# Momentive Performance Materials

# Silquest A-174\* Silane

## **Product Description**

Momentive Performance Materials Silquest A-174 silane is employed in adhesive and sealant systems cured via a free radical mechanism, such as polyesters, polyurethanes, acrylics, and many thermoplastics such as PVC, polyolefins and polyurethanes.

# Key Features and Typical Benefits

Feature	Benefit
Methacryloxy Functionality	<ul> <li>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.</li> </ul>
Methoxy Silane Functionality	<ul><li>Bonds to inorganic substrates to provide excellent wet and dry adhesion.</li><li>Fast hydrolysis rate.</li></ul>

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 enhnacement of strength performance, both initially and after wet conditioning, of glass, silica, silicate, and metal oxide filled polyester resin systems.

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

Momentive Performance Materials provides versatile materials as the starting point for our creative approach to ideas that help enable new developments across hundreds of industrial and consumer applications. We are helping customers

solve product, process, and performance problems; our silanes, fluids, elastomers, sealants, resins, adhesives, urethane additives, and other specialty products are delivering innovation in everything from car engines to biomedical devices.

From helping to develop safer tires and keeping electronics cooler, to improving the feel of lipstick and ensuring the reliability of adhesives, our technologies and enabling solutions are at the frontline of innovation.



# **Typical Physical Properties**

Appearance	Clear light straw liquid
Molecular Weight	248.1
Specific Gravity at 25/25°C	1.045
Refractive Index n <sub>D</sub> 25°C	1.429
Flash Point, Tag Closed Cup, °C (°F)	108 (226)
Boiling Point, °C (°F)	255 (491)

# **Commercial Status**

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

# **Chemical Structure**

$$\begin{tabular}{c|c} O & OCH_3 \\ \parallel & \mid \\ CH_2 = CCOCH_2CH_2CH_2 - Si - OCH_3 \\ \mid & \mid \\ CH_3 & OCH_3 \end{tabular}$$

Gamma-Methacryloxypropyltrimethoxy 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 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 <a href="https://www.momentive.com">www.momentive.com</a> or, upon request, from any Momentive Performance Materials representative. Use of other materials in conjunction with Momentive Performance Materials 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.

#### **Emergency Service**

Momentive Performance Materials maintains an around-the-clock emergency service for its products. The American Chemistry Council (CHEMTREC), Transport Canada (CANUTEC), and the Chemical Emergency Agency Service also maintain an around-the-clock emergency service for all chemical products:

Location	Momentive Performance Materials Products	All Chemical Products
Mainland U.S., Puerto Rico	518.233.2500	CHEMTREC: 800.424.9300
Alaska, Hawaii	518.233.2500	CHEMTREC: 800.424.9300
Canada	518.233.2500	CANUTEC: 613.996.6666 (collect) or CHEMTREC: 800.424.9300
Europe, Middle East, Africa	+32.(0)14.58.45.45 (Belgium)	CHEMTREC: +1-703.527.3887 (collect)
Latin America, Asia/Pacific, all other locations worldwide	+518.233.2500	CHEMTREC: +1-703.527.3887 (collect)
At sea	Radio U.S. Coast Guard, which can directly contact Momentive Performance Materials at 518.233.2500 or CHEMTREC at 800.424.9300.	

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

# **Principal Locations**

Regional Information	Phone	Fax
North America World Headquarters 187 Danbury Road		
Wilton, CT 06897, USA	800.295.2392	607.754.7517
<b>Latin America</b> Rodovia Eng. Constâncio Cintra, Km 78,5 Itatiba, SP – 13255-700 Brazil	+ 55.11.4534.9650	+ 55.11.4534.9660
Europe, Middle East, Africa and India Leverkusen Germany	00.800.4321.1000 + 31.164.293.276	+ 31.164.241750
Pacific Akasaka Park Building 5-2-20 Akasaka	01.2 5544.2100	01.2 5544.2404
Minato-ku, Tokyo 107-6112 Japan	+ 81.3.5544.3100	+ 81.3.5544.3101
Customer Service Centers  North America Charleston, WV 25314, USA	Specialty Fluids 800.523.5862	304.746.1654
E-mail: <u>cs-na.silicones@momentive.com</u>	UA, Silanes, Resins, and Specialties 800.334.4674 304.746.1623	
	RTV Products-Elastomers 800.332.3390	304.746.1623
	Sealants and Adhesives and Construction 877.943.7325	304.746.1654
Latin America Argentina and Chile Brazil Mexico and Central America Venezuela, Ecuador, Peru, Colombia, and Caribbean E-mail: cs-la.silicones@momentive.com	+ 54.11.4862.9544 + 55.11.4534.9650 + 52.55.5899.5135 + 58.212.285.2149	+ 54.11.4862.9544 + 55.11.4534.9660 + 52.55.5899.5138 + 58.212.285.2149
Europe, Middle East, Africa and India E-mail: cs-eur.silicones@momentive.com	00.800.4321.1000 +31.164.293.276	+ 31.164.241750
Pacific E-mail: cs-ap.silicones@momentive.com Japan China Korea Singapore	+ 81.276.20.6182 + 86.21.5050.4666 (ext. 1523) + 82.2.6201.4600 + 65.6220.7022	
Worldwide Hotline 800.295.2392 Worldwide Web	+ 607.786.8131 www.momentive.com	+ 607.786.8309

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