# **3M**Scotch-Grip<sup>™</sup> Contact Adhesive

Technical Data August, 2005

#### **Product Description**

3M<sup>TM</sup> Scotch-Grip<sup>TM</sup> Contact Adhesive 10 is a multi-purpose contact adhesive which may be used to bond plastic laminate, aluminum, steel, wallboard, wood, masonry, rubber and canvas.

#### **Features**

- Roll or brush-applied.
- · Fast drying.
- Adhesion to a wide variety of materials.
- Excellent resistance to plastic flow (creep).
- 60 minute bonding range.

#### **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.)	450-700 cps	
Brookfield Viscometer	RVF #2 spindle @ 20 rpm @ 80°F (27°C)	
Solids Content (by wt.)	21-25%	
Base	Polychloroprene	
Color (wet and dry)	Yellow	
Net Weight (lbs./gal.)	6.9 ± 0.2 lbs.	
Flash Point (TCC)	-14°F (-25°C)	
Coverage (approx.)	288 sq. ft. per gallon (@ 2.5 gms./ft.² dry wt.)	
Solvent	Petroleum distillate, acetone, toluene and n-hexane	

#### 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 solvents such as 3M<sup>TM</sup> Scotch-Grip<sup>TM</sup> Solvent No. 3 or 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 Scotch-Grip Solvent No. 3 or methyl ethyl ketone.\*
- \*When using solvents, extinguish all ignition sources, including pilot lights, and follow the 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. **Brushes:** Use fiber or animal hair brushes. Do not use nylon or other synthetic fibers.
- 2. **Rollers:** Use solvent resistant paint rollers, designed for applying oil based paints.

#### 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:** Peel bonds of cotton duck (canvas) to cold rolled steel were tested at a peel angle of 180°F at two inches per minute separation rate.

Time @ 75°F (24°C)	Test Temp.	Value (lbs./inch width)
1 day	75°F	10
3 days	75°F	13
5 days	75°F	17
1 week	75°F	19
2 weeks	75°F	22
3 weeks	75°F	23
3 weeks	-30°F	28 (substrate failure)
3 weeks	180°F	9

**Overlap Shear Strength:** Overlap shear strength on birch plywood to itself tested at 0.1 inches per minute separation rate.

Time @ 75°F (24°C)	Test Temp.	Value (psi)
2 weeks	RT	430 (substrate failure)
3 weeks	RT	433 (substrate failure)
3 weeks	-30°F	676 (substrate failure)
3 weeks	180°F	111
3 weeks	225°F	70

#### Storage

Best storage temperature is 60-70°F (16-27°C). Continuous exposure to higher temperatures may cause some increase in viscosity. Quality is not affected until the adhesives becomes thickened so that it is difficult or impossible to spread. 3M<sup>TM</sup> Scotch-Grip<sup>TM</sup> Contact Adhesive 10 will not freeze, but continuous exposure to low temperature will cause a considerable increase in viscosity. After storage at low temperatures and before using, the adhesive must be thawed and stirred vigorously until the entire container regains its original viscosity. The thawing process should be done at approximately room temperatures, never at elevated temperatures. Several days may be required for thawing – particularly with larger containers. Rotate stock on a "first in-first out" basis.

#### **Shelf Life**

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

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#### 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.

#### **Product Use**

All statements, technical information and recommendations contained in this document are based upon tests or experience that 3M believes are reliable. However, many factors beyond 3M's control can affect the use and performance of a 3M product in a particular application, including the conditions under which the product is used and the time and environmental conditions in which the product is expected to perform. Since these factors are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for the user's method of application.

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ISO 9001:2000

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