

Silquest* A-Link* 235 silane

Product Description

Silquest A-Link 235 silane is an amino-functional oligosiloxane adhesion promoter used in a broad range of adhesive, coating and sealant applications. In addition to adhesion promotion, it can also modify the physical properties of hybrid and RTV sealants by increasing strength and elasticity, while decreasing residual surface tack of the final cured product, as well as reduce yellowing in sealant formulations.

Key Features and Typical Benefits

In hybrid, polyurethane and RTV silicone sealants and adhesives:

- Multi amino functionality for improved adhesion especially under wet conditions
- Excellent reactivity
- Low levels of octamethylcyclotetrasiloxane and decamethylcyclopentasiloxane (D4, D5)
- Excellent elasticity and elastic recovery in support of advanced ISO 11600 classification
- Low sealant residual surface tack

In filled and unfilled oxime silicone sealants:

- Multi amino functionality for improved adhesion especially under wet conditions
- Manufactured without the use of MEKO to support MEKO free formulations
- Advanced reactivity
- Excellent elasticity and elastic recovery in support of advanced ISO 11600 classification
- Low sealant residual surface tack

Typical Physical Properties

Appearance	Pale yellow liquid
Flash Point (closed cup) ASTM D56	130 °C (266 °F)
Boiling Point (1013 hPa)	>300 °C (>572 °F)
Density (20 °C) DIN 51757	0.98 g/cm ³
Viscosity (23 °C)	10-60 mPa·s

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

Silquest* A-Link* 235 silane

Adhesion in Peel Performance of SPUR+* Prepolymer-Based Sealant

The following sample sealant formulation was used to evaluate the performance characteristics of Silquest A-Link 235 silane.

	wt%
SPUR+ 1015LM prepolymer ⁽¹⁾	23.00
Plasticizer	18.35
Fumed Silica	1.15
TiO ₂	1.08
GCC treated with stearate	55.00
UV stabilizer	0.23
HALS	0.23
Adhesion Promoter: Silquest A-1110 silane or Silquest A-Link 235 silane	0.57
Silquest A-171* silane	0.34
Fomrez [†] SUL-4	0.06
	100.01

(1) SPUR+1015 LM pre-polymer is available from Momentive Performance Materials.

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 limitation, concerning the efficacy or safety of any product manufactured using such formulations.

The physical properties of the one-part SPUR+ prepolymer-based sample sealant using Silquest A-Link 235 silane were measured (see table below), with the results indicating better performance of the Silquest A-Link 235 sample sealant on aluminum and smooth mortar under wet conditions compared to the sample sealant utilizing Silquest A-1110 silane (aminopropyltrimethoxysilane).

Sample Sealant Formulation Physical Property Evaluation

Adhesion Promoter	Silquest A-1110 Silane	Silquest A-Link 235 Silane
Skin Time (min)	60	60
Tensile Strength at Break (MPa) (psi)	1.10MPa (160psi)	1.25MPa (181psi)
Elongation at Break (%)	457	605
Tensile Modulus at 100% (MPa) (psi)	0.67MPa 97psi	0.62MPa 90psi
Shore A Hardness	26	23
Tear Resistance (N/mm) (lbs/in)	5.8N/mm (33lbs/in)	4.6N/mm (26lbs/in)
Elastic Recovery (dumbbell)	96%	96%
Substrate (CF% = cohesive failure)		
Aluminum	20	100
Glass	100	100
Stainless Steel	100	100
Mortar Smooth M1 Dry	100	100
Mortar Smooth M1 after Waterimmersion	AF	20

Note: Test data. Actual results may vary.

Silquest* A-Link* 235 silane

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 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

Customers must evaluate Momentive Performance Materials products and make their own determination as to fitness of use in their particular applications.

Contact Information

Email

commercial.services@momentive.com

Telephone

Americas

+1 800 295 2392

+1 614 986 2495

**Europe, Middle East,
Africa and India**

00800 4321 1000

+40 213 044229

Asia Pacific

China

800 820 0202

Japan

+81 276 20 6182

All Other Countries

+60 3 9206 1543

For literature and technical assistance, visit our website at: www.momentive.com

DISCLAIMER:

THE MATERIALS, PRODUCTS AND SERVICES OF MOMENTIVE PERFORMANCE MATERIALS INC. AND ITS SUBSIDIARIES AND AFFILIATES (COLLECTIVELY "SUPPLIER"), ARE SOLD SUBJECT TO SUPPLIER'S STANDARD CONDITIONS OF SALE, WHICH ARE INCLUDED IN THE APPLICABLE DISTRIBUTOR OR OTHER SALES AGREEMENT, PRINTED ON THE BACK OF ORDER ACKNOWLEDGMENTS AND INVOICES, AND AVAILABLE UPON REQUEST. ALTHOUGH ANY INFORMATION, RECOMMENDATIONS, OR ADVICE CONTAINED HEREIN IS GIVEN IN GOOD FAITH, SUPPLIER MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, (i) THAT THE RESULTS DESCRIBED HEREIN WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (ii) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN INCORPORATING ITS PRODUCTS, MATERIALS, SERVICES, RECOMMENDATIONS OR ADVICE. EXCEPT AS PROVIDED IN SUPPLIER'S STANDARD CONDITIONS OF SALE, SUPPLIER AND ITS REPRESENTATIVES SHALL IN NO EVENT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS MATERIALS, PRODUCTS OR SERVICES DESCRIBED HEREIN. Each user bears full responsibility for making its own determination as to the suitability of Supplier's materials, services, recommendations, or advice for its own particular use. Each user must identify and perform all tests and analyses necessary to assure that its finished parts incorporating Supplier's products, materials, or services will be safe and suitable for use under end-use conditions. Nothing in this or any other document, nor any oral recommendation or advice, shall be deemed to alter, vary, supersede, or waive any provision of Supplier's standard Conditions of Sale or this Disclaimer, unless any such modification is specifically agreed to in a writing signed by Supplier. No statement contained herein concerning a possible or suggested use of any material, product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right of Supplier covering such use or design, or as a recommendation for the use of such material, product, service or design in the infringement of any patent or other intellectual property right.

***Silquest, A-Link, SPUR⁺, Silquest A-171, Momentive and the Momentive logo are trademarks of Momentive Performance Materials Inc.**



260 Hudson River Road
Waterford, NY 12188 USA
momentive.com