How can EMEROX® Polyols help you improve your flexible foam applications?

EMEROX Polyols are engineered for performance. Our polyols provide formulators, fabricators, and end-users with enhanced properties, increased efficiencies, and sustainability. They are excellent materials for use in manufacturing high quality flexible foams and can also be used in CASE applications.

EMEROX Polyols offer significant benefits in a broad range of ester and ether flexible foam applications. They increase hydrophobicity with minimal hydrolytic degradation and provide excellent aliphatic / aromatic hydrocarbon resistance for ester foams and as supplements for ether foams.

Based on well-established, natural-based feedstocks, EMEROX Polyols for flexible foam applications offer structural similarity to petrochemical polyols, but with high renewable content (80–99%), all while being cost competitive.

<table>
<thead>
<tr>
<th>PRODUCT NAME</th>
<th>HYDROXYL VALUE</th>
<th>VISCOSITY CP @25°C</th>
<th>ACID VALUE</th>
<th>FUNCTIONALITY (CALCULATED)</th>
<th>BIO-BASED CONTENT</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMEROX® 14001</td>
<td>50</td>
<td>2,400</td>
<td>≤ 1.5</td>
<td>1.1</td>
<td>99*</td>
<td>Aliphatic polyester polyol with low viscosity and low functionality. Used as an additive for improved mold flow efficiency. Also for CASE applications.</td>
</tr>
<tr>
<td>EMEROX® 14050</td>
<td>50</td>
<td>9,000</td>
<td>≤ 1.5</td>
<td>2.4</td>
<td>80*</td>
<td>Branched EG azelate polyester polyol. For ester foams with high elongation. Offers improved mechanical properties and bio-content for ether based flexible foams (molded, visco, conventional, HR). Also for CASE applications.</td>
</tr>
<tr>
<td>EMEROX® 14060</td>
<td>60</td>
<td>20,000</td>
<td>≤ 1.5</td>
<td>3.1</td>
<td>82*</td>
<td>Branched EG azelate polyester polyol for ester foams with increased load bearing and / or “clickability” properties. Also for CASE applications.</td>
</tr>
<tr>
<td>EMEROX® 14090</td>
<td>86</td>
<td>5,000</td>
<td>≤ 1.5</td>
<td>2.5</td>
<td>80**</td>
<td>Branched EG azelate polyester polyol with lower MW and lower viscosity for flexible foam and CASE applications.</td>
</tr>
</tbody>
</table>

*USDA Certified Biobased Product.  **Bio-based content is an estimate, pending final testing.
EMEROX® Polyols for Flexible Foams

Key Benefits

Home Furnishing & Comfort Grades
- Conventional Grades
  - Soft, luxurious hand-feel
  - Significant source of bio-content
  - Improved tensile, tear, elongation
  - More hydrophobic
  - Substitute polyol at 10-50%
- Viscoelastic Grades
  - Potential for improved tear strength, aids foam handling
- HR Grades
  - Builds IFD, potentially reducing co-polymer polyol demand

Molded Foams
- Builds IFD, potentially reducing co-polymer polyol demand
- Improved mold flow/filling, especially for MDI systems
- Improved tensile/tear properties to aid in de-molding
- Significant source of bio-content without compromising performance

Ester/Technical Grade Foams
- Enables truly new and unique technical grade foams
- More hydrophobic backbone, but with similar structure
to adipate polyols
- Improved moisture resistance properties
- Improved solvent resistant properties
- Up to 100% of the formulation

To request a sample or to find out more about our EMEROX® Polyols, contact EFP.Americas@emeryoleo.com or visit www.emeryoleo.com/polyols