

# Membrane Switch Spacer/Data Page

FOD # 0922

# Scotch<sup>™</sup> 7965MP Double Linered Laminating Adhesive

# **Description**

Liner: 86# Polycoated Kraft

Adhesive: #200 "Hi-Performance" Acrylic

Liner: 58# Polycoated Kraft

# **Typical Applications**

Attachment of graphic overlay to membrane switch or keyboard.

Attachment of membrane switch to product housing.

Lamination to polyester for membrane spacers.

#### **Features**

- Long term environmentally stable bond.
- Smooth adhesive for high quality appearance on thin graphic overlays.
- High cohesive strength to withstand repeated stresses from switch activation.
- High temperature, humidity, and chemical resistance.
- Lay-flat liner provides greater stiffness and rigidity.
- Thick adhesive provides higher bond strength on rough or smooth surfaces.

		Appropriate Thickness		
<b>Component</b>	<b>Description</b>	<u>Inches</u>	(MM)	
Release Liner	86# Polycoated Kraft	0.0065	0.165	
Adhesive	#200 "Hi-Performance" Acrylic	0.005	0.127	
Release Liner	58# Polycoated Kraft	0.004	0.10	
	Total	0.0155	0.392	

### **Properties and Performance**

(Typical Values – Not for Specification Use)

- Temperature Range
  - Low -40 degrees F (-40 degrees C)
  - High Long Term (days, weeks) 300 degrees F (149 degrees C)
  - High Short Term (minutes, hours) 400 degrees F (204 degrees C)
- Chemical Resistance
  - Solvent resistance is excellent when this product is properly applied to impervious materials. The
    adhesive resists softening through edge contact with mild acids, alkalies, oil, gasoline, Kerosene,
    JP-4 fuel and many other solvents.
  - Not recommended for total immersion -

•	Dielectric Strength (ASJM D149)	0.95	KV/mil
•	Insulation Resistance (ASTM P257)	N.A.	ohms 15
•	Volume Resistivity (ASTM D257)	2.2 x 10	ohm-cm
•	Surface Resistivity (ASTM D257)	1.3 x 10	ohms/square

- Moisture and Humidity Resistance
   No adverse effect on the bond after exposure to 100% RH at 100 degrees F.
- · Shelf Life

Twelve months from date of receipt by customer when stored in cartons at 70 degrees F at 50% relative humidity.

- Bond Build-Up
  - The bond strength of Scotch #200 "Hi-Performance" Acrylic adhesive increases as a function of time and temperature.
- U.V. Resistance

Adhesive is very resistant to oxidation and ozone when exposed to air or sunlight (U.V.).

# **Adhesion Properties**

The results indicated are typical values.

#### 7965MP

N/100 mm

		<del></del>	_	
ASTM D903 180 degree peel 12"/minute 1 mil polyester to stainless steel		87		96
	72 Hour Dwell		Ultimate Bond	
3M test	OZ/IN	N/100 mm	OZ/IN	N/100 mm
90% peel 12"/minute 8 mil aluminum to various surfaces				
Stainless Steel	164	180	244	270
Epoxy	156	172	214	236
Polyester	128	142	142	156

OZ/IN

# **Application Techniques**

Polycarbonate

**ABS** 

1. Bond strength is dependent upon the amount of adhesive-to-surface contact developed. Firm application pressure develops better adhesive contact and thus improves bond strength.

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2. To obtain optimum adhesion, the bonding surfaces must be clean, dry, and smooth. Some typical surface cleaning solvents are isopropyl alcohol or heptane. Use proper safety precautions for handling solvents.

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

4/1/96

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