

Product Overview

VORASIL™ Silane Modified Polymers – A Breakthrough in Adhesive & Sealant Polymer Performance Solutions









VORASIL™ Silane Modified Polymers are a family of moisture-curable hybrid polymers comprised of polyurethane backbone and silane end groups. When using VORASIL Silane Modified Polymers, adhesive and sealant manufacturers can change backbones to achieve different targeted performance results – and achieve silicone-like performance without the high-end silicone cost.

VORASIL™ Silane Modified Polymers are created with a unique, proprietary process that allows for reproducible, tunable final properties, without compromise, providing manufacturers with unprecedented freedom of design. Silylation of any selected backbone allows tailoring of hydrophobicity, mechanical performance, UV stability and weatherability.

Sustainable Solutions: A Tailored Blend of Advantages

- Unique hybrid Combines the advantages of polyurethane backbones with the curing of silane end groups
- Excellent balance Low viscosity and fast ambient cure for easy processing and formulation latitude
- Versatile Formulated systems provide a wide breadth of mechanical properties for specific application needs, including low compression sets
- Easy to handle Handling and sustainability advantages over conventional options
- Proven performance Rigorously tested and validated with adhesive and sealant customers

Property Comparison

VORASIL™ 602 SMP is a low-modulus, high-elongation resin now available for sampling and broad validation testing. VORASIL™ 604 SMP is a medium modulus resin now available for sampling. Blending the two provides a wide breadth of properties and allows for performance "dialing in" for adhesive and sealant applications.

Tensile Properties (D1708)

Туре	Secant Modulus (psi)	Elongation at Break (%)	Tensile Strength (psi)	Curing Speed (hours, D5895)	Viscosity (Pa.s, AR 2000 @ 25 °C)	Water Uptake (%m 100°C, 7 days)
VORASIL 602	20-30	275-450	50-85	3-5	18-24	4±0.5
VORASIL 604	65-100	100-250	100-150	1.5-3.5	8-14	

In all cases, (DXXXX) refers to ASTM utilized

Innovating For You

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