



Double Coated PET Tapes

8015P, 8020P

Technical Data

August, 2018

Product Description

The subject double-coated film tape features a medium-firm acrylic pressure sensitive adhesive system. The key characteristics of this adhesive include a combination of high performance in adhesion and good shear holding power to a wide variety of materials, including many plastic materials.

This product series is designed for system assembly in electronic market and flat panel display application, such as nameplate, optical management films attachment, foam and isolative film fixing.

Constructions

Product Number	Adhesive Type/ Color ¹	Adhesive Thickness (mm)	Liner Color, Type, Print	Liner Caliper
3M™ 8015P	Acrylic Translucent	0.15 mm	White paper liner with grey 3M logo printing	0.13mm
3M™ 8020P	Acrylic Translucent	0.20 mm	White paper liner with grey 3M logo printing	0.13mm

¹The adhesive color is translucent with a very slight yellow cast. The yellow cast is not typically visible in a single adhesive layer.

3M™ Double Coated PET Tapes

8015P • 8020P

Typical Physical Properties and Performance Characteristics

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

I.

Adhesion to Surfaces (Unit: kgf/in)

ASTM D3330 modified (180° peel, 2 mil aluminum foil backing)

	8015P	8020P
Dwell		
20min RT SUS	2.9	3.5
72 hour RT SUS	3.5	3.7
20min RT PC		3.6
72 hour RT PC		3.8
20min RT ABS		2.8
72 hour RT ABS		3.0
20min RT PP		2.5
72 hour RT PP		2.7
20min RT PET		3.8
72 hour RT PET		4.0

II.

Relative High Temperature Operating Ranges

Short term (minutes/hours)	121°C
Long term (days/weeks)	93°C

III.

Static Shear

ASTM D3654 - 1" x 1" sample area - aluminum foil to stainless steel

Minutes to Failure

Temperature	Load	8015P	8020P
22°C	1Kg	10000+	
65°C	1Kg	10000+	
85°C	1Kg	4320+	

Application Techniques

For maximum bond strength (during installation of the final part) the surface should be thoroughly cleaned and dried. Typical cleaning solvents are heptane* (for oily surfaces) or isopropyl alcohol* for plastics. Use reagent grade solvents since common household materials like rubbing alcohol frequently contain oils to minimize the drying affect on skin and can interfere with the performance of a pressure-sensitive adhesive.

It is necessary to provide pressure during lamination (1.5-20 pli recommended) and during final part installation (10-15 psi) to allow the adhesive to come into direct contact with the substrate. Using a hard-edged plastic tool, which is the full width of the laminated part, helps to provide the necessary pressure at the point of lamination. Heat can increase bond strength when bonding to metal parts (generally this same increase is observed at room temperature over longer times, weeks). For plastic parts, the bond strength is not enhanced with the addition of heat.

The ideal adhesive application temperature range is 60°F (15.6°C) to 100°F (38°C). Application is not recommended if the surface temperature is below 50°F (10°C) because the adhesive becomes too firm to adhere readily. Once properly applied, at the recommended application temperature, low temperature holding is generally satisfactory.

Application Ideas

- Long term bonding of graphic nameplates and overlays (“subsurface” printed polycarbonate or polyester) to metal and high surface energy plastics in the aerospace, medical and industrial equipment, automotive, appliance and electronic markets.
- Bonding metal nameplates and rating plates in the aerospace, medical and industrial equipment, automotive, appliance and electronic markets.
- Bonding graphic overlays for membrane switches and for bonding the complete switch to the equipment surface.
- High speed processing of parts in the medical, telecommunications and electronics markets (medical components, durable labels, flexible circuits).
- Lamination to industrial foams for rotary die-cutting of small gaskets for industrial and electronics markets.

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Product Use

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ISO 9001: 2015

This EDB product was manufactured under a 3M quality system registered to ISO 9001: 2015 standards.



Electric Device Bonding

3M Taiwan

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