PRODUCT B

3M™

High speed processing of parts in the medical, telecommunications and electronics markets (medical components, durable labels, flexible circuits).

Lamination to industrial foams for rotary die-cutting of small gaskets for industrial and electronics markets.

APPLICATION TECHNIQUES

For maximum bond strength (during installation of the final part) the surface should be thoroughly cleaned and dried. Typical cleaning solvents are heptane* (for oily surfaces) or isopropyl alcohol for plastics. Use reagent grade solvents since common household materials like rubbing alcohol frequently contain oils to minimize the drying affect on skin and can interfere with the performance of a pressure-sensitive adhesive.

Note: *Carefully read and follow the manufacturer's precautions and directions for use when working with solvents. These cleaning recommendations may not be in compliance with the rules of certain air quality management districts in California; consult applicable rules before use.*

It is necessary to provide pressure during lamination (1.5-20 pli recommended) and during final part installation (10-15 psi) to allow the adhesive to come into direct contact with the substrate. Using a hard edged plastic tool, which is the full width of the laminated part, helps to provide the necessary pressure at the point of lamination. Heat can increase bond strength when bonding to metal parts (generally this same increase is observed at room temperature over longer times, weeks). For plastic parts, the bond strength is not enhanced with the addition of heat.

The ideal adhesive application temperature range is 60°F (15.6°C) to 100°F (38°C). Application is not recommended if the surface temperature is below 50°F (10°C) because the adhesive becomes too firm to adhere readily. Once properly applied, at the recommended application temperature, low temperature holding is generally satisfactory.

When bonding a thin, smooth, flexible material to a smooth surface, it is generally acceptable to use 3M 467MP. If a texture is visible on one or both surfaces, the 3M 468MP would be suggested. If both materials are rigid, it may be necessary to use a thicker adhesive to successfully bond the components.

PRODUCT CONSTRUCTION

Product Number	Adhesive Type/Color[1]	Adhesive Thickness[2] (mils, mm)	Liner Color, Type, Print	Liner Caliper / Liner Release[3]

[1] The adhesive color is transparent with a very slight yellow cast. The yellow cast is not typically visible in a single adhesive layer.
[2] The thickness listed is based on a calculation from manufacturing controlled adhesive coat weights using a density of 1.012 g/cc.
[3] Typical liner release value, in grams/inch, tested at 90 ipm.

PHYSICAL PROPERTIES & PERFORMANCE CHARACTERISTICS

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

I. Adhesion to Stainless Steel

ASTM D3330 modified (90° peel, 2-mil aluminum foil backing)

Dwell	467 MP 2 mil (0.002 inches)	468 MP

materials, longer time at RT before cold exposure and little or no stress below the Tg. The lowest service temperature is -40°F (-40°C).

Note: 467MP and 468MP are not recommended for low energy plastics (polypropylene, polyethylene, powder coated paints).

V. Static Shear

ASTM D3654 - 1" x 1" sample area - aluminum foil to stainless steel

Temperature	Load	Minutes to Failure	
		467 MP 2 mil (0.002 inches)	468 MP 5 mil (0.005 inches)
70°F (21°C)	2000 grams	10,000+	10,000+
200°F (93°C)	1000 grams	10,000+	10,000+
350°F (177°C)	500 grams	10,000+	10,000+

CONTACT INFORMATION

For help with questions concerning Gerber products, please call your distributor or Gerber Customer Service at 1-800-222-7446 or (860) 644-1551. Visit us on the Internet at www.gerbertechnology.com/signage to learn more about our many other foils, materials and equipment.

Category: Materials **FastFact #**: N/A **Supplied by**: Aftermarkets