

February, 2015

3M™ Neoprene Contact Adhesive 5

Product Description

3M™ Neoprene Contact Adhesive 5 is a sprayable contact adhesive which may be used to bond many high-pressure plastic laminates to wood, particle- board, metal and other surfaces.

Product Features

- Sprayable.
- Fast drying.
- 60 minute bonding range.
- Excellent resistance to plastic flow (creep).



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		Notes	Test Condition
Color	Green, Light Yellow			
Solids Content by Weight	18 to 21 %			
Flash Point	-25 °C	-14 °F	TCC	
Solvent Resistance	Petroleum distillate, acetone, toluene and n-hexane			
Coverage	233 sq ft/gal		@ 2.5 g/ft² dry wt.	
Viscosity	175 to 350 cP		Brookfield Viscometer RVF #2 spindle @ 20 rpm	80°F(27°C)

*Note

When bonding wood veneers, success is dependent on many variables such as environmental conditions, bonding process, type of base material, type of veneer, adhesive type and top coat finishing systems to name a few. It is the user’s responsibility to thoroughly test any adhesive for its suitability in bonding wood veneers. It is also recommended to follow the veneer manufacturers recommendation and industry guidelines.

Typical Uncured Physical Properties

Property	Values
Base	Polychloroprene
Net Weight	6.4 to 6.8 lb/gal

Typical Performance Characteristics

Overlap Shear Strength	Dwell/Cure Time	Test Condition
7680 oz/in	2 wk @ Room Temperature	Room Temperature
7712 oz/in	3 wk @ Room Temperature	Room Temperature
16960 oz/in	After 3 wk @ Room Temperature	-30°F(-34°C)
1040 oz/in	After 3 wk @ Room Temperature	180°F(82°C)

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Typical Performance Characteristics (continued)

Overlap Shear Strength	Dwell/Cure Time	Test Condition
608 oz/in	After 3 wk @ Room Temperature	225°F(107°C)

Property: Overlap Shear Strength
Method: ASTM D1002
Substrate: Birch to Birch
Substrate Notes: 1/8in

180° Peel Adhesion	Dwell/Cure Time	Dwell Time Units	Temp C	Temp F
160 oz/in	24	hr	22C	72F
192 oz/in	72	hr	22C	72F
224 oz/in	120	hr	22C	72F
288 oz/in	168	hr	22C	72F
288 oz/in	2	wk	22C	72F
304 oz/in	3	wk	22C	72F
264 oz/in	3	wk	-34C	-29F
112 oz/in	3	wk	82C	180F

Property: 180° Peel Adhesion
Environmental Condition: 52%RH
Substrate: Canvas to Steel

Handling/Application Information

Application Equipment

Note: Appropriate application equipment enhances adhesive performance. We suggest the following application equipment for the user’s evaluation in light of the user’s particular purpose and method of application.

1. Pumping: A 2:1 divorced design pump is suggested. Packings and glands, in contact with the adhesive, should be PTFE.

2. Pressure Pot: Any stainless steel or galvanized pressure pot with A.S.M.E. rating is acceptable to use with 3M™ Neoprene Contact Adhesive 5.

3. Spray Equipment:

Spray Gun	Air Cap	Fluid Tip	Atomizing Air Pressure	Approximate Air Requirement*	Fluid Flow**
Binks 62, 2001, 95	66PH	63BSS (.046")	85 psi	24 CFM	7.5 fl. oz./min.
DeVilbiss JGA, MSA	777	FX (.042")	85 psi	24 CFM	6 fl. oz./min.

Note: These adhesives are not recommended for Airless Spraying.

*3 H.P. Compressor for intermittent use. 5 H.P. Compressor for continuous use.

**To Measure Fluid Flow: Pressurize fluid source only; pull trigger, flow material into measuring device for 60 seconds, increase or decrease fluid source pressure to obtain desired fluid flow.

4. Hoses: All material hoses should be nylon or PVA lined.

5. Brush/Roller: Typical brushes/rollers designed for oil-based paint may be used.

Handling/Application Information (continued)

Directions for Use

Working Temperature

- 1. The temperature of the adhesive and surfaces to be bonded should be at 65°F (18°C) or above.
- 2. Warm the can of adhesive by placing in a warm room, not in stove, oven or other possible ignition source.
- 3. If the room must be warmed, turn off the heater before opening container.
- 4. Leave heater off until all vapors are gone.

Application

- 1. Stir thoroughly before using.
- 2. Apply adhesive generously in a uniform film on both surfaces with either a fiber or animal hair brush, or pour and spread with paint roller (solvent resistant texturing type).
- 3. Porous surfaces may require 2 coats of adhesive.
- 4. A glossy film when completely dry indicates adequate adhesive.
- 5. Dull spots after drying indicate not enough adhesive; these spots must have another coat.

Assembly

- 1. Allow to dry until adhesive is no longer tacky (5-10 minutes).
- 2. Position surfaces carefully before assembly.
- 3. No adjustment is possible after contact.
- 4. Spacers such as dowels or strips of laminate, may be used to prevent premature adhesive/adhesive contact and bonding.
- 5. Slide out the spacers and apply uniform pressure, working toward the edges.
- 6. A 3 in roller used with maximum body pressure should be used to help ensure adequate contact and bonding, especially on the edges.
- 7. Bonded assemblies can be machined, trimmed or finished immediately after bonding.

Drying Time

- 1. Drying time depends on temperature, humidity, air movement and porosity of materials bonded.

Cleanup

- 1. Excess adhesive may be removed with a solvent such as methyl ethyl ketone.*
- *When using solvents, extinguish all ignition sources, including pilot lights, and follow manufacturer’s precautions and directions for use.

Surface Preparation

Note: Read and follow precautions before using this product.

Surface Preparation

- 1. For best results all surfaces to be bonded should be dry and free from dirt, dust, oil, loose paint, wax, grease, etc.
- 2. Oil, grease and other contaminants can be removed by wiping with a solvent such as methyl ethyl ketone.*
- 3. If used for decorative laminate, laminate should have reached moisture equilibrium for the shop conditions.

Storage and Shelf Life

Best storage temperature is 60-80°F (16-27°C). Higher temperatures reduce normal storage life. Lower temperatures cause increased viscosity of a temporary nature. Rotate stock on a “first in, first out” basis. When stored at the recommended temperature in the original, unopened container, this product has a shelf life of 30 months from date of manufacture.

Trademarks

3M is a trademark of 3M Company.

References

Property	Values
3m.com Product Page	https://www.3m.com/3M/en_US/company-us/all-3m-products/~ /3M-Neoprene-Contact-Adhesive-5/?N=5002385+3293241724&rt=rud

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References (continued)

Property	Values
Safety Data Sheet (SDS)	https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&msdsLocale=en_US&co=ptn&q=5

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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