Silquest® A-174NT

Description

Momentive Performance Materials Silquest A-174NT silane is a methacryloxy functional trimethoxy silane that finds utility in coating, composite and adhesive and sealant systems that cure via a free radical mechanism.

Key Features and 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 n&lt;sub&gt;D&lt;/sub&gt; 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>

**Chemical Structure**

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\[
\begin{array}{c}
  \text{O} \\
  \text{CH}_2 = \text{CCOCH}_2\text{CH}_2\text{CH}_2 - \text{Si} - \text{OCH}_3 \\
  \text{CH}_3 \\
  \text{OCH}_3 \\
\end{array}
\]
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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.

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

Contact Information
For product prices, availability, or order placement, contact our customer service at Momentive.com/CustomerService/

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

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