

# SPUR+\* 1060 Prepolymer



MARKETING BULLETIN

SILANES - ADHESIVES & SEALANTS ADDITIVES

SPUR+ 1060 prepolymer is a plasticizer-free, ethoxysilane-modified resin used in the manufacture of one-part moisture-curing adhesives and sealants. It is an excellent material of choice as a base resin for medium modulus adhesives and sealants that serve a range of applications, particularly where HAPs emissions are a significant factor.

## Key Features and Typical Benefits

- Broad formulation latitude
- Excellent adhesion to many substrates
- High durability indoors and outdoors
- Good water and chemical resistance
- High elastic recovery

Silane-terminated polyurethanes (SPUR+ prepolymers) have become increasingly attractive to manufacturers of adhesives, sealants and coatings. SPUR+ 1060 prepolymer's hybrid technology combines the advantages of a silane-curing mechanism and a polyurethane backbone, allowing sealant and adhesive formulations to offer room-temperature cure and good durability, without the liberation of methanol or a dependence on an isocyanate cure.

## Typical Physical Properties

Property	Value
Viscosity, 25 °C	13,000 - 20,000 mPa·s
Appearance, 25 °C	Clear
Hardness Shore A after 7d cure	~ 34
Modulus at 50% ex (MPa)	~ 0.5 - 0.6

Typical properties are average data and are not to be used as or to develop specifications.

**Example of Medium Modulus SPUR+ 1060 Prepolymer Based Sealant Formulation**

	Wt
SPUR+ 1060 prepolymer	21
Silquest* A-151 silane	0.5
Ground Calcium Carbonate	55
Plasticizer	19.2
Fumed Silica	2
Hindered Amine Light Stabilizer/UV Absorber (1/1)	0.21
Silquest A-1100 silane	0.7
Niax* catalyst LC-5659	0.9
DBU	0.5
TOTAL	100.0
Skin Formation [ Hr:min ]	3:45

Product formulations are included as illustrative examples only. Momentive makes no representation or warranty of any kind with respect to any such formulations, including, without limitations, concerning the efficacy or safety of any product manufactured using such formulations.

**Mechanical Properties after 1 week 23 °C / 50% RH**

Tensile Strength at Break (MPa)	1.87 (271 psi)
Elongation at Break (%)	301
Modulus at 100% Mpa (psi)	1.44 (209 psi)
Hardness Shore A	45
Tear Strength (N/mm)	9.52 (54 lbf/in)
Elastic Recovery Dog Bone [ % ]	94%

Note: Test results. Actual results may vary.

The mechanical properties were measured after curing the sealant for 1 week at 23 °C/50% relative humidity and then tested according to ISO 37 for tensile strength and elongation, ISO 8339 for modulus, ISO 868 for hardness and ASTM D 624 B for tear strength.

## Patent Status

Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute the permission, inducement or recommendation to practice any invention covered by any patent, without authority from the owner of the patent.

## Product Safety, Handling and Storage

Customers should review the latest Safety Data Sheet (SDS) and label for product safety information, safe handling instructions, personal protective equipment if necessary, emergency service contact information, and any special storage conditions required for safety. Momentive Performance Materials (MPM) maintains an around-the-clock emergency service for its products. SDS are available at [www.momentive.com](http://www.momentive.com) or, upon request, from any MPM representative. For product storage and handling procedures to maintain the product quality within our stated specifications, please review Certificates of Analysis, which are available in the Order Center. Use of other materials in conjunction with MPM products (for example, primers) may require additional precautions. Please review and follow the safety information provided by the manufacturer of such other materials.

## Limitations

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