Natural Oil Polyols for CASE Applications

Looking to fill a specialty market or get ahead of the competition? Search no further. Dow Polyurethanes is committed to expanding markets and transforming technologies into solutions that help customers differentiate themselves from competitors. Dow Polyurethanes does more than create products—the business develops solutions to satisfy specific customer needs, drawing on more than 50 years of polyurethanes expertise.

Cleaner, Greener Solutions
Dow is building better polyols so you can build better products. Working together, we can build a sustainable future—both environmentally and economically.

With natural oil polyols, you can differentiate your company from your competitors while reducing the impact on the environment. Our soy-based polyols have virtually no odor, contain high levels of renewable content and deliver the performance you expect from Dow.

Dow’s bio-based polyols help to ensure excellent performance and enable you to create products with a very high level of renewable content.
A Clear CASE of Numerous Benefits
Dow’s tailor-made natural polyols offer benefits that cover the entire spectrum of coating, adhesive, sealant & elastomer (CASE) application needs, with high levels of renewable content, reduced environmental impact and exceptional product performance. Our natural oil polyols have virtually no odor, and their low viscosity reduces the need for solvents, resulting in a reduction in volatile organic compounds in your applications. The key benefits Dow’s bio-based polyols bring to your applications include:

- Improved water resistance
- Excellent chemical resistance
- Ease of application, with simplified production processes and reduced labor costs facilitated by the use of low-viscosity liquids at room temperature
- Faster cure times and system cost savings

Summary of CASE Applications for Dow’s Natural Oil Polyols
Dow’s natural oil polyols can be tailored to meet your needs in many of your key CASE applications, including:

- Concrete coatings
- Wood coatings
- Metal coatings
- Plastic coatings
- Melamine-cured coatings
- Waterborne urethanes
- One- and two-component urethane adhesives and sealants
- Binders

Building a Better Polyol
Producing polyurethanes from natural oil sources isn’t a completely new concept, but the way Dow does it is. Our cutting-edge technology breaks down soybean oil and functionalizes it, then uses a distinct process to reconstruct the molecules for greater quality and consistency, building a better polyol.

Some competitors use soybean oil with simple processes to produce one or two natural polyols that don’t provide much advantage over unmodified castor oil, but Dow’s technology gives birth to an enhanced generation of cleaner, greener, performance-based polyols. The distinct chemistry allows Dow—in close collaboration with you—to be a polyol architect, designing polyols with a variety of specifications and attributes that help to achieve consistent performance.

According to life-cycle analysis, the manufacturing of Dow’s natural oil polyols is greenhouse gas neutral and uses 60% less fossil fuel resources than the manufacturing of conventional polyols. These bio-based polyols ensure excellent performance and help you to create products with a high level of renewable content.

A Sustainable Future Is a Better Future
Dow recognizes that the scarcity of petroleum-based resources, growth in population, and the influence of human activity on the future are cause for concern, and that society expects industry to help address these issues. In return, companies that take on this challenge can look forward to a better relationship with the community, greater employee motivation, increased customer loyalty, reduced costs and liabilities, and improved corporate reputation—all of which have a direct or indirect influence on a company’s financial results. Building a sustainable future means building a better future, both environmentally and economically.
Dow Polyurethanes

Polyurethanes, a business group of The Dow Chemical Company, offers a broad product portfolio comprising rigid and flexible foams, coatings, adhesives, sealants and more. Dow Polyurethanes serves a variety of markets, including appliances, automotive, bedding, carpet backing, construction, furniture, packaging and recreation. As a world-leading supplier of innovative polyurethane solutions, Dow Polyurethanes is committed to customer success. This is realized every day through products that meet your quality, consistency and performance needs. It’s shown through on-time delivery and a focus on safety and the environment—and demonstrated through local sales and technical support that help you grow.

Start Collaborating Today

Dow is ready to work with you today, and the sooner we begin collaborating, the quicker you can bring your products to market. Our exceptional process technology and standing as a reliable global supply source help us to provide you with the materials you need for economic and environmental sustainability. In addition, our ongoing research and development promises even more exciting possibilities for tomorrow.

So contact us today to discuss how Dow Polyurethanes’ customized natural polyols can meet your current needs and help you differentiate your product offerings well into the future.

For technical assistance and sampling information, please contact our Customer Information Group (CIG) at:

United States or Canada, (800) 447-4369
Other locations worldwide, U.S.A. (989) 832-1466