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Issue Date 9/01/97

3M™ 9437 Laminating Adhesive

Features:

- Excellent temperature and chemical resistance.
- Exceptional shear holding strength at elevated temperatures.
- Strong bond to metals and high surface energy plastics (e.g. ABS, polycarbonate).
- Polyester liner provides excellent die-cutting surface.

Typical Applications:

- A component in the construction of labels designed for harsh environments such as in automotive, aerospace and outdoor applications.

Physical Properties:

(Typical values—not for specification use) see Table 2.

Environmental Performance:

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

Bond Build-up —

The bond strength of Scotch™ #600 acrylic adhesive increases as a function of time and temperature.

Table 1. Product Construction:

Adhesive	1st Liner	2nd Liner
2.0 mils (51 microns) #600 Acrylic	4.0 mils (102 microns) 58# Polycoated Kraft (Removed first)	1.5 mils (37.5 microns) Polyester (Removed second)

Table 2. Physical Properties:

Adhesion: 90° Peel, (ASTM D-3330 modified), 12"/min. (305 mm/min.) on 2 mil aluminum				
Surface	20 Minute Dwell			
	oz./in.	N/100 mm		
Stainless Steel	48	53		
Surface	72 Hr. Dwell		Ultimate Bond	
	oz./in.	N/100 mm	oz./in.	N/100 mm
Stainless Steel	73	80	125	137
Polycarbonate	47	51		
Polypropylene	17	19		

Humidity Resistance —

High humidity has a minimal effect on adhesive performance. Bond strengths are generally higher after exposure for 7 days at 90°F (32° C) and 90% relative humidity.

U.V. Resistance —

When properly applied, nameplates and decorative trim parts are not adversely affected by outdoor exposure.

Water Resistance —

Immersion in water has no appreciable effect on the bond strength. After 100 hours in room temperature water, the bond actually shows an increase in strength.

Temperature Cycling Resistance —

Bond strength generally increases after cycling four times through:
4 hours at 158°F (70°C)
4 hours at -20°F (-29°C)
16 hours at room temperature

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3M™ 9437 Laminating Adhesive (continued)

Chemical Resistance —

When properly applied, labels will hold securely after exposure to numerous chemicals including gasoline, oil, Freon™ TF, sodium chloride solution, mild acids and alkalis.

Heat Resistance —

The #600 acrylic adhesive is usable for short periods (minutes) at temperatures up to 450°F (232°C) and for intermittent longer periods of time (days) up to 300°F (149°C).

Shelf Life:

Product retains its performance and properties for one year from date of purchase if properly stored at room temperature conditions of 72°F (22°C) and 50% relative humidity. Storage in plastic bag 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 manufacturer's Material Safety Data Sheet for proper handling and storage instructions.

Bond strength also can be improved with firm application pressure and moderate heat, from 100°F (38°C) to 130°F (54°C), causing the adhesive to develop intimate contact with the bonding surface.

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