

3M

Neoprene Contact Adhesive

5 (Green and Light Yellow)

Technical Data

February, 2015

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.

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

Special 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 Physical Properties

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

Viscosity (approx.)	175-350 cps
Brookfield Viscometer	RVF #2 spindle @ 20 rpm @ 80°F (27°C)
Solids (by wt.)	18-21%
Base	Polychloroprene
Color	Green, Light Yellow
Net Weight (approx.)	6.4-6.8 lbs./gal.
Flash Point (TCC)	-14°F (-25°C)
Solvent	Petroleum distillate, acetone, toluene and n-hexane
Coverage (approx.)	233 sq. ft. per gallon (@ 2.5 gms./ft. ² dry wt.)

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Handling/ Application Information

Directions For Use

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.

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.

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Application Equipment Suggestions

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.

Typical Adhesive Performance Characteristics

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

Peel Strength – Canvas/Steel

Time @ 75°F (24°C)	Test Temp.	Value (lbs./in. width)
1 day	75°F (24°C)	10
3 days	75°F (24°C)	12
5 days	75°F (24°C)	14
7 days	75°F (24°C)	18
2 weeks	75°F (24°C)	18
3 weeks	75°F (24°C)	19
after 3 weeks	-30°F (-34°C)	16.5
after 3 weeks	180°F (82°)	7

Overlap Shear Strength – 1/8" Birch/Birch

Time @ 75°F (24°C)	Test Temp.	Value (lbs./in. width)
2 weeks	75°F (24°C)	480
3 weeks	75°F (24°C)	482
after 3 weeks	-30°F (-34°C)	1060
after 3 weeks	180°F (82°)	65
after 3 weeks	225°F (107°C)	38

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Storage	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.
Shelf Life	When stored at the recommended temperature in the original, unopened container, this product has a shelf life of 15 months.
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.
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