

May, 2017

3M™ Adhesive Transfer Tape 9375W

Product Description

3M™ Adhesive Transfer Tapes are acrylic based and specially formulated to provide a permanent bond between substrates in environments requiring regulatory compliance with flame retardant standards such as Federal Aviation Regulation 25.853.



Technical Information Note

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

Typical Physical Properties

| Property | Values | |
|---------------------|---|---------|
| Color | Off White (opaque) | |
| Thickness Tolerance | ±15 % | |
| Adhesive Type | Tackified Acrylic, 300FR Series | |
| Adhesive Carrier | None | |
| Adhesive Thickness | 0.127 mm | 5 mil |
| Areal Density | 188 g/m ² | |
| Liner | Polycoated Kraft, Layflat and Moisture Stable Liner | |
| Liner Thickness | 0.17 mm | 6.5 mil |
| Liner Color | Tan, unprinted | |
| Net Weight | 83 lb/Ream | |

Typical Performance Characteristics

| Relative High Temperature Operating Ranges | | Test Condition |
|--|--------|-----------------------------|
| 121 °C | 250 °F | Short Term (minutes, hours) |
| 82 °C | 180 °F | Long Term (days, weeks) |

Property: Relative High Temperature Operating Ranges

| 90° Peel Adhesion | | Dwell/Cure Time | Substrate |
|-------------------|-----------|--------------------------|----------------------------------|
| 9.6 N/cm | 88 oz/in | Initial | Stainless Steel |
| 11.7 N/cm | 107 oz/in | 72 hr @ Room Temperature | Stainless Steel |
| 9.5 N/cm | 87 oz/in | 72 hr @ Room Temperature | Polycarbonate (PC) |
| 6.0 N/cm | 55 oz/in | 72 hr @ Room Temperature | Polypropylene (PP) |
| 7.3 N/cm | 67 oz/in | 72 hr @ Room Temperature | High Density Polyethylene (HDPE) |
| 9.4 N/cm | 86 oz/in | 72 hr @ Room Temperature | ABS |
| 17.5 N/cm | 160 oz/in | Ultimate (72 hr, 158°F) | Stainless Steel |

Property: 90° Peel Adhesion
Method: ASTM D3330

Typical Performance Characteristics (continued)

| Property | Values | | Method | Test Condition | Notes | Dwell/Cure Time |
|--------------------|-------------|-----------|------------|---------------------------|-------------------------------|--------------------------|
| Static Shear | >10,000 min | | ASTM D3654 | 1000 g @ Room Temperature | 1 in ² sample size | |
| Static Shear | >10,000 min | | ASTM D3654 | 500 g @ 70°C (158°F) | 1 in ² sample size | |
| Solvent Resistance | Very Good | | | | | |
| UV Resistance | Very Good | | | | | |
| 180° Peel Adhesion | 14 N/cm | 126 oz/in | | | | 72 hr @ Room Temperature |

Available Sizes

| Property | Values | |
|-------------------------------|---------|-----------|
| Normal Slitting Tolerance | ±0.8 mm | ±1/32 in |
| Precision Slitting Capability | ±0.1 mm | ±0.004 in |
| Core Size (ID) | 76.2 mm | 3 in |

Available Sizes:

| Minimum Slit Width: | 1" up to 3" | 1/2" up to 3" | 2" up to 3" |
|---------------------|-------------|---------------|-------------|
| minimum length | 60 yards | 60 yards | 60 yards |
| maximum length | 180 yards | 180 yards | 180 yards |
| 3" to 30" | 60 yards | 60 yards | 60 yards |
| maximum length | 720 yards | 720 yards | 720 yards |
| 31" to 48" | – | – | 60 yards |
| maximum length | – | – | 500 yards |
| 31" to 60" | 60 yards | 60 yards | – |
| maximum length | 500 yards | 500 yards | – |

Certifications/Standards

| Property | Values |
|--|--------|
| Federal Aviation Regulations, FAR 25.853 | Yes |
| Underwriter Laboratories 94, UL-94 (V-2) | Yes |

Handling/Application Information

Application Ideas

This family of products has been formulated for applications requiring flame retardancy and high bond strength to a wide variety of substrates. These attributes and choice of three product thicknesses make the products ideally suited to applications in aerospace, maritime, electronic, automotive and building construction applications on both smooth and textured substrates.

Application Techniques

Bond strength is dependent upon the amount of adhesive-to-surface contact developed. Firm application pressure helps develop better adhesive contact and improve bond strength. 15 psi momentary pressure is typical.

Ideal tape application temperature range is 70°F to 100°F (21°C to 37°C). Initial tape application to surface at temperatures below 50°F (10°C) is not recommended because the adhesive becomes too firm to adhere readily. However, once applied, low temperature holding is generally satisfactory.

Surfaces should be clean and dry prior to bonding. We recommend a final surface cleaning with a mixture of 50% isopropyl alcohol* and water.

Two liner options facilitate wide array of application techniques. Densified kraft liner ideal for roll to roll lamination and subsequent rotary die cutting. Heavy caliper, layflat, polycoated kraft liner, minimizes surface asperities, minimizes distortion of pre-laminated substrates in variable humidity conditions and provide convenient backing for kiss cutting operations.

*Carefully read and follow the manufacturer's precautions and directions for use when using cleaning solvents.

Application Equipment

To apply adhesives in a wide web format, lamination equipment is required to ensure acceptable quality. To learn more about working with pressure-sensitive adhesives please refer to technical bulletin, Lamination Techniques for Converters of Laminating Adhesives (70-0704-1430-8).

For additional dispenser information, contact your local 3M sales representative, or the toll free 3M sales assistance number at 1-800-362-3550.

Storage and Shelf Life

Store under normal conditions of 70°F (21°C) and 50% relative humidity in the original carton.

To obtain best performance, use this product within 24 months from date of manufacture.

Industry Specifications

UL 94 (V-2)

FAR 25.853

Information

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Trademarks

3M is a trademark of 3M Company.

References

Safety Data Sheet (SDS)

https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&msdsLocale=en_US&co=ptn&q=9375W

Family Group

| | 9372W | 9372DKW | 9375W |
|--|--------------------|--------------------|--------------------|
| Relative High Temperature Operating Ranges (°C) Test Condition: Short Term (minutes, hours) | 121 | 121 | 121 |
| Relative High Temperature Operating Ranges (°C) Test Condition: Long Term (days, weeks) | 82 | 82 | 82 |
| Color | Off White (opaque) | Off White (opaque) | Off White (opaque) |

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3M™ Adhesive Transfer Tape 9375W

Family Group (continued)

| | 9372W | 9372DKW | 9375W |
|-------------------------|---|---|---|
| Adhesive Type | Tackified Acrylic, 300FR Series | Tackified Acrylic, 300FR Series | Tackified Acrylic, 300FR Series |
| Adhesive Carrier | None | None | None |
| Adhesive Thickness (mm) | 0.051 | 0.051 | 0.127 |
| Liner | Polycoated Kraft, Layflat and Moisture Stable Liner | Densified Kraft, "DK" suffiz, Designed for Rotary Die Cutting | Polycoated Kraft, Layflat and Moisture Stable Liner |
| Liner Thickness (mm) | 0.17 | 0.1 | 0.17 |
| Liner Color | Tan, unprinted | White, unprinted | Tan, unprinted |

ISO Statement

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

