

## The Future of Comfort Starts with Chemistry

Polyols are the essential building blocks in polyurethane manufacturing, shaping how comfort products look, feel and perform. And right now, the pressure on those building blocks has never been greater. As furniture and bedding manufacturers navigate tightening sustainability requirements, shifting consumer expectations and supply chain volatility, the chemistry behind comfort products is being asked to do more than ever before.

From plush bedding foams to durable seating applications, polyol chemistry gives manufacturers the ability to fine-tune materials across a wide spectrum of comfort and performance requirements. That flexibility is especially critical in foam applications, where consistent chemistry supports everything from airflow and durability to long-term comfort. Polyol innovation continues to be a key differentiator.

For decades, Dow has helped advance polyurethane technology by developing polyols that balance comfort, durability and performance. Today, that focus continues as manufacturers look for materials that not only perform consistently but deliver dependable results while aligning with evolving market expectations. The future of comfort will be shaped by materials that are thoughtfully designed from start to finish. By combining performance, reliability and circularity, we're helping customers reimagine what's possible across comfort-driven applications.

### How does Dow ensure the high quality and consistency of its polyol products?

Consistency is essential in foam manufacturing, where even small variations in chemistry can affect comfort, durability and processing efficiency. Dow ensures the quality and consistency of our polyols through tightly integrated manufacturing processes, advanced quality control systems and decades of formulation expertise.

Our global production network is designed to deliver reliable supply while maintaining strict standards for batch-to-batch consistency, a key requirement for customers producing high-performance foams for bedding, furniture and other comfort-driven markets. That consistency allows manufacturers to scale production with confidence, knowing the material performance they rely on will remain stable over time.

### Where is Dow directing its innovation efforts in polyol development?

Dow has been developing polyols that allow for more precise foam design. Late last year, we began producing VORANOL™ WK5750, a high-performance cell-opening polyol introduced to support the development of viscoelastic and high-resiliency foams.

Designed to improve airflow and promote a more uniform cell structure, VORANOL™ WK5750 helps enhance breathability, comfort and durability—key attributes for comfort applications such as bedding and furniture. By supporting greater control over foam performance, this polyol helps manufacturers meet evolving consumer expectations for high-performance comfort products.



Two individuals in lab coats hold colorful sponges, one purple and one orange, against a light background.

### How is Dow integrating sustainability within polyol innovation?

Sustainability is increasingly intertwined with performance expectations across polyurethane markets. We take a holistic view of the product lifecycle, focusing on reducing waste, lowering emissions and increasing material resiliency without compromising performance.

In addition to its comfort and performance benefits, VORANOL™ WK5750 is designed with efficiency in mind. Its non-fatty structure can contribute to a lower carbon footprint in foam production by allowing for more efficient use of water and energy during processing. This reflects Dow's broader commitment to advancing materials that support both performance and sustainability, as we continue to expand our portfolio of circular and bio-based polyols for the future.

Across comfort-driven applications, customers are increasingly looking for materials that deliver consistent performance while supporting a more sustainable future. Dow's approach to polyol innovation combines advanced foam chemistry, scalable circular technologies and responsible manufacturing practices to help meet those evolving demands. By pairing precise control over foam performance with circular technologies and traceable supply chains, we're enabling manufacturers to rethink how comfort products are designed, produced and reused – driving progress in durability, waste reduction and lower lifecycle emissions.

### What is Dow's outlook for the polyol market in the coming years?

Downstream comfort markets are facing near-term pressure, with cautious industry outlooks reflecting macroeconomic challenges, reduced discretionary spending and delayed recovery expectations in bedding and furniture through 2026. Mattress consumption remains below historical norms, signaling continued softness in the short term.

Despite these headwinds, global polyol usage in furniture and bedding is expected to see renewed momentum beginning in 2027, with demand projected to grow approximately 5–6% annually through 2032, driven by mattress life-cycle replacement trends emerging in the post-COVID environment. There are also longer-term needs for packaging efficiency, durability and sustainability enhancements within these segments, and polyol innovation will be integral to addressing these evolving requirements.

At Dow, we are advancing polyol technologies that deliver consistent performance, greater foam design control and improved sustainability—helping customers navigate today's market conditions while scaling efficiently as demand rebounds.