



Membrane Switch Spacer/Data Page

FOD # 0916

Scotch™ 7955MP Double Lined Laminating Adhesive

Description

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

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.
- Thick adhesive provides higher bond strength on rough or smooth surfaces.

<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	0.005	0.127
Release Liner	58# Polycoated Kraft	0.004	0.10
	Total	0.013	0.327

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
- Volume Resistivity (ASTM D257) 2.2×10^{15} ohm-cm
- Surface Resistivity (ASTM D257) 1.3×10^{14} 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 resistant to oxidation and ozone when exposed to air or sunlight (U.V.).

Adhesion Properties

The results indicated are typical values.

	7955MP			
	<u>OZ/IN</u>		<u>N/100 mm</u>	
ASTM D903				
180 degree peel				
12"/minute				
1 mil polyester	87		96	
to stainless steel				
	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	164	180	244	270
Epoxy	156	172	214	236
Polyester	128	142	142	156
Polycarbonate	170	188	198	218
ABS	174	190	134	146

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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