SILQUEST* A-174NT silane

SILANES - ADHESIVES & SEALANTS ADDITIVES

Key Features and Typical Benefits

<table>
<thead>
<tr>
<th>Feature</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methacryloxy Functionality</td>
<td>▪ May be suitable for use in free radical cure adhesives and sealants based upon resin systems such as polyesters, polyurethanes, acrylics, and many thermoplastics such as PVC, polyolefins and polyurethanes.</td>
</tr>
</tbody>
</table>
| Methoxy Silane Functionality | ▪ Bonds to inorganic substrates to provide excellent wet and dry adhesion.  
                                  ▪ Fast hydrolysis rate. |

May be copolymerized with vinyl acetate, vinyl chloride, acrylates, or methacrylate monomers to yield a moisture curable silylated polymer. Such polymers may be incorporated into adhesive and sealant systems to enhance adhesion to substrates such as glass, metal and some plastics. (See SPUR+* prepolymer-based technology literature for additional ideas regarding the benefits of silane crosslinked polymer chemistry).

May result in the enhancement of strength performance, both initially and after wet conditioning, of glass, silica, silicate, and metal oxide filled polyester resin systems.

May improve the wet electrical performance of many mineral-filled thermoplastic materials such as crosslinked polyethylene and polyvinylchloride.

Typical Physical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear light straw liquid</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>248.1</td>
</tr>
<tr>
<td>Specific Gravity at 25/25°C</td>
<td>1.045</td>
</tr>
<tr>
<td>Refractive Index nD 25°C</td>
<td>1.429</td>
</tr>
<tr>
<td>Flash Point, Tag Closed Cup, °C (°F)</td>
<td>108 (226)</td>
</tr>
<tr>
<td>Boiling Point, °C (°F)</td>
<td>255 (491)</td>
</tr>
</tbody>
</table>

*Silquest and SPUR+ trademark of Momentive Performance Materials Inc.*
Commercial Status

Silquest A-174NT silane is commercially available. Contact your sales or customer service representative to enter a sample request, or place an order.

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 considering the use of this product should review the latest Material Safety Data Sheet and label for product safety information, handling instructions, personal protective equipment if necessary, and any special storage conditions required. Material Safety Data Sheets are available at www.momentive.com or, upon request, from any Momentive Performance Materials representative. Use of other materials in conjunction with Momentive Performance Materials products 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.

*Silquest is a trademark of Momentive Performance Materials Inc.*
Emergency Service

Momentive Performance Materials maintains an around-the-clock emergency service for its products. The American Chemistry Council (CHEMTREC) and CareChem24 International also maintain an around-the-clock emergency service for all chemical products:

<table>
<thead>
<tr>
<th>Location</th>
<th>Momentive Performance Materials Products</th>
<th>All Chemical Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mainland U.S., Puerto Rico</td>
<td>518.233.2500</td>
<td>CHEMTREC: 800.424.9300</td>
</tr>
<tr>
<td>Alaska, Hawaii</td>
<td>518.233.2500</td>
<td>CHEMTREC: 800.424.9300</td>
</tr>
<tr>
<td>Canada</td>
<td>518.233.2500</td>
<td>CHEMTREC: 800.424.9300</td>
</tr>
<tr>
<td>Europe</td>
<td>+518.233.2500</td>
<td>+44.(0)208.762.8322 (UK)</td>
</tr>
<tr>
<td></td>
<td>(Albanian, Czech, Danish, Dutch, English, Finnish, French, German, Greek, Hungarian, Italian, Lithuanian, Norwegian, Polish, Portuguese, Romanian, Russian, Serbo-Croatian, Slovak, Spanish, Swedish, Turkish, Ukrainian)</td>
<td></td>
</tr>
<tr>
<td>Middle East, All countries, except Israel</td>
<td>+518.233.2500</td>
<td>+961.3.487.287 (Lebanon)</td>
</tr>
<tr>
<td>Middle East, Israel</td>
<td>+518.233.2500</td>
<td>+44.(0)208.762.8322 (UK)</td>
</tr>
<tr>
<td>Latin America, Asia/Pacific, all other locations worldwide</td>
<td>+518.233.2500</td>
<td>CHEMTREC: +1-703.527.3887 (collect)</td>
</tr>
<tr>
<td>At sea</td>
<td>Radio U.S. Coast Guard, which can directly contact Momentive Performance Materials at 518.233.2500 or CHEMTREC at 800.424.9300.</td>
<td></td>
</tr>
</tbody>
</table>

DO NOT WAIT. Phone if in doubt. You will be referred to a specialist for advice.
CUSTOMER SERVICE CENTERS

North America  E cs-na.silicones@momentive.com

- Specialty Fluids  T +1.800.523.5862  F +1.304.746.1654
- UA, Silanes and Specialty Coatings  T +1.800.334.4674  F +1.304.746.1623
- RTVs and Elastomers  T +1.800.332.3390  F +1.304.746.1623
- Consumer Sealants & Construction  T +1.877.943.7325  F +1.304.746.1654
- Sealants and Adhesives

Latin America  E cs-la.silicones@momentive.com

- Argentina & Chile  T +54.11.4862.9544  F +54.11.4862.9544
- Brazil  T +55.11.4534.9660  F +55.11.4534.9660
- Mexico & Central America  T +52.55.2169.7670  F +52.55.2169.7699
- Venezuela, Ecuador, Peru, Colombia & Caribbean

Europe, Middle East, Africa and India  E cs-eur.silicones@momentive.com T +00.800.4321.1000

- Argentina & Chile  T +54.11.4862.9544  F +54.11.4862.9544
- Brazil  T +55.11.4534.9660  F +55.11.4534.9660
- Mexico & Central America  T +52.55.2169.7670  F +52.55.2169.7699
- Venezuela, Ecuador, Peru, Colombia & Caribbean

Pacific  E cs-ap.silicones@momentive.com

- China  T +1.800.820.0202 or F +86.21.5079.3725
- Japan  T +0120.975.400 or F +81.276.31.6259
- Korea  T +82.2.6201.4600  F +82.2.6201.4601
- Malaysia  T +60.3.9206.1532  F +60.3.9206.1533
- Thailand  T +662.207.3456  F +66.2207.3488

Worldwide Hotline  T +1.607.786.8131  F +1.607.786.8309

Visit us at Momentive.com

Momentive Performance Materials
22 Corporate Woods Boulevard
Albany, NY 12211

* Silquest and SPUR* are trademarks of Momentive Performance Materials Inc.
Momentive is a trademark of Momentive Performance Materials Holdings LLC.
Copyright 2003-2011 Momentive Performance Materials Inc. All rights reserved.

THE MATERIALS, PRODUCTS AND SERVICES OF MOMENTIVE PERFORMANCE MATERIALS INC., MOMENTIVE PERFORMANCE MATERIALS USA INC., MOMENTIVE PERFORMANCE MATERIALS ASIA PACIFIC PTE. LTD., MOMENTIVE PERFORMANCE MATERIALS WORLDWIDE INC., MOMENTIVE PERFORMANCE MATERIALS GmbH, THEIR SUBSIDIARIES AND AFFILIATES DOING BUSINESS IN LOCAL JURISDICTIONS (collectively “SUPPLIERS”), ARE SOLD BY THE RESPECTIVE LEGAL ENTITY OF THE SUPPLIER SUBJECT TO SUPPLIERS’ 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, SUPPLIERS MAKE 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 SUPPLIERS’ PRODUCTS, MATERIALS, SERVICES, RECOMMENDATIONS OR ADVICE. AFOREMENTIONED EXCLUSIONS OR LIMITATION OF LIABILITY ARE NOT APPLICABLE TO THE EXTENT THAT THE END-USE CONDITIONS AND/OR INCORPORATION CONDITIONS CORRESPOND TO THE RECOMMENDED CONDITIONS OF USE AND/OR OF INCORPORATION AS DESCRIBED BY SUPPLIER IN ITS PRODUCT DATA SHEET AND/OR PRODUCT SPECIFICATIONS, EXCEPT AS PROVIDED IN SUPPLIERS’ STANDARD CONDITIONS OF SALE, SUPPLIERS AND THEIR 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 Suppliers’ 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 Suppliers’ 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 Suppliers’ Standard Conditions of Sale or this Disclaimer, unless any such modification is specifically agreed to in a writing signed by Suppliers. 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 Suppliers or any of its subsidiaries or affiliates 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.