



# Laminating Adhesives/Data Page

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*FOD # 0283*

## **Stamark™ 9770 Laminating Adhesive 9774 Laminating Adhesive**

### **Product Construction**

Adhesive:	2.0 mils	(51 microns)	#300MP Industrial Acrylic
Liners:	4.0 mils	(102 microns)	58# Polycoated Kraft

### **Features**

- Very smooth adhesive
- High bond to most plastics: bonds better to polypropylene than #200MP adhesives
- Moisture stable liner
- Very good shear holding at elevated temperature

### **Applications**

- Nameplate attachment to a variety of surfaces including low surface energy plastics
- Graphic overlays in automotive industry
- Decorative trim in appliance and electronic market

## Physical Properties

(Typical values – not for specification use)

	<u>Product</u>	<u>20 Minute Dwell</u>			
		<u>Oz./In.</u>	<u>N/100 mm</u>		
ASTM D-3330 (modified) (90 degree peel, 12"/min. 305 mm/min.) 2 mil aluminum foil to stainless steel	9770	41	45		
	9774	48	53		
	<u>Product</u>	<u>72 Hr. Dwell</u>		<u>Ultimate Bond</u>	
		<u>Oz./In.</u>	<u>N/100 mm</u>	<u>Oz./In.</u>	<u>N/100 mm</u>
ASTM D-3330 (modified) (90 degree peel, 12"/min. 305 mm/min.) 2 mil aluminum to various surfaces	9770	68	74	93	102
	9774	87	95	138	151
– High Surface Energy Plastic (Polycarbonate)	9770	40	44	27	30
	9774	70	77	34	37
– Low Surface Energy Plastic (Polypropylene)	9770	37	41	36	39
	9774	44	48	40	44

## 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 #300MP Industrial Acrylic Adhesive increases as a function of time and temperature on most surfaces and has very good initial adhesion.
Humidity Resistance:	High humidity has minimal effect on adhesive performance. Bond strengths are generally higher after exposure for 7 days at 90 degrees F (32 degrees C) and 90% relative humidity.
U.V. Resistance:	When properly applied, nameplates and decorative trim parts are not adversely affected by exposure.
Water Resistance:	Immersion in water has no appreciable effect on the bond strength. After 100 hours at room temperature, the bond actually shows an increase in strength.
Temperature Cycling Resistance:	Bond strength generally increases after cycling four times through: 4 hours at 158 degrees F ( 70 degrees C) 4 hours at -20 degrees F (-29 degrees C) 16 hours at 73 degrees F ( 22 degrees C)
Chemical Resistance:	When properly applied, nameplate and decorative trim parts will hold securely after exposure to numerous chemicals including oil, mild acids and alkalis.
Heat Resistance:	The #300MP Industrial adhesive is usable for short periods (minutes, hours) at temperatures up to 250 degrees F (121 degrees C) and for intermittent longer periods of time (days, weeks) up to 150 degrees F (66 degrees C).
Cold Service Temp:	-40 degrees F (-40 degrees C).
Shelf Life:	Product retains its performance and 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. Storage in plastic bag is recommended.

## Special Considerations

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 degrees F (38 degrees C) to 130 degrees F (54 degrees C), causing the adhesive to develop intimate contact with the bonding surface.

Ideal adhesive application temperature range is 70 degrees F to 100 degrees F (21 degrees C to 38 degrees C). Initial application to surfaces at temperatures below 50 degrees F (10 degrees 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 satisfactory. For more specific information contact our Customer Service and Sales Support "hot line" at 1-800-223-7427.

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