



Technical Data Sheet

3M™ Double Coated Tape GPT-020



Additional Info

Product Description

3M™ Double Coated Tape GPT-020 is an 8 mil thick, double sided tape utilizing a modified acrylic adhesive with polyester carrier and a paper liner.

Product Features

- Excellent adhesion to a variety of substrates
- High initial tack
- High shear and temperature resistance
- Easy handling and converting due to polyester carrier
- General Purpose Tape (GPT)

Typical Physical Properties

Attribute Name	Test Method	Test Condition	Value
Color			Clear
Adhesive Type			Modified Acrylic
Adhesive Carrier			PET
Adhesive Thickness		Faceside	0.095 mm (3.75 mil) ¹
Carrier Thickness			0.012 mm (0.47 mil)
Adhesive Thickness		Backside	0.095 mm (3.75 mil) ²
Total Tape Thickness	ASTM D3652		0.202 mm (7.95 mil)
Liner			Polycoated Kraft, Red 3M Logo on White Background
Liner Print			3M
Liner Thickness			0.1 mm (3.9 mil)

¹ Faceside adhesive is on the interior of the roll, exposed when unwound and liner removed.

² Backside adhesive is on the exterior of the roll, exposed when liner is removed.

Typical Performance Characteristics

90° & 180° Peel Adhesion (Table 1)

Shear & Temperature Resistance (Tables 2 & 3)

Test Method: ASTM D3330

Attribute Name	Dwell Time	Temperature	Substrate	Backing	Value
90° Peel Adhesion	20 min	23 °C (73 °F)	Stainless Steel	2 mil Aluminum Foil	7.7 N/cm (70 oz/in) ¹
90° Peel Adhesion	72 h	23 °C (73 °F)	Stainless Steel	2 mil Aluminum Foil	9.1 N/cm (83 oz/in) ¹
90° Peel Adhesion	72 h	23 °C (73 °F)	ABS	2 mil Aluminum Foil	9.7 N/cm (89 oz/in) ¹
90° Peel Adhesion	72 h	23 °C (73 °F)	Polypropylene (PP)	2 mil Aluminum Foil	9.2 N/cm (84 oz/in) ¹

Attribute Name	Dwell Time	Temperature	Substrate	Backing	Value
90° Peel Adhesion	72 h	23 °C (73 °F)	Polycarbonate (PC)	2 mil Aluminum Foil	10 N/cm (91 oz/in) ¹
180° Peel Adhesion	20 min	23 °C (73 °F)	Stainless Steel	2 mil Aluminum Foil	14.3 N/cm (131 oz/in) ¹
180° Peel Adhesion	72 h	23 °C (73 °F)	Stainless Steel	2 mil Aluminum Foil	17.1 N/cm (156 oz/in) ¹
180° Peel Adhesion	72 h	23 °C (73 °F)	ABS	2 mil Aluminum Foil	17.7 N/cm (162 oz/in) ¹
180° Peel Adhesion	72 h	23 °C (73 °F)	Polypropylene (PP)	2 mil Aluminum Foil	19.1 N/cm (174 oz/in) ¹
180° Peel Adhesion	72 h	70 °C (158 °F)	Stainless Steel	2 mil Aluminum Foil	20.3 N/cm (185 oz/in) ¹
180° Peel Adhesion	72 h	70 °C (158 °F)	ABS	2 mil Aluminum Foil	16.1 N/cm (147 oz/in) ¹
180° Peel Adhesion	72 h	70 °C (158 °F)	Polypropylene (PP)	2 mil Aluminum Foil	20.4 N/cm (186 oz/in) ¹
180° Peel Adhesion	72 h	23 °C (73 °F)	Stainless Steel	2 mil PET	11.8 N/cm (106 oz/in) ¹
180° Peel Adhesion	72 h	23 °C (73 °F)	ABS	2 mil PET	12.3 N/cm (110 oz/in) ¹
180° Peel Adhesion	72 h	23 °C (73 °F)	Polypropylene (PP)	2 mil PET	13.5 N/cm (121 oz/in) ¹
180° Peel Adhesion	72 h	23 °C (73 °F)	Polycarbonate (PC)	2 mil PET	14.6 N/cm (131 oz/in) ¹
180° Peel Adhesion	72 h	23 °C (73 °F)	Glass	2 mil PET	12.9 N/cm (116 oz/in) ¹

¹ 300 mm/min (12 in/min)

Substrate: Stainless Steel
Dwell Time: 72 h
Backing: 2 mil Aluminum Foil

Attribute Name	Test Method	Temperature	Test Condition	Value
Static Shear	ASTM D3654	23 °C (73 °F)	1000 g	10000 min ¹
Static Shear	ASTM D3654	70 °C (158 °F)	500 g	10000 min ¹
Static Shear	ASTM D3654	93 °C (200 °F)	500 g	10000 min ¹
Shear Adhesion Failure Test - SAFT	PSTC 17		1000 g	140 °C (284 °F) ²
Shear Adhesion Failure Test - SAFT	PSTC 17		500 g	202 °C (395 °F) ²

¹ 25 x 25 mm (1 in x 1 in) sample area, test terminated after 10,000 minutes

² 25 x 25 mm (1 in x 1 in) Area Contact

Attribute Name	Value
Short Term Temperature Resistance	149 °C (300 °F) ¹
Long Term Temperature Resistance	93 °C (200 °F) ²

¹ Short Term (minutes, hour)

² Long Term (day, weeks)

Typical Environmental Performance

180° Peel Adhesion

Temperature: 32 °C (90 °F)

Dwell Time: 72 h

Backing: 2 mil Aluminum Foil

Test Method: ASTM D3330

Environmental Condition: 90 %RH

Substrate	Value
Stainless Steel	18.3 N/cm (167 oz/in) ¹
ABS	17.8 N/cm (163 oz/in) ¹
Polypropylene (PP)	19.9 N/cm (182 oz/in) ¹

¹ 300 mm/min (12 in/min)

90° Peel Adhesion

Substrate: Stainless Steel

Backing: 2 mil Aluminum Foil

Test Method: ASTM D3330

Dwell Time	Temperature	Environmental Condition	Value
72 h	23 °C (73 °F)	Control	9.1 N/cm (83 oz/in) ¹
1 h	23 °C (73 °F)	Isopropyl alcohol	102 % of control ¹
1 h	23 °C (73 °F)	Acetone	89 % of control ¹
1 h	23 °C (73 °F)	Gasoline	84 % of control ¹
4 h	23 °C (73 °F)	Weak Acid (pH 4)	95 % of control ¹
4 h	23 °C (73 °F)	Weak Base (pH 10)	93 % of control ¹
72 h	23 °C (73 °F)	Salt Water (5% by weight)	82 % of control ¹
100 h	23 °C (73 °F)	Water Immersion	85 % of control ¹
72 h	32 °C (90 °F)	90 %RH	117 % of control ¹
72 h	49 °C (120 °F)	Oil (10W30)	108 % of control ¹
96 h		Temperature Cycling: 4 Hours at 70 °C (158 °F). 4 Hours at -29 °C (-20 °F). 16 Hours at 23 °C (73 °F). Repeat four times	104 % of control ¹

¹ 300 mm/min (12 in/min)

Handling/Application Information

Application Examples

- Point of purchase displays (POP)
- Indoor/Outdoor signage and banners
- Bonding and mounting of sales displays and billboards.
- Paper bonding and packaging
- Splicing
- Mounting of plastic parts
- Mounting of furniture and decorative trims
- Fixing of decorative trims and emblems.

Storage and Shelf Life

Store under normal conditions of 16° to 27°C (60° to 80°F) and 40 to 60% relative humidity in the original packaging, out of direct sunlight. For best performance, use this product within 18 months from date of manufacture.

Certificate of Analysis (COA)

Available upon request.

Information

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3M Center, St. Paul, MN 55144-1000
3M.com/iatd

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