

3M 9172MP High Performance Adhesive Transfer Tapes with Adhesive 200MP

Category : Polymer , Adhesive

Material Notes:

3M™ High Performance Acrylic Adhesive 200MP is a popular choice for graphic attachment and membrane switch applications because it has excellent quality, consistency and durability. In addition, as a result of 3M's innovative, proprietary process, 3M™ Adhesive 200MP also offers the following excellent performance characteristics. Clarity (virtually free of vapor inclusions that are commonly found in adhesives produced by the traditional solvent coating technique). Excellent high temperature performance as well as excellent shear strength (that minimizes edge lifting and slippage of parts). Excellent resistance to harsh environments; this adhesive can withstand splashes of organic solvents, weak acids and bases and salt water, cleaning solutions, germicidals, disinfectants, oils, etc. In addition, it performs well after exposure to humidity and hot/cold cycles. Provides some initial repositionability when bonding to plastic parts (not metal) which allows graphic parts to be lifted and repositioned if initial alignment is incorrect. Finally, this adhesive family is provided with a variety of liner configurations to help ensure excellent process flexibility. Information provided by 3M

Order this product through the following link:

http://www.lookpolymers.com/polymer_3M-9172MP-High-Performance-Adhesive-Transfer-Tapes-with-Adhesive-200MP.php

Physical Properties	Metric	English	Comments
Thickness	58.4 microns	2.30 mil	

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	0.352 MPa	51.1 psi	ASTM D2370-82
	0.752 MPa @Thickness 0.127 mm	109 psi @Thickness 0.00500 in	Tensile Lap Shear – Peak Stress; ASTM D1002-72
Elongation at Break	1915 %	1915 %	ASTM D2370-82
	@Thickness 0.127 mm	@Thickness 0.00500 in	
Peel Strength	0.51494 kN/m	2.9375 pli	to Stainless Steel, 90° peel, 2 mil aluminum foil backing, 15 minute room temperature
	0.570 kN/m	3.25 pli	72 hour RT rigid PVC (unplasticized), 90° peel, 2 mil aluminum foil backing
	0.6355 kN/m	3.625 pli	72 hour RT polycarbonate, 90° peel, 2 mil aluminum foil backing
	0.66833 kN/m	3.8125 pli	72 hour RT acrylic, 90° peel, 2 mil aluminum foil backing
	0.6793 kN/m	3.875 pli	72 hour RT ABS, 90° peel, 2 mil aluminum foil backing
	0.71216 kN/m	4.0625 pli	72 hour RT polycarbonate, 90° peel, 5 mil aluminum foil backing
	0.7231 kN/m	4.125 pli	to Stainless Steel, 90° peel, 5 mil aluminum foil backing, 15 minute

Mechanical Properties	Metric	English	room temperature Comments
	0.73407 kN/m	4.1875 pli	72 hour RT acrylic, 90° peel, 5 mil aluminum foil backing
	0.745 kN/m	4.25 pli	72 hour RT ABS, 90° peel, 5 mil aluminum foil backing
	0.75598 kN/m	4.3125 pli	72 hour RT rigid PVC (unplasticized), 90° peel, 5 mil aluminum foil backing
	0.84363 kN/m	4.8125 pli	to Stainless Steel, 72 hour RT - 180° peel, 2 mil al foil
	0.84363 kN/m	4.8125 pli	72 hour RT aluminum, 90° peel, 2 mil aluminum foil backing
	0.877 kN/m	5.00 pli	72 hour RT glass, 90° peel, 2 mil aluminum foil backing
	0.8984 kN/m	5.125 pli	to Stainless Steel, 90° peel, 2 mil aluminum foil backing, 72 hour RT
	1.01 kN/m	5.75 pli	72 hour RT glass, 90° peel, 5 mil aluminum foil backing
	1.2600 kN/m	7.1875 pli	72 hour RT aluminum, 90° peel, 5 mil aluminum foil backing
	1.293 kN/m	7.375 pli	to Stainless Steel, 90° peel, 5 mil aluminum foil backing, 72 hour RT
	1.4572 kN/m	8.3125 pli	to Stainless Steel, 72 hour RT - 180° peel, 5 mil al foil
	1.84 kN/m	10.5 pli	to Stainless Steel, 90° peel, 2 mil aluminum foil backing, 72 hour 158°F (70°C)
	1.983 kN/m	11.31 pli	to Stainless Steel, 90° peel, 5 mil aluminum foil backing, 72 hour 158°F (70°C)

Thermal Properties	Metric	English	Comments
CTE, linear	-6.00 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$	-3.33 $\mu\text{in}/\text{in}\cdot^\circ\text{F}$	first heat; ASTM D 696
	@Thickness 0.0508 mm	@Thickness 0.00200 in	
	28.0 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$	15.6 $\mu\text{in}/\text{in}\cdot^\circ\text{F}$	first heat; ASTM D 696
	@Thickness 0.0508 mm	@Thickness 0.00200 in	
	72.0 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$	40.0 $\mu\text{in}/\text{in}\cdot^\circ\text{F}$	second heat; ASTM D 696
	@Thickness 0.127 mm	@Thickness 0.00500 in	
	92.0 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$	51.1 $\mu\text{in}/\text{in}\cdot^\circ\text{F}$	second heat; ASTM D 696
	@Thickness 0.127 mm	@Thickness 0.00500 in	

Thermal Properties	Metric	English	Comments
Thermal Conductivity	0.170 W/m-K	1.25 BTU-in/hr-ft ² -°F	
	@Thickness 0.0508 mm	@Thickness 0.00200 in	
	0.180 W/m-K	1.25 BTU-in/hr-ft ² -°F	
	@Thickness 0.127 mm	@Thickness 0.00500 in	

Electrical Properties	Metric	English	Comments
Dielectric Strength	23.6 kV/mm	600 kV/in	ASTM D149-92
	@Thickness 0.127 mm	@Thickness 0.00500 in	
	34.6 kV/mm	880 kV/in	500 vac, rms [60 hz/sec]; ASTM D149-92
	@Thickness 0.0508 mm	@Thickness 0.00200 in	
Dielectric Breakdown	1760 V	1760 V	ASTM D 150-92
	@Thickness 0.0508 mm, Frequency 1000 Hz	@Thickness 0.00200 in, Frequency 1000 Hz	
	3000 V	3000 V	ASTM D 150-92
	@Thickness 0.127 mm, Frequency 1000 Hz	@Thickness 0.00500 in, Frequency 1000 Hz	
Dissipation Factor	0.021	0.021	
	@Thickness 0.0508 mm	@Thickness 0.00200 in	
	0.022	0.022	
	@Thickness 0.127 mm	@Thickness 0.00500 in	

Processing Properties	Metric	English	Comments
Shelf Life	18.0 Month	18.0 Month	

Descriptive Properties	Value	Comments
Appearance	Clear	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com

Email : sales@lookpolymers.com

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China