

SNAPSIL* TN3005

ENGINEERED MATERIALS - CONSUMER ELECTRONICS



SnapSil TN3005 is a one-component, low volatile siloxane, silicone adhesive sealant 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
- low odor cure: releases an alcohol vapor during cure

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/cm ³	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
	Cl ⁻	<2

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

(2) In-house test method

Typical property data values should not be used as specifications.

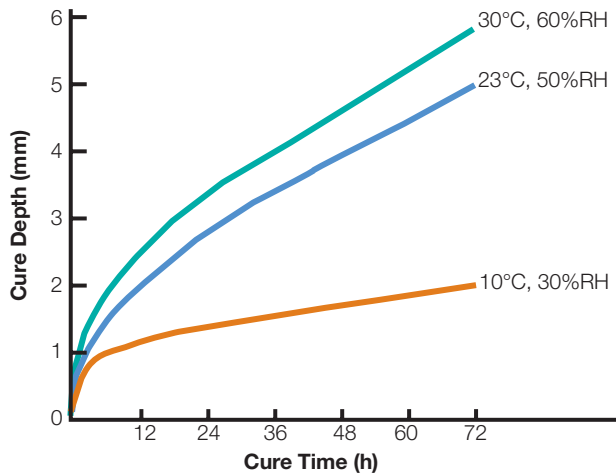
SNAPSIL* TN3005 fast cure silicone adhesive sealant

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 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	O
Copper	O
Steel	O
Stainless Steel	O
Acrylic resin	O
Phenolic resin	O
Epoxy resin	O
PET	O
ABS	O
PBT	O
PPS	O
PVC	O
Nylon	O
Polycarbonate	O
PPO	O
Polyethylene	X
Polytetrafluoroethylene	X
Glass	O

O: Good (cohesive failure)
X: Adhesive failure

Packaging

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

*SnapSil is a trademark of Momentive Performance Materials Inc.

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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.

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:

<u>Location</u>	<u>Momentive Performance Materials Products</u>	<u>All Chemical Products</u>
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	CHEMTREC: 800.424.9300
Europe	+518.233.2500 (Albanian, Czech, Danish, Dutch, English, Finnish, French, German, Greek, Hungarian, Italian, Lithuanian, Norwegian, Polish, Portuguese, Romanian, Russian, Serbo-Croatian, Slovak, Spanish, Swedish, Turkish, Ukrainian)	+44.(0)208.762.8322 (UK)
Middle East,		
All countries, except Israel	+518.233.2500	+961.3.487.287 (Lebanon)
Middle East, Israel	+518.233.2500	+44.(0)208.762.8322 (UK)
Latin America, Asia/Pacific,	+518.233.2500	CHEMTREC: +1-703.527.3887 (collect)
all other locations worldwide		
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.