



Laminating Adhesives Data Page

FOD # 0339

3M™ 467MS Roll Laminating Adhesive 468MS Roll Laminating Adhesive

Product Construction

	<u>Adhesive</u>	<u>Liner</u>
467MS	2.0 mils (50 microns) #200 “Hi-Performance” Acrylic Adhesive	4.0 mils (102 microns) #58 Polycoated Kraft Liner
468MS	5.0 mils (125 microns) #200 “Hi-Performance” Acrylic Adhesive	4.0 mils (102 microns) #58 Polycoated Kraft Liner

Features

- 58# moisture stable liner to resist wrinkling & buckling attributed to the effects of humidity.
- Excellent balance of properties for most nameplate appliques and decorative trim attachments.
- Temperature performance to 350 degrees F (177 degrees C).
- 3M 467MS Laminating Adhesive is designed for application to smooth surfaces.
- 3M 468MS Laminating Adhesive is a 5 mil adhesive designed for application to a variety of rough or textured surfaces.
- “Hi-Performance” Acrylic Adhesive for excellent environmental resistance.

Typical Applications

- Attachment of metal nameplates in most industrial applications.
- Attachment of graphic overlays to a variety of metal and high surface energy plastics.
- For use in the automotive, appliance and electronic industries for long term bonding applications.

Physical Properties

(Typical values - Not for specification use)

	<u>Surface</u>	<u>Product</u>	<u>Oz./In.</u>	<u>N/100m</u>
Initial Adhesion				
Dynamic Peel - 180 deg. ASTM D-3330, PSTC-3 (modified) 1 mil polyester backing	Stainless	467MS 468MS	46 65	51 71
72 Hr. dwell at room temp. Dynamic Peel - 90 deg. ASTM D-3330, PSTC-3 (modified) 2 mil aluminum backing	Stainless ABS	467MS 468MS 467MS 468MS	72 90 58 78	79 98 63 85
Ultimate Bond 72 Hr. dwell at 158 deg. F (70C) Dynamic Peel - 90 deg. ASTM D-3330, PSTC-3 (modified) 2 mil aluminum backing	Stainless	467MS 468MS	131 203	143 222

- For Low Surface Energy Plastics (Polypropylene, Polyethylene), evaluate #300, #300MP, #320 or #340 adhesive families.

Environmental Performance

Properties defined are based on the adhesion of impervious faceplate materials to a stainless steel surface test.

Chemical Resistance:	Very good resistance to gasoline, oil, mild acids and alkalis, and NaCl solution (5%).
Water Resistance:	Very good resistance when immersed for hours at 150 deg. F (66 deg. C)
Temperature Resistance:	#200 "Hi-Performance" Adhesive has a temperature range of -40 deg. F (-40 deg. C) to 350 deg. F (177 deg. C).
Humidity Resistance:	Very good resistance when bond is exposed to 168 hours at 100% R.H. at 100 deg. F (38 deg. C).
U.V. Resistance:	Ultraviolet light does not adversely affect adhesive performance.
Shelf Life:	Product retains its performance properties for two years from date of manufacture if properly stored at room temperature conditions of 72 degrees F (22 degrees C) and 50% relative humidity.

Processing

Die Cutting: Excellent die-cuttability. If necessary, lubricate dies with Laminoleum, produced by Metal Lubricants Company, 708-333-8900.

Roll Laminating: Excellent processability. A combination of metal and rubber rollers with moderate pressure is recommended.

Special Considerations/Application Tips

For maximum bond strength the surface should be thoroughly cleaned and dried. Typical cleaning solvents are heptane or isopropyl alcohol. Consult solvent manufacturer's Material Safety Data Sheet for proper handling and storage instructions.

Bond strength can also be improved with firm application pressure and moderate heat causing adhesive to develop intimate contact with the bonding surface.

Ideal tape application temperature range is 70 deg. F to 100 deg. F (21 deg. C to 38 deg. C). Initial tape application to surfaces at temperatures below 50 deg. F (10 deg. C) is not recommended for most pressure sensitive adhesives because the adhesive becomes too firm to adhere readily. However, once properly applied, low temperature holding is generally satisfactory.

4/15/96

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