



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.

PRODUCT NAME	HYDROXYL VALUE	VISCOSITY CP @25°C	ACID VALUE	FUNCTIONALITY (CALCULATED)	BIO-BASED CONTENT	DESCRIPTION
EMEROX® I 4001	50	2,400	≤ 1.5	1.1	99*	Aliphatic polyester polyol with low viscosity and low functionality. Used as an additive for improved mold flow efficiency. Also for CASE applications.
EMEROX® I 4050	50	9,000	≤ 1.5	2.4	80*	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.
EMEROX® I 4055	50	5,000	≤ 2.5	1.4	80*	Branched aliphatic polyester polyol with lower viscosity / functionality.
EMEROX® I 4060	60	20,000	≤ 1.5	3.1	82*	Branched EG azelate polyester polyol for ester foams with increased load bearing and / or "clickability" properties. Also for CASE applications.
EMEROX® I 4090	86	5,000	≤ 1.5	2.5	80**	Branched EG azelate polyester polyol with lower MW and lower viscosity for flexible foam and CASE applications.

*USDA Certified Biobased Product. ** Bio-based content is an estimate, pending final testing.



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

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