



Laminating Adhesives/Data Page

FOD # 0182

Scotch™ 7951 Laminating Adhesive

Product Construction

| | | | |
|-----------|-------------|---------------|---------------------------------|
| Adhesive: | 2.0 mils | (51 microns) | #300MP “Hi-Strength” Acrylic |
| Liners: | 1) 4.0 mils | (102 microns) | 58# Polycoated Kraft |
| | 2) 4.0 mils | (102 microns) | 58# Polycoated Kraft |

Features

- Long-term environmentally stable bond
- Smooth adhesive for high quality appearance on thin graphic overlays
- High bond adhesive for application to plastic surfaces, including low surface energy plastics
- Double lined for selective die cutting

Applications

- Attachment of graphic overlays to membrane switches
- Attachment of membrane switches to product housing
- Attachment of decorative overlays which require window areas void of adhesive

Physical Properties

(Typical values – not for specification use)

| Initial Adhesion: | <u>Surface</u> | <u>Oz./In.</u> | <u>N/100 mm</u> |
|----------------------------|-----------------|----------------|-----------------|
| Dynamic Peel, ASTM D-3330 | Stainless Steel | 31 | 34 |
| Modified (90 degree peel), | Aluminum | 43 | 47 |
| 20 min. dwell, 12"/min. | Polycarbonate | 38 | 42 |
| (2 mil aluminum backing) | Polypropylene | 33 | 36 |

Environmental Performance

The properties defined are based on the attachment of impervious faceplate materials (such as aluminum) to a stainless steel test surface.

| | |
|----------------------|--|
| Bond Build-up: | The bond strength of Scotch #300MP “Hi-Strength” Acrylic Adhesive increases as a function of time and temperature. |
| Chemical Resistance: | Very good resistance to gasoline, oil, sodium chloride solution, and mild acids and alkalies. |
| Water Resistance: | Immersion in water has no appreciable effect on the bond strength. |
| Shelf Life: | Scotch 7951 Laminating Adhesive can be certified to retain adhesive properties for one year from date of purchase if properly stored at normal room temperature conditions of 72 F (22 C) and 50% relative humidity. |

Special Considerations

| | |
|-----------------|---|
| General: | <p>Proper preparation of application surfaces is essential to assure high quality, long lasting bond of Scotch #300MP “Hi-Strength” Acrylic Laminating Adhesive.</p> <p>Assume all surfaces to which the laminating adhesive will be applied are contaminated – metals may be oily or dusty, plastics may be coated with mold release agents, dirt, etc. Any surface contaminant will adversely affect adhesion and must be removed prior to application by solvent wiping.</p> |
| Solvent Wiping: | <p>Wet the application surface with a mild solvent such as isopropyl alcohol (rubbing alcohol) or heptane and wipe thoroughly.</p> <p>Dry the surface with a lint free cloth before the solvent evaporates from the surface.</p> |
| Temperature: | <p>Scotch 7951 can be applied when application surface temperatures are above 60 F (15.6 C).</p> <p>Substrates may be heated in order to raise the surface temperature above the minimum specified. This may be accomplished by a portable heater or heat lamps.</p> |
| Techniques: | <p>Bond strength can be improved with firm application pressure so as to develop intimate contact of adhesive to the bonding surface.</p> <p>Initial bond strength can be improved by applying heat along with firm pressure, thus allowing the adhesive to flow into the texture of the bonding surface for maximum adhesive-to-surface contact.</p> |
| Storage: | Storage of Scotch brand #300MP “Hi-Strength” Acrylic Adhesive in polyethylene bags is highly recommended. |

Note: Safety

When using solvent, it is essential that proper precautionary measures for handling such materials be observed. These include, but are not restricted to:

1. Work only in a well ventilated area.
2. Keep away from heat, sparks and open flame.
3. No smoking in the work area.
4. Avoid breathing vapors.
5. Avoid eye and prolonged skin contact.
6. Keep solvent containers closed when not in use.
7. Consult the manufacturer’s Material Safety Data Sheet for proper handling and storage of solvents.

2/5/89

Terms and Conditions of Sale for products sold by 3M Identification and Converter Systems Division can be found in the ICSD Price Book and in other appropriate schedules.

Technical Data: All physical properties, statements, and recommendations are either based on tests we believe to be reliable or our experience, but they are not guaranteed. 3M recommends each user determine the suitability of the products for the intended use.

Warranty and Limited Remedy: THE FOLLOWING WARRANTY IS MADE IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTY OF MERCHANTABILITY, THE IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE AND ANY IMPLIED WARRANTY ARISING OUT OF A COURSE OF DEALING, A CUSTOM OR USAGE OF TRADE: 3M warrants its product will be free from all defects.

If a product is proved to be defective, then the exclusive remedy 3M’s and seller’s sole obligation shall be, at 3M’s option, to replace the quantity of the product which is proved to be defective or to refund the purchase price.

Limitation of Liability: 3M and seller shall not be liable for direct, indirect, special, incidental or consequential damages based breach of warranty, breach of contract, negligence, strict liability or any other legal theory.

The foregoing Warranty and Limited Remedy and Limitation of Liability may be changed only by a written agreement signed by authorized officers of 3M and seller.

Scotch, ScotchMark, ScotchCap, and Stamark are trademarks of 3M.



Identification and Converter Systems Division

3M Center, Building 220-7W-03
St. Paul, MN 55144-1000
USA
1 800 223 7427
1 800 258 7511 FAX
e-mail idconvert@mmm.com

3M Canada Inc.

PO Box 5757
London, Ontario
Canada N6A 4T1
1 800 265 1840
519 452 6090 FAX

3M Mexico, S.A. de C.V.

Apartado Postal 14-139
Mexico, D.F. 07070
Mexico
52 5 728 2289
52 5 728 2299 FAX

3M Puerto Rico, Inc.

Puerto Rico Industrial Park
PO Box 100
Carolina, PR 00986-0100
809 750 3000
809 750 3035 FAX

©3M 1996