

Product Data

Silicone Encapsulant Adhesive TN3405

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

KEY FEATURES

- Fast tack-free time
- Low volatility
- Non-corrosive to metals
- Primerless adhesion to many substrates
- Low odor cure: releases an alcohol vapor during cure

APPLICATIONS

- Protective encapsulation of PCB components
- Structural bonding and sealing in electronics

TYPICAL PROPERTIES

UNCURED PROPERTIES		
Appearance		flowable clear color
Viscosity	Pa.s	30
Tack-free Time (23°C)	min	7
CURED PROPERTIES (3days @ 23°C, 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	2.0×10 ¹⁵
Dielectric strength	kV/mm	25
Dielectric constant (60Hz)		2.7
Dissipation factor (60Hz)		0.01
Impurities ^{*2} ppm	Na ⁺ K ⁺ Cl ⁻	each <2

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

Typical property data values should not be used as specifications.

Product Data

Silicone Encapsulant Adhesive **TN3405**

Adhesion Performance

TN3405 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	○
Copper	○
Phenolic resin	○
Epoxy resin	○
Polyester	○
ABS	○
Nylon	○
Polycarbonate	○
PPO	○
Polyethylene	X
Polytetrafluoroethylene	X
Glass	○

○: Good (cohesive failure) X: Adhesive failure

Product Safety, Handling and Storage

Customers considering the use of this product should review the latest Safety Data Sheet and label for product safety information, handling instructions, personal protective equipment if necessary, and any special storage conditions required. 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.

Packaging

- 333ml cartridge

Product Data

Silicone Encapsulant Adhesive TN3405

DISCLAIMER: THE MATERIALS, PRODUCTS AND SERVICES OF MOMENTIVE PERFORMANCE MATERIALS INC., MOMENTIVE PERFORMANCE MATERIALS USA INC., MOMENTIVE PERFORMANCE MATERIALS ASIA PACIFIC PTE. LTD., MOMENTIVE PERFORMANCE MATERIALS WORLDWIDE INC., MOMENTIVE PERFORMANCE MATERIALS GmbH & Co. KG, MOMENTIVE PERFORMANCE MATERIALS SUISSE Sarl, THEIR SUBSIDIARIES AND AFFILIATES DOING BUSINESS IN LOCAL JURISDICTIONS (collectively "SUPPLIERS"), ARE SOLD BY THE RESPECTIVE LEGAL ENTITY OF THE SUPPLIER SUBJECT TO SUPPLIERS' 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, SUPPLIERS MAKE 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 SUPPLIERS' PRODUCTS, MATERIALS, SERVICES, RECOMMENDATIONS OR ADVICE. AFOREMENTIONED EXCLUSIONS OR LIMITATION OF LIABILITY ARE NOT APPLICABLE TO THE EXTENT THAT THE END-USE CONDITIONS AND/OR INCORPORATION CONDITIONS CORRESPOND TO THE RECOMMENDED CONDITIONS OF USE AND/OR OF INCORPORATION AS DESCRIBED BY SUPPLIER IN ITS PRODUCT DATA SHEET AND/OR PRODUCT SPECIFICATIONS. EXCEPT AS PROVIDED IN SUPPLIERS' STANDARD CONDITIONS OF SALE, SUPPLIERS AND THEIR 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 Suppliers' 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 Suppliers' 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 Suppliers' Standard Conditions of Sale or this Disclaimer, unless any such modification is specifically agreed to in a writing signed by Suppliers. 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 of Suppliers or any of its subsidiaries or affiliates covering such use or design, or as a recommendation for the use of such material, product, service or design in the infringement of any patent or other intellectual property right.



Momentive Performance Materials

<http://www.momentive.com>

Tokyo Head Office: Phone: +81-3-5544-3111 FAX: +81-3-5544-3122

TN3405 3/3
February, 2015