

English
Last Revision Date: Dec, 2020

Technical Data Sheet

3M™ Double Coated Tape GPT-020F

Product Description

3M™ Double Coated Tape GPT-020F is an 8 mil thick, double sided tape utilizing a modified acrylic adhesive with polyester carrier and a BOPP (Bi-axially Oriented Polypropylene) film liner.

Product Features

- High adhesion to a variety of high and low surface energy substrates
- High initial tack
- High shear and temperature resistance
- Easy handling and converting due to polyester carrier
- Bi-axially Oriented Polypropylene (BOPP) Liner for clean handling and automatic unwinding
- General Purpose Tape (GPT)
- High thermal and humidity resistance

Typical Physical Properties

Property	Values	Additional Information
Adhesive Type	Modified Acrylic	
Adhesive Carrier	PET	
Color	Clear	
Liner	Bi-axially Oriented Polypropylene film, White with Red 3M Logo	
Liner Thickness	0.1 mm	
Liner Print	3M	
Carrier Thickness	0.012 mm	
Total Tape Thickness (mil)	7.95 mil	View

Test Method: ASTM D3652

Total Tape Thickness (mm)	0.202 mm	View

Test Method: ASTM D3652

Adhesive Thickness	0.095 mm	View

Test Name: Backside

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

Adhesive Thickness	3.75 mil	View

Test Name: Backside

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

Adhesive Thickness	0.095 mm	View

Test Name: Faceside

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

Adhesive Thickness	3.75 mil	View

Test Name: Faceside

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

Carrier Thickness	0.47 mil
Liner Thickness	3.9 mil
Shear Adhesion Failure Test - SAFT	500g >190 °C, 1000G>160 °C
Shear Adhesion Failure Temperature - SAFT	500g >375 °F, 1000G>320 °F

Typical Performance Characteristics

Property	Values	Additional Information
180° Peel Adhesion	12.32 N/cm	View

Test Method: ASTM D3330

Dwell/Cure Time: 72.0
Dwell Time Units: hr
Temp C: 23C
Temp F: 72F
Environmental Condition: 50%RH

Substrate: Polycarbonate (PC)

Notes: 12 in/min (300 mm/min)

180° Peel Adhesion	113 oz/in	View

Test Method: ASTM D3330

Dwell/Cure Time: 72.0
Dwell Time Units: hr
Temp C: 23C
Temp F: 72F
Environmental Condition: 50%RH
Substrate: Polycarbonate (PC)

Notes: 12 in/min (300 mm/min)

180° Peel Adhesion	10.86 N/cm	View

Test Method: ASTM D3330

Dwell/Cure Time: 72.0
Dwell Time Units: hr
Temp C: 23C
Temp F: 72F
Environmental Condition: 50%RH
Substrate: ABS

Notes: 12 in/min (300 mm/min)

180° Peel Adhesion	99 oz/in	View

Test Method: ASTM D3330

Dwell/Cure Time: 72.0
Dwell Time Units: hr
Temp C: 23C
Temp F: 72F
Environmental Condition: 50%RH
Substrate: ABS

Notes: 12 in/min (300 mm/min)

180° Peel Adhesion	12.26 N/cm	View

Test Method: ASTM D3330

Dwell/Cure Time: 72.0
Dwell Time Units: hr
Temp C: 23C
Temp F: 72F
Environmental Condition: 50%RH
Substrate: Polypropylene (PP)

Notes: 12 in/min (300 mm/min)

180° Peel Adhesion	112 oz/in	View

Test Method: ASTM D3330

Dwell/Cure Time: 72.0
Dwell Time Units: hr
Temp C: 23C
Temp F: 72F
Environmental Condition: 50%RH
Substrate: Polypropylene (PP)

Notes: 12 in/min (300 mm/min)

180° Peel Adhesion	11.79 N/cm	View

Test Method: ASTM D3330

Dwell/Cure Time: 72.0
Dwell Time Units: hr
Temp C: 23C
Temp F: 72F
Environmental Condition: 50%RH
Substrate: Glass

Notes: 12 in/min (300 mm/min)

180° Peel Adhesion	108 oz/in	View

Test Method: ASTM D3330

Dwell/Cure Time: 72.0
Dwell Time Units: hr
Temp C: 23C
Temp F: 72F
Environmental Condition: 50%RH
Substrate: Glass

Notes: 12 in/min (300 mm/min)

180° Peel Adhesion	11.3 N/cm	View

Test Method: ASTM D3330

Dwell/Cure Time: 72.0
Dwell Time Units: hr
Temp C: 23C
Temp F: 72F
Environmental Condition: 50%RH
Substrate: Stainless Steel

Notes: 12 in/min (300 mm/min)

180° Peel Adhesion	103 oz/in	View

Test Method: ASTM D3330

Dwell/Cure Time: 72.0
Dwell Time Units: hr
Temp C: 23C
Temp F: 72F
Environmental Condition: 50%RH
Substrate: Stainless Steel

Notes: 12 in/min (300 mm/min)

Short Term Temperature Resistance	320 °F	View

Test Condition: Short Term (minutes, hour)

Short Term Temperature Resistance	160 °C	View

Test Condition: Short Term (minutes, hour)

Long Term Temp C	90 °C	View

Test Condition: Long Term (day, weeks)

Long Term Temp F	195 °F	View

Test Condition: Long Term (day, weeks)

Static Shear	>10,000 min	View

Test Method: ASTM D3654

Test Condition: 1000 g @ Room Temperature

Notes: 1 in² sample size

Static Shear	>10,000 min	View

Test Method: ASTM D3654

Test Condition: 500 g @ 70°C (158°F)

Notes: 0.5 in² sample size

UV Resistance	Excellent

Storage and Shelf Life

It is suggested that products are stored at room temperature conditions of 70°F (21°C) and 50% relative humidity. If stored properly, product retains its performance and properties for 18 months from date of manufacture. Note: The shelf life may be shortened if the original packaging is not properly sealed or stored in an environment with high temperatures or humidity.

Certificate of Analysis (COA)

Available upon request.

Automotive Disclaimer

Automotive Applications: This product is an industrial product and has not been designed or tested for use in certain automotive applications, including, but not limited to, automotive electric powertrain battery or high voltage applications. This product does not fully adhere to typical automotive design or quality system requirements, such as IATF 16949 or VDA 6.3. This product may not be manufactured in an IATF certified facility and may not meet a Ppk of 1.33 for all properties. The product may not undergo an automotive production part approval process (PPAP). Customer is solely responsible for evaluating the product and determining whether it is appropriate and suitable for customer's automotive application and for conducting incoming inspections before use of the product. Failure to do so may result in injury, death, and/or harm to property. No written or verbal statement, report, data or recommendation by 3M related to automotive use of the product shall have any force or effect unless in an agreement signed by the Technical Director of 3M's Automotive Division. Customer assumes all responsibility and risk if customer chooses to use this product in an automotive electric powertrain battery or high voltage application, and 3M will not be liable for any loss or damage arising from or related to the 3M product or customer's use of the product, whether direct, indirect, special, incidental, or consequential (including, but not limited to, lost profits or business opportunity or recall costs), regardless of the legal or equitable theory asserted, including, but not limited to, warranty, contract, negligence, or strict liability. In no event shall 3M be liable for any damages in excess of the purchase price paid for the product.
NOTWITHSTANDING ANY OTHER STATEMENT TO THE CONTRARY, 3M MAKES NO REPRESENTATIONS, WARRANTIES OR CONDITIONS WHATSOEVER, EXPRESS OR IMPLIED, REGARDING THE PRODUCT IF USED IN AN AUTOMOTIVE ELECTRIC POWERTRAIN BATTERY OR HIGH VOLTAGE APPLICATION, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTY ON PERFORMANCE, LONGEVITY, SUITABILITY, COMPATIBILITY, OR INTEROPERABILITY, OR ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ARISING OUT OF A COURSE OF DEALING, CUSTOM, OR USAGE OF TRADE.

Important Notice

All statements, technical information and recommendations contained in this document are based upon tests or experience that 3M believes are reliable. However, many factors beyond 3M's control can affect the use and performance of a 3M product in a particular application, including the conditions under which the product is used and the time and environmental conditions in which the product is expected to perform. Since these factors are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for the user's method or application. All questions of liability relating to this product are governed by the terms of the sale subject, where applicable, to the prevailing law

Bottom Matter

3M
Industrial Adhesives & Tapes Division Converter Markets
3M Center, Building 225-3S-06
St. Paul, MN 55144-1000
800-223-7427 651-778-4244 (fax)
www.3M.com

Trademarks

3M is a trademark of 3M Company.

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.

References

Property	Values
3m.com Product Page	https://www.3m.com/3M/en_US/p/d/b5005163007/

ISO Statement

This Industrial Adhesives and Tapes Division product was manufactured under a 3M quality system registered to ISO 9001 standards.

Precautionary Information

For information please contact your local 3M Office. www.3M.com

Information

Technical Information: The technical information, guidance, and other statements contained in this document or otherwise provided by 3M are based upon records, tests, or experience that 3M believes to be reliable, but the accuracy, completeness, and representative nature of such information is not guaranteed. Such information is intended for people with knowledge and technical skills sufficient to assess and apply their own informed judgment to the information. No license under any 3M or third party intellectual property rights is granted or implied with this information.

Product Selection and Use: Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. As a result, customer is solely responsible for evaluating the product and determining whether it is appropriate and suitable for customer's application, including conducting a workplace hazard assessment and reviewing all applicable regulations and standards (e.g., OSHA, ANSI, etc.). Failure to properly evaluate, select, and use a 3M product and appropriate safety products, or to meet all applicable safety regulations, may result in injury, sickness, death, and/or harm to property.

Warranty, Limited Remedy, and Disclaimer: Unless a different warranty is specifically stated on the applicable 3M product packaging or product literature (in which case such warranty governs), 3M warrants that each 3M product meets the applicable 3M product specification at the time 3M ships the product. 3M MAKES NO OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR ARISING OUT OF A COURSE OF DEALING, CUSTOM, OR USAGE OF TRADE. If a 3M product does not conform to this warranty, then the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price.

Limitation of Liability: Except for the limited remedy stated above, and except to the extent prohibited by law, 3M will not be liable for any loss or damage arising from or related to the 3M product, whether direct, indirect, special, incidental, or consequential (including, but not limited to, lost profits or business opportunity), regardless of the legal or equitable theory asserted, including, but not limited to, warranty, contract, negligence, or strict liability.

Disclaimer: 3M industrial and occupational products are intended, labeled, and packaged for sale to trained industrial and occupational customers for workplace use. Unless specifically stated otherwise on the applicable product packaging or literature, these products are not intended, labeled, or packaged for sale to or use by consumers (e.g., for home, personal, primary or secondary school, recreational/sporting, or other uses not described in the applicable product packaging or literature), and must be

selected and used in compliance with applicable health and safety regulations and standards (e.g., U.S. OSHA, ANSI), as well as all product literature, user instructions, warnings, and limitations, and the user must take any action required under any recall, field action or other product use notice. Misuse of 3M industrial and occupational products may result in injury, sickness, or death. For help with product selection and use, consult your on-site safety professional, industrial hygienist, or other subject matter expert. For additional product information, visit www.3M.com.

Please recycle. © 3M 2016 (3/16)