



Laminating Adhesives 300MP

Tips for storing, handling and slitting in roll form

Technical Bulletin

June, 2003

The aggressive, tacky and compliant nature of 3M™ Laminating Adhesives 300MP present storage, handling and slitting requirements that are often necessary in order to prevent damage to the rolls.

Storage Recommendations

- It is best to use the rolls as soon as possible after receipt. The adverse effects described below will develop with time. Ideally, rolls should be laminated to the intended substrates as soon after receipt as possible.
- If storage is necessary, it is best to maintain the rolls at a cool temperature (at or below 22°F [-6°C]). Warm warehouse storage must be avoided. High temperatures will further soften the adhesive and accelerate the mechanical processes that produce the adverse effects described below.
- When storing rolls, lay them flat in a horizontal position with release treated wafers between the rolls. Due to the medium-soft tension applied during the slitting, vertical storage of any kind will result in damage to the rolls via the following mechanisms:
 - If rolls are standing up being supported by a rigid bottom layer then gravitational forces on the bottom layers will cause oozing out of the sides of the roll and therefore picking at the edges upon unwinding of the roll.
 - Suspension of the rolls through the core will lead to gravitational forces compressing the top half of the roll and causing oozing out of the sides of the roll. These same gravitational forces will put the lower half of the roll in tension and cause gapping between layers on the bottom half of the roll. The resultant egg-shaped roll can yield problems (tear-outs, inconsistent tension, edge picking, etc.) during unwind.
- Do not place anything on top of stored rolls or their boxes. Any slight oozing due to the flowing ability of the adhesive will be further pushed into other adjacent layers of adhesive – past the paper liner dividing them – further strengthening the bond between the layers of adhesive. This will cause edge picking during unwind.

Handling Recommendations

- Rolls should be handled at a minimum. Rolls are to be handled by their core and top layer, without applying a lot of finger pressure (too much pressure may result in oozing out of the sides of the rolls).
- Do not handle the rolls by their sides, as this can cause the sides of the adhesive to bond with fingertips. When fingertips are removed the adhesive can snap back bonding with the sides of adhesive from the layers of the roll surrounding it. This will result in edge picking during the unwinding of the roll.

3M Technical Bulletin

Laminating Adhesives 300MP

Tips for storing, handling and slitting in roll form

Slitting Recommendations

- Tension during winding of the roll is critical for this adhesive. Too high of a tension setting will cause oozing out of the sides of the roll due to the adhesive being very compliant. Too low of a tension setting will cause gapping between the laps on the roll. Therefore, tension is set at medium-soft to minimize oozing and gapping.
- Tension becomes more critical with narrower and longer rolls. Narrower rolls have less area to support pressure applied on adhesive during winding, which further increases oozing. Longer rolls provide same adverse effect by compounding the pressure from the top layers on the bottom layers. Wider rolls with shorter lengths are recommended whenever possible.

The following roll size combinations are recommended:

1" - 3" (25.4 mm - 76.2 mm) Width; 60 yards (54.8 m) maximum roll size
3" - 5" (76.2 mm - 127 mm) Width; 180 yards (165 m) maximum roll size
5" - 60" (127 mm - 1524 mm) Width; 360 yards (329 m) maximum roll size

Slitting below widths of 1" should be avoided.

For Additional Information

To request additional product information or to arrange for sales assistance, call toll free 1-800-362-3550 or visit www.3M.com/adhesives. Address correspondence to: 3M Industrial Adhesives and Tapes Division, Building 21-1W-10, 900 Bush Avenue, St. Paul, MN 55144-1000. Our fax number is 651-778-4244. In Canada, phone: 1-800-364-3577. In Puerto Rico, phone: 1-787-750-3000. In Mexico, phone: 52-70-04-00.

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.

Warranty and Limited Remedy

Unless stated otherwise in 3M's product literature, packaging inserts or product packaging for individual products, 3M warrants that each 3M product meets the applicable specifications at the time 3M ships the product. Individual products may have additional or different warranties as stated on product literature, package inserts or product packages. 3M MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY IMPLIED WARRANTY ARISING OUT OF A COURSE OF DEALING, CUSTOM OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's application. If the 3M product is defective within the warranty period, your exclusive remedy and 3M's and seller's sole obligation will be, at 3M's option, to replace the product or refund the purchase price.

Limitation of Liability

Except where prohibited by law, 3M and seller will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including warranty, contract, negligence or strict liability.



This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9002 standards.



Industrial Business
Industrial Adhesives and Tapes Division
3M Center, Building 21-1W-10, 900 Bush Avenue
St. Paul, MN 55144-1000



Recycled Paper
40% pre-consumer
10% post-consumer

Printed in U.S.A.
©3M 2003 70-0709-3905-6 (6/03)