



# Membrane Switch Spacer/Data Page

FOD # 0920

## Scotch™ 7961MP Membrane Switch Spacer

### Description

Liner: 58# Polycoated Kraft  
Adhesive: #200 “Hi-Performance” Acrylic  
Adhesive Carrier: Polyester Film  
Adhesive: #200 “Hi-Performance” Acrylic  
Liner: 58# Polycoated Kraft

### Typical Applications

Spacer for membrane switch/keyboard circuits

### Features

- Long term environmentally stable bond.
- High cohesive strength to withstand repeated stresses from switch activation.
- Excellent temperature, humidity, and chemical resistance.
- High bond strength to high surface energy plastics such as polyester and polycarbonate.

<u>Component</u>	<u>Description</u>	<u>Appropriate Thickness</u>	
		<u>Inches</u>	<u>(MM)</u>
Release Liner	58# Polycoated Kraft	0.004	0.10
Adhesive	#200 “Hi-Performance” Acrylic	0.002	0.05
Adhesive Carrier	Polyester	0.007	0.178
Adhesive	#200 “Hi-Performance” Acrylic	0.002	0.05
Release Liner	58# Polycoated Kraft	0.004	0.10
	Total	0.019	0.478

## Properties and Performance

(Typical Values – Not for Specification Use)

- Temperature Range
  - Low – –40 degrees F (–40 degrees C)
  - High Long Term (days, weeks) 250 degrees F (121 degrees C)
  - High Short Term (minutes, hours) 300 degrees F (149 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) 

1.5	KV/mil
	14
- Insulation Resistance (ASTM P257) 

2.5 x 10	ohms
	15
- Volume Resistivity (ASTM D257) 

1.1 x 10	ohms-cm
	15
- Surface Resistivity (ASTM D257) 

1.1 x 10	ohms/square
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- 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 High 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.

	7961MP			
	<u>OZ/IN</u>		<u>N/100mm</u>	
ASTM D903 180 degree peel 12"/minute 1 mil polyester to stainless steel	104		114	
	72 Hour Dwell		Ultimate Bond	
	<u>OZ/IN</u>	<u>N/100 mm</u>	<u>OZ/IN</u>	<u>N/100 mm</u>
3M test 90% peel 12"/minute 8 mil aluminum to various surfaces				
Stainless Steel	104	114	68	74
Epoxy	80	88	74	80
Polyester	68	74	62	70
Polycarbonate	98	108	122	134
ABS	92	102	90	100

## Application Techniques

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.
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.
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.

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**Identification and Converter  
Systems Division**

3M Center, Building 220-7W-03  
St. Paul, MN 55144-1000  
USA  
1 800 223 7427  
1 800 258 7511 FAX  
e-mail idconvert@mmm.com

**3M Canada Inc.**

PO Box 5757  
London, Ontario  
Canada N6A 4TI  
1 800 265 1840  
519 452 6090 FAX

**3M Mexico, S.A. de C.V.**

Apartado Postal 14-139  
Mexico, D.F. 07070  
Mexico  
52 5 728 2289  
52 5 728 2299 FAX

**3M Puerto Rico, Inc.**

Puerto Rico Industrial Park  
PO Box 100  
Carolina, PR 00986-0100  
809 750 3000  
809 750 3035 FAX