Science. Applied to Life.™

Technical Data Sheet

3M™ Neoprene Contact Adhesive 5

English-US

Last Revision Date: June, 2024

Supersedes: May, 2022

Product Details

Regulatory Info/SDS

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 Uncured Physical Properties

Attribute Name	Value
Net Weight	6.4 — 6.8 lb/gal
Base	Polychloroprene

Typical Physical Properties

Attribute Name	Temperature	Value
Color		Green, Light Yellow
Solids Content by Weight		18 — 21 %
Solvent Resistance		Petroleum distillate, acetone, toluene and n-hexane
Coverage		233 ft²/gal [1]
Flash Point		-25 °C (-14 °F) [2]
Viscosity	27 °C (80 °F)	175 — 350 cP [3]

[1] @ 2.5 g/ft² dry wt.

[2] TCC

[3] Brookfield Viscometer RVF #2 spindle @ 20 rpm

Attribute Name	Value
*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 Performance Characteristics

180° Peel Adhesion

Substrate: Canvas to Steel

Dwell Time	Temperature	Value
24 h	22 °C (72 °F)	160 oz/in
72 h	22 °C (72 °F)	192 oz/in
120 h	22 °C (72 °F)	224 oz/in
168 h	22 °C (72 °F)	288 oz/in
2 week	22 °C (72 °F)	288 oz/in
3 week	22 °C (72 °F)	304 oz/in
3 week	-34 °C (-29 °F)	264 oz/in
3 week	82 °C (180 °F)	112 oz/in

Overlap Shear Strength

Substrate: Birch to Birch
Temperature: 22 °C (72 °F)
Test Method: ASTM D1002, ISO 4587

Dwell Time	Test Condition	Value
2 week		7,680 oz/in [1]
3 week		7,712 oz/in [1]
3 week	-34°C (-30°F)	16,960 oz/in [1]
3 week	82°C (180°F)	1,040 oz/in [1]
3 week	107°C (225°F)	608 oz/in [1]

[1] 1/8in thick substrates

Handling/Application Information

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.

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.

Storage and Shelf Life

Store under normal conditions of 16° to 27°C (60° to 80°F) and 40 to 60% relative humidity in the original, unopened packaging, out of direct sunlight. Lower temperatures cause increased viscosity of a temporary nature. For best performance, use this product within 30 months from date of manufacture.

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

Automotive Disclaimer

Select Automotive Applications:
This product is an industrial product and has not been designed or tested for use in certain automotive applications, such as automotive electric powertrain battery or high voltage applications, which may require the product to be manufactured in a IATF certified facility, meet a Ppk of 1.33 for all properties, undergo an automotive production part approval process (PPAP), or fully adhere to automotive design or quality system requirements (e.g., IATF 16949 or VDA 6.3). Customer assumes all responsibility and risk if customer chooses to use this product in these applications.

Information

Technical Information: The technical information, guidance, and other statements contained in this document or otherwise provided by 3M are based upon records, tests, or experience that 3M believes to be reliable, but the accuracy, completeness, and representative nature of such information is not guaranteed. Such information is intended for people with knowledge and technical skills sufficient to assess and apply their own informed judgment to the information. No license under any 3M or third party intellectual property rights is granted or implied with this information.

Product Selection and Use: Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. As a result, customer is solely responsible for evaluating the product and determining whether it is appropriate and suitable for customer's application, including conducting a workplace hazard assessment and reviewing all applicable regulations and standards (e.g., OSHA, ANSI, etc.). Failure to properly evaluate, select, and use a 3M product and appropriate safety products, or to meet all applicable safety regulations, may result in injury, sickness, death, and/or harm to property.

Warranty, Limited Remedy, and Disclaimer: Unless a different warranty is specifically stated on the applicable 3M product packaging or product literature (in which case such warranty governs), 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR

CONDITION OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ARISING OUT OF A COURSE OF DEALING, CUSTOM, OR USAGE OF TRADE. If a 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price.

Limitation of Liability: Except for the limited remedy stated above, and except to the extent prohibited by law, 3M will not be liable for any loss or damage arising from or related to the 3M product, whether direct, indirect, special, incidental, or consequential (including, but not limited to, lost profits or business opportunity), regardless of the legal or equitable theory asserted, including, but not limited to, warranty, contract, negligence, or strict liability.

Disclaimer: 3M industrial and occupational products are intended, labeled, and packaged for sale to trained industrial and occupational customers for workplace use. Unless specifically stated otherwise on the applicable product packaging or literature, these products are not intended, labeled, or packaged for sale to or use by consumers (e.g., for home, personal, primary or secondary school, recreational/sporting, or other uses not described in the applicable product packaging or literature), and must be selected and used in compliance with applicable health and safety regulations and standards (e.g., U.S. OSHA, ANSI), as well as all product literature, user instructions, warnings, and limitations, and the user must take any action required under any recall, field action or other product use notice. Misuse of 3M industrial and occupational products may result in injury, sickness, or death. For help with product selection and use, consult your on-site safety professional, industrial hygienist, or other subject matter expert. For additional product information, visit www.3M.com.

ISO Statement

This product was manufactured under a 3M quality system registered to ISO 9001 standards.

3M™ Industrial Adhesives and Tapes Division
3M Center, St. Paul, MN 55144-1000
3M.com/iatd