



Technical Data Sheet

3M™ Adhesive Sealant 740 UV

Product Description

3M™ 700-Series Silane Modified Polymer (SMP) Adhesive Sealant products are one component, moisture curing products which form permanent elastic bonds. They are similar in function as a typical one component polyurethane sealant but are isocyanate-free. 3M SMP Adhesive Sealants bond to a wide variety of materials including plastics, metals, fiberglass, and wood. Differentiated from other high performance sealants as they are very low VOC, have better UV resistance, and have broad substrate adhesion for a wide range of productivity enhancement applications.

Product Features

Technical Information Note

The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

Typical Physical Properties

Property	Values	Additional Information
Color	White Gray Black	
VOC	22 g/L	
VOC	0.18 lb/gal	
Approximate Coverage	38 lineal m	View
Notes: 10.5 oz. [310 mm Cartridge]; 1/8 in (3 mm) bead		
Approximate Coverage	126 lineal ft	View
Notes: 10.5 oz. [310 mm Cartridge]; 1/8 in (3 mm) bead		
Specific Gravity	1.65	
Water and salt spray resistance	Excellent	
Resistance to dilute acids and bases		

Good

Compatibility with paints	Water based: yes Solvent based: test beforehand	View
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Notes: Can be painted when wet

Typical Uncured Physical Properties

Property	Values	Additional Information
Consistency	Medium Paste	

Typical Mixed Physical Properties





Property	Values	Additional Information
Tack Free Time	40 to 60 min	
Rate of Cure	>1/8 in per 24 hr	
Rate of Cure	>3.5 mm per 24 hr	

Typical Cured Characteristics

Property	Values	Additional Information
Shore A Hardness	30	View
Test Method: ASTM C661		
Modulus at 100% Elongation	>0.5 MPa	View
Test Method: ASTM D412		
Modulus at 100% Elongation	>70 lb/in ²	View
Test Method: ASTM D412		

Typical Performance Characteristics

Property	Values	Additional Information
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Tensile Strength	1.12 MPa	View 
Test Method: ASTM D412		
Tensile Strength	165 lb/in ²	View 
Test Method: ASTM D412		
Stress at 100% Strain	155 lb/in ²	View 
Test Method: ASTM D412		
Elongation at Break	125 %	View 
Test Method: ASTM D412		
Long Term Temperature Resistance	90 °C	
Minimum Long Term Temperature Resistance	-40 °C	
Long Term Temperature Resistance	194 °F	
Minimum Long Term Temperature Resistance	-40 °F	
Application Temperature	5 to 35 °C	
Application Temperature	40 to 95 °F	
UV Resistance	Excellent	

Product Certifications and Listings

Typical Environmental Performance

Long term exposure to temperatures greater than 212°F (100°C) will decrease tensile strength over time. Do not use these products in applications where the temperatures will continuously exceed 212°F (100°C).

Storage and Shelf Life

SMP sealants and adhesive sealants must be stored in a controlled environment to maximize shelf life. Store the products in the original unopened containers below 77°F (25°C).

When stored at recommended conditions, the shelf life is 15 months from date of manufacture.

Industry Specifications

[NFPA 130 test report for details \(ASTM E662\)](#)

[NFPA 130 test report for details \(ASTM E1354\)](#)

[NFPA 130 test report for details \(BSS 7239\)](#)

[NFPA 130 test report for details \(ASTM E162\)](#)

Automotive Disclaimer

Automotive Applications: This product is an industrial product and has not been designed or tested for use in certain automotive applications, including, but not limited to, automotive electric powertrain battery or high voltage applications. This product does not fully adhere to typical automotive design or quality system requirements, such as IATF 16949 or VDA 6.3. This product may not be manufactured in an IATF certified facility and may not meet a Ppk of 1.33 for all properties. The product may not undergo an automotive production part approval process (PPAP). Customer is solely responsible for evaluating the product and determining whether it is appropriate and suitable for customer's automotive application and for conducting incoming inspections before use of the product. Failure to do so may result in injury, death, and/or harm to property. No written or verbal statement, report, data or recommendation by 3M related to automotive use of the product shall have any force or effect unless in an agreement signed by the Technical Director of 3M's Automotive Division. Customer assumes all responsibility and risk if customer chooses to use this product in an automotive electric powertrain battery or high voltage application, and 3M will not be liable for any loss or damage arising from or related to the 3M product or customer's use of the product, whether direct, indirect, special, incidental, or consequential (including, but not limited to, lost profits or business opportunity or recall costs), regardless of the legal or equitable theory asserted, including, but not limited to, warranty, contract, negligence, or strict liability. In no event shall 3M be liable for any damages in excess of the purchase price paid for the product.

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Bottom Matter

3M
Industrial Adhesives and Tapes Division
3M Center, Building 225-3S-06
St. Paul, MN 55144-1000
800-362-3550

Trademarks

3M and Scotch-Brite are trademarks of 3M Company.

Handling/Application Information

Application Examples

Application Equipment

Cartridge and Sausage Pack:

A variety of applicators are available. Please contact your sales rep for assistance in selecting an applicator.

Bulk Dispensing:

A 46:1 ratio dual action piston pump with a ram is suggested. Actual equipment should be designed for your application based on the volume required. Please contact your sales rep or the technical service group to suggest equipment manufacturers (Graco: 1-877-844-7226 or www.graco.com).

Directions for Use

Surface Preparation:

Surfaces to be sealed or bonded should be clean and dry. Surfaces should be free from grease, mold release, oil, water/condensation, and other contaminants that may affect the adhesion of the sealant. Abrading with 180 to 220 grit abrasive followed by a solvent wipe will improve the bond strength. Suitable solvents include 3M™ Adhesive Remover, methyl ethyl ketone (MEK), isopropyl alcohol (IPA), or acetone.*

*When using solvents, use in a well ventilated area. Extinguish all sources of ignition in the work area and observe product directions for use and precautionary measures.

Refer to product label and MSDS for further precautions. Always pre-test solvent to ensure it is compatible with substrates.

Local and federal air quality regulations may regulate or prohibit the use of these products or surface preparation and cleanup materials. Consult local and federal air quality regulations before using these products.

Primer:

Use of a primer is an extra step and cost and will depend on substrates and the final end use. Using primer can improve the corrosion resistance of certain metals as well as improve the durability of the bond when exposed to high humidity conditions.

For most applications, high strength bonds on metal can be achieved without the use of a primer. Pre-testing for adhesion is suggested to determine if a primer is needed. Contact your 3M Technical Service representative for primer recommendation and application advice.

Application:

Loading the applicator gun: make sure the applicator is set up with correct plunger attachment for cartridge or sausage pack.

Metal Cartridge: Puncture seal in nozzle and remove the pull-tab seal at the bottom of the cartridge. Load into applicator and fix retaining ring (if applicable). Assemble the nozzle (if applicable) and cut to desired size and shape.

Plastic Cartridge: Cut off the top of the cartridge with a sharp blade, just above the area where the threads stop. Attach the nozzle and cut to desired size and shape.

Sausage Pack: Make a 1" slit close to the crimp on one end of the sausage pack. Load the sausage pack into the applicator barrel (slit side out). Place the rounded end of the supplied sausage nozzle onto the slit end of the sausage pack and fix with retaining ring. Cut nozzle to desired size and shape.

Product should be used within 24 hours after seal is punctured. Dispense product with the nozzle tip in contact with the substrate to insure good gap filling and substrate wetting. Bonding must occur within the first 50% of published skin time

Do not apply SMP sealants and adhesive sealants on frozen nor wet surfaces.

Do not apply over silicone nor in the presence of curing silicone or curing polyurethane. Avoid contact with uncured polyurethane during curing. Sealant can be tooled immediately after applying to give desired appearance.

Cleanup:

While sealant is still soft, cleaning can be done with the same solvents used for surface preparation. If sealant is already cured, removal is done mechanically with razor knife, piano wire, sanding or 3M™ Scotch-Brite™ Molding Adhesive and Stripe Removal Disc. This disc is available from 3M Automotive Aftermarket Division.

References

Property	Values
3m.com Product Page	https://www.3m.com/3M/en_US/p/d/b40066974/
Safety Data Sheet SDS	https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&msdsLocale=en_US&co=ptn&q=740 UV

Family Group

Link Tags:

- [730](#)
- [740 UV](#)
- [760 UV](#)

Products	Long Term Temperature Resistance	Minimum Long Term Temperature Resistance	Rate of Cure	Color
760 UV	212 °F	-40 °C	N/A	N/A
740 UV	194 °F	-40 °C	>3.5 mm per 24 hr	White

730

194 °F

N/A

N/A

Clear

ISO Statement

This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9001 standards.

Precautionary Information

Refer to Product Label and Material Safety Data Sheet for health and safety information before using this product. For additional health and safety information, call 1-800-364-3577 or (651) 737-6501.

Information

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