

SNAPSIL™ TN3405

Silicone Encapsulant Adhesive

Description

TN3405 is a one-component, low volatile silicone adhesive sealant that cures at room temperature upon exposure to atmospheric moisture, and exhibits primerless adhesion to a many substrates..

Key Features and Typical Benefits

- Fast tack-free time
- Low Volatility
- Primerless adhesion to many substrates
- Low odor cure: releases an alcohol vapor during cure

Typical Physical Properties

Criteria		Properties
Appearance		Flowable, clear color
Viscosity	Pa.s	30
Tack-free Time (23C)	Min	7
Cured Properties (3 days @23C, 50%RH)		
Appearance		Clear elastic rubber
Density (23°C)	g/cm ³	1.02
Hardness (Type A)		17
Tensile Strength	MPa	1.3
Elongation	%	260
Adhesion Strength ¹	MPa	0.8
Volatile Siloxane ² (D ₃ -D ₁₀)	Ppm	100
Volume Resistivity	Ω.cm	2.0 x 10 ¹⁵
Dielectric Strength	kV/mm	25
Dielectric Constant (60Hz)		2.7
Dissipation Factor (60Hz)		0.01
Impurities ² (Na ⁺ , K ⁺ , Cl ⁻)	Ppm	each <2

*1 glass lap shear, 7 days @ 23C, 50%RH *2: In-house test method

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

Packaging

333ml cartridge

Adhesion Performance

TN3405 adheres to a wide variety of substrates used in electronic components. The following table depicts adhesion performance to typical substrates. Actual performance may vary depending on the substrate manufacturer or grade.

Substrate	
Aluminum	○
Copper	○
Phenolic resin	○
Epoxy resin	○
Polyester	○
ABS	○
Nylon	○
Polycarbonate	○
PPO	○
Polyethylene	X
Polytetrafluoroethylene	X
Glass	○

○: Good (cohesive failure) X: Adhesive failure

General Considerations for Use

While the typical operating temperature for silicone materials ranges from -45°C to 200°C, the long-term maintenance of its initial properties is dependent upon design related stress considerations, substrate materials, frequency of thermal cycles, and other factors.

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 Safety Data Sheet (SDS) 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. SDS 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

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Limitations

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

Contact Information

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