

SNAPSIL* TN3005

silicone adhesive sealant

ENGINEERED MATERIALS







SnapSil TN3005 silicone adhesive sealant is a one-component, low volatile siloxane that cures at room temperature upon exposure to atmospheric moisture, and exhibits primerless adhesion to many substrates.

Key Features and Typical Benefits

- Fast tack-free time
- Low volatility
- Non-corrosive to most metals
- Primerless adhesion to many substrates

Typical Physical Properties		(JIS K 6249)
Uncured Properties (23 °C, 50%RH)		
Appearance		Thixotropic paste, clear, white, black
Tack-free Time	min	7
Cured Properties (3 days @ 23 °C, 50%RH)		
Appearance		Elastic rubber, clear, white, black
Density (23 °C)	g/cm³	1.04
Hardness (Type A)		22
Tensile Strength	MPa	1.8
Elongation	%	330
Adhesion Strength ⁽¹⁾	MPa	1.2
Volatile Siloxane ⁽²⁾ (D ₃ -D ₁₀)	wt%	0.01
Volume Resistivity	Ω•cm	2.0x10 ¹⁵
Dielectric Strength	kV/mm	26
Dielectric Constant (60Hz)		2.7
Dissipation Factor (60Hz)		0.002
Impurities ⁽²⁾ ppm	Na ⁺	<2
	K ⁺	<2
	CI ⁻	<2

⁽¹⁾ Glass lap shear, 7 days @ 23 °C, 50%RH

⁽²⁾ In-house test method

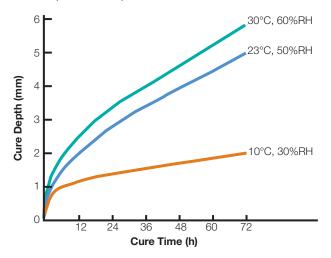
Typical properties are average data and are not to be used as or to develop specifications.

Potential Applications

- Insulating adhesive seal and fixing for electrical and electronic parts
- Waterproof sealant for electrical, electronic and communication equipment
- General adhesive for metal, glass, plastics, etc.

Cure Profile

SnapSil TN3005 silicone adhesive sealant cures upon exposure to atmospheric moisture, and its cure speed is affected by humidity and temperature. The material begins to cure from the sections that are exposed to the atmosphere and, therefore, greater time is required for the cure to extend to deeper sections. The typical cure depth of SnapSil TN3005 silicone adhesive sealant at various combinations of humidity and temperature are provided below.



Adhesion Performance

SnapSil TN3005 silicone adhesive sealant adheres to a wide variety of substrates used in electronic components. The following matrix depicts adhesion performance to typical substrates. However, actual performance may vary depending on the substrate manufacturer or grade.

Substrate		
Aluminum	0	
Copper	0	
Steel	0	
Stainless Steel	0	
Acrylic resin	0	
Phenolic resin	0	
Epoxy resin	0	
PET	0	
ABS	0	
PBT	0	
PPS	0	
PVC	0	
Nylon	0	
Polycarbonate	0	
PPO	0	
Polyethylene	Х	
Polytetrafluoroethylene	Х	
Glass	0	

O:Good (cohesive failure)

Packaging

- 100g tube
- 333ml cartridge
- 18kg pail

X: Adhesive failure

SNAPSIL* TN3005 silicone adhesive sealant

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 Material Safety Data Sheet (MSDS) 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. MSDS 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.

Customer Service Centers

Email

4information@momentive.com

Telephone

Americas

+1 800 295 2392

+1 614 986 2495

Europe, Middle East, Africa and India +00 800 4321 1000 +40 212 534754 Asia Pacific China

+800 820 0202

Japan

+81 276 20 6182

All Other Countries +60 3 9206 1543

To find a specific language, visit the Contact Us page at Momentive.com. You may select a country to view additional languages and the corresponding telephone numbers.

For email inquiries, we will make every attempt to respond in the incoming written language. If that is not possible, we will respond in English.

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.

*SnapSil is a trademark of Momentive Performance Materials Inc.

 $\label{thm:momentive} \mbox{Momentive logo are trademarks of Momentive Performance Materials Inc.}$



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