td>
</tr>
<tr>
<td>ENCOR® 3219</td>
<td>•</td>
<td>A  -12 50.0 3.5 120</td>
</tr>
<tr>
<td>ENCOR® 3250</td>
<td>•</td>
<td>A  -10 37.0 7.3 60</td>
</tr>
<tr>
<td>ENCOR® 3210</td>
<td>•</td>
<td>A/NI -8 36.0 5.5 50</td>
</tr>
<tr>
<td>ENCOR® 3211</td>
<td>•</td>
<td>A/NI 0 39.0 4.7 70</td>
</tr>
<tr>
<td>ENCOR® 3222</td>
<td>•</td>
<td>A/NI 2 60.0 7.5 230</td>
</tr>
<tr>
<td>ENCOR® 3125</td>
<td>•</td>
<td>A  +3 42.0 4.0 150</td>
</tr>
<tr>
<td>ENCOR® 3240</td>
<td>•</td>
<td>A/NI +4 36.0 8.0 40</td>
</tr>
<tr>
<td>ENCOR® 3140</td>
<td>•</td>
<td>A/NI +7 40.0 7.5 80</td>
</tr>
<tr>
<td>ENCOR® 3244</td>
<td>•</td>
<td>A/NI +18 36.0 10.0 50</td>
</tr>
</tbody>
</table>

A: Anionic Surfactant(s)
NI: Non-ionic Surfactant(s)
• Highly Recommended
• Suitable
Europe
- Headquarters
  - Arkema - Colombes, France
  - Coatex - Genay, France
- Technical and R&D Centers
  - Bonetto, Italy - Coating Resins
  - Genay, France - Coatex
  - Sant Celoni, Spain - Coating Resins
  - Verneuil, France - Coating Resins - Sartomer
- Production Facilities
  - Bonetto, Italy - Coating Resins
  - Bremen, The Netherlands - Coating Resins
  - Drocourt, France - Coating Resins
  - Grassi, Italy - Coating Resins
  - Genay, France - Coatex
  - Moerdijk, The Netherlands - Coatex
  - Mollet, Spain - Coating Resins
  - Sant Celoni, Spain - Coating Resins
  - Stallingborough, United Kingdom - Coating Resins
  - Villers St-Paul, France - Coating Resins - Sartomer
  - Zwickau, Germany - Coating Resins

Americas
- Headquarters
  - Arkema Coating Resins - Cary, NC
  - Arkema Inc. - King of Prussia, PA
- Technical and R&D Centers
  - Araçariguama, Brazil - Coatex - Coating Resins
  - Cary, NC - Coating Resins
  - Chester, SC - Coatex
  - King of Prussia, PA
  - North Kansas City, MO - Coating Resins
- Production Facilities
  - Alsip, IL - Coating Resins
  - Araçariguama, Brazil - Coatex - Coating Resins
  - Chester, SC - Coatex
  - Grand Rapids, MI - Coating Resins
  - North Kansas City, MO - Coating Resins
  - Saint Charles, LA - Coating Resins
  - Saukville, WI - Coating Resins
  - Torrance, CA - Coating Resins

Asia
- Headquarters
  - Arkema Greater China - Shanghai, China
  - Arkema K.K. - Tokyo, Japan
- Technical and R&D Centers
  - Changshu, China - Coatex
  - Guangzhou, China - Sartomer - Coating Resins
  - Kyoto Technical Center, Japan
  - Navi Mumbai, India - Coating Resins
  - Pasir Gudang, Malaysia - Coating Resins
- Production Facilities
  - Changshu, China - Coatex - Coating Resins - Kynar
  - Kunsan, Korea - Coatex
  - Navi Mumbai, India - Coating Resins
  - Pasir Gudang, Malaysia - Coating Resins

*For detailed information, please refer to the original document.*
IMPORTANT: The statements, technical information and recommendations contained herein are believed to be accurate as of the date hereof. Since the conditions and methods of use of the product and of the information referred to herein are beyond our control, Arkema expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information; NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OR MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE CONCERNING THE GOODS DESCRIBED OR THE INFORMATION PROVIDED HEREIN. The information provided within relates only to the specific product designated and may not be applicable when such product is used in combination with other materials or in any process. The user should thoroughly test any application before commercialization. Nothing contained herein constitutes a license to practice under any patent and it should not be construed as an inducement to infringe any patent and the users is advised to take appropriate steps to be sure that any proposed use of the product will not result in patent infringement.

The product data provided in this document are typical values, intended only as guides, and should not be construed as sales specifications.

The products described in the brochure are not Medical grades designated for Medical Device applications. Arkema has implemented an internal Medical Policy regarding the use of Arkema products in Medical Devices applications. Products that have not been designated as Medical grades are not authorized by Arkema for use in Medical Device applications. In addition, except for limited cases as determined by the Medical Device Policy, Arkema strictly prohibits the use of any Arkema products in Medical Device applications that are implanted in the body or in contact with bodily fluids or tissues for greater than 30 days.

For any use of Arkema’s product in Medical Device applications, please contact Arkema’s sales network.