Dow Polyurethanes

Components Portfolio for Spray Foam Formulation

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Unlock Performance and Energy Efficiency with Our Solution for Spray Foam Formulation

Formulate with Confidence. Build with Purpose.

At Dow, our portfolio of polyurethane components forms the reliable foundation at the core of your spray foam systems. Our proven polyurethane chemistries are trusted by formulators across North America, thanks to our unwavering commitment to quality control. This dedication extends to our customers, as we understand the daily challenges you face in producing high-quality products while balancing performance, economics, and environmental impact.

Choose the product that's right for you

Dow offers standard and high-performance isocyanates and polyols used in the formulations of open and closed-cell spray foam systems. This guide offers an easy-to-use tool for comparing product features and benefits. Use it to help you select the option that is best for your application. Or talk to your Dow representative about your needs, and together, we can identify a solution to enable optimal product performance at the right price.

More sustainable options to achieve your goals

We're committed to advancing a circular economy and climate protection and supporting your sustainability goals by using alternative feedstocks. We've invested in ISCC PLUS certification to trace the flow of bio-based and recycled materials in our value chain and attribute the benefits to final materials using a mass balance approach. Products are available under the Ecolibrium™ portfolio of products with bio-based material and Renuva™ portfolio of products with recycled material. Reach out to your Dow representative to learn more.

Ecolibrium™ Bio-based materials by Dow

Renuva™ Recovered. Recycled. Renewed. with Dow

Added benefits of working with Dow

- Local Production. Reliable Supply. Strategically located assets across the U.S. to ensure reliable delivery and reduced lead times.
- Decades of Proven Chemistry. Our raw materials have powered spray foam innovation for generations offering high quality, consistency, stability, scalability, and performance.

Let's Build Smarter Together

Whether you're formulating for R-value, density, or improving spray distribution, our materials are designed to meet your performance and processing needs.

VORANOL™ Rigid Polyether Polyols

Sucrose / Glycerin-initiated and engineered for consistency and compatibility across open and closed-cell systems

Product	OH	Functionality	Viscosity cps @77F (25°C)	Features
VORANOL™ 280	280	7	3,311	• Low viscosity • **High functionality to support compression resistance and dimensional stability at low OH levels** • Typically blended with lower functionality polyols • **Supports standard work ratio for polyols and iso**
VORANOL™ 360	360	4.5	3,600	• Low viscosity • Designed to produce both high and low-density rigid polyurethane foams • Can be used alone or in combination with other polyols or fire-retardant agents to achieve desired properties • **Compatible with polymeric isocyanates, which aids in processing high density foams where long cream time (45-60 seconds) is desired** • Reduces foaming reaction of systems due to high humidity • Provides uniform foam properties and improves adhesion to substrates
VORANOL™ 370	370	7.0	30,580	• Used when high strength to density ratio is required • **Enables high degree of crosslinking that provides excellent dimensional stability under both humid aging and dry heat aging conditions** • Is suitable for production of both high and low-density foams
VORANOL™ 490	490	4.3	5,500	• Can be used alone or in combination with other polyols or fire-retardant agents to achieve various degrees of crosslinking • Compatible with many types of isocyanates • **Results in foams with excellent K-factors to flowability relationships**

VORANOL™ Mannich Polyols

Engineered for consistency and compatibility to help you deliver on desired reactivity and fire performance across open and closed-cell systems

Product	OH	Functionality	Viscosity cps @77F (25°C)	Features
VORANOL™ 470x	470	4	8,000	• Aminic polyol used to reduce required catalyst level in formulas • Enables a fast-curing profile
VORANOL™ 425 xl	425	4	1,700	• Enables a fast-curing profile • **A low viscosity grade that** offers exceptional formulating flexibility – enabling production of a wide range of low-to high-density foams • Autocatalytic and provides superior dimensional stability and strength and promotes cold surface adhesion

VORANOL™ High Molecular Weight (MW) Polyether Polyols

Engineered to consistently deliver on requirements of open-cell systems

Product	OH	Functionality	Viscosity cps @100F (25°C)	Features
VORANOL™ 4701	34	3	435	• A high reactivity capped polyether triol with high molecular weight and high primary hydroxyl content
VORANOL™ 2000 LM	34	2	200	• Low-monol diol usually used to improve tensile strength and elongation in the final application compared to standard polyether • Excellent consistency in reactivity due to precise control of functionality, OH content, water content, and basicity
VORANOL™ CP 6001	27.5	3	1130	• A triol polyether polyol, capped, 6000 MW. • It can be used in the production of semi-rigid foams as well as in the production of cold cure molded foams andhigh resilience molded.

VORANOL™ Sorbitol Based Polyether Polyols

A general-purpose base polyol, used in various rigid foam applications

Product	OH	Functionality	Viscosity cps @100F (25°C)	Features
VORANOL™ RN 482	475	4	35,000	• Sorbitol initiated propoxylated polyol of low molecular weight especially developed to produce rigid polyurethane foams. • Offers very high functionality providing high dimensional stability in the end products.

PAPI™ Polymeric MDI

High-purity isocyanates designed for optimal reactivity and foam structure

Product	OH	Functionality	Viscosity cps @100F (25°C)	Features
PAPI™ 27	31.4	2.7	180	• A polymethylene polyphenylisocyanate that contains MDI • Narrow molecular weight distribution and a high reactivity
PAPI™ 17	31.5	2.7	180	• Low-viscosity liquid MDI for faster reactivity • Improved aesthetics enabling bright white foams

Let's Build Smarter Together

From Freeport to your facility, our local assets and expert teams are here to support your formulations with reliable chemistry, innovative thinking and unmatched service.

Learn More Here

Scan the QR code to explore Dow's Spray Foam solutions.

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Call 800 447 4369

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*Toll free service not available in all countries

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