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English  
Last Revision Date: May, 2022

# Technical Data Sheet

## 3M™ Adhesive Transfer Tape 91022

### Product Description

**Finite Element Analysis (FEA)** data is available for this product at: [3m.com/FEA](https://www.3m.com/FEA)

3M™ Adhesive Transfer Tape 91022 with 3M™ Silicone Adhesive provide high bond strength to most silicones and difficult-to-bond to substrates, including many low surface energy plastics and select varnished leathers.

### Product Features

- Single liner tapes with a stable differential release.
- Good initial quick stick and adhesion build over time.
- Adhesion to silicone rubbers and silicone foams.
- Excellent solvent resistance.
- Superior temperature performance.

### 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	Additional Information
Adhesive Type	Silicone	
Liner	PET	
Liner Thickness	0.05 mm	
Liner Color	White	View
Test Name: Primary		

Total Tape Thickness (mil)


2 mil

View 

Test Method: ASTM D3652

Total Tape Thickness (mm)

0.05 mm

View 

Test Method: ASTM D3652

Liner Print

None

Liner Thickness

2 mil

## Typical Performance Characteristics

Property

Values

Additional Information

90° Peel Adhesion

4.4 N/cm

View 

Test Method: ASTM D3330

Dwell/Cure Time: 24.0

Dwell Time Units: hr

Temp C: 23C

Temp F: 72F


Environmental Condition: 50%RH

Substrate: Stainless Steel

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

90° Peel Adhesion

40 oz/in

View 

Test Method: ASTM D3330

Dwell/Cure Time: 24.0

Dwell Time Units: hr

Temp C: 23C

Temp F: 72F

Environmental Condition: 50%RH

Substrate: Stainless Steel

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

90° Peel Adhesion

4.4 N/cm

View 

Test Method: ASTM D3330

Dwell/Cure Time: 24.0

Dwell Time Units: hr

Temp C: 23C

Temp F: 72F


Environmental Condition: 50%RH

Substrate: ABS

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

90° Peel Adhesion

40 oz/in

View 

Test Method: ASTM D3330

Dwell/Cure Time: 24.0

Dwell Time Units: hr

Temp C: 23C

Temp F: 72F


Environmental Condition: 50%RH

Substrate: ABS

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

90° Peel Adhesion

4.4 N/cm

View 

Test Method: ASTM D3330

Dwell/Cure Time: 24.0

Dwell Time Units: hr

Temp C: 23C

Temp F: 72F

Environmental Condition: 50%RH

Substrate: Polycarbonate (PC)

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

90° Peel Adhesion

40 oz/in

View 

Test Method: ASTM D3330

Dwell/Cure Time: 24.0

Dwell Time Units: hr

Temp C: 23C

Temp F: 72F

Environmental Condition: 50%RH

Substrate: Polycarbonate (PC)

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

90° Peel Adhesion

3.8 N/cm

View 

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Test Method: ASTM D3330

Dwell/Cure Time: 24.0

Dwell Time Units: hr

Temp C: 23C

Temp F: 72F

Environmental Condition: 50%RH

Substrate: Polypropylene (PP)

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

90° Peel Adhesion

35 oz/in

View 

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Test Method: ASTM D3330

Dwell/Cure Time: 24.0

Dwell Time Units: hr

Temp C: 23C

Temp F: 72F

Environmental Condition: 50%RH

Substrate: Polypropylene (PP)

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

90° Peel Adhesion

3.8 N/cm

View 

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Test Method: ASTM D3330

Dwell/Cure Time: 24.0

Dwell Time Units: hr

Temp C: 23C

Temp F: 72F

Environmental Condition: 50%RH

Substrate: Silicone Rubber

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

90° Peel Adhesion

35 oz/in

View 

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Test Method: ASTM D3330

Dwell/Cure Time: 24.0

Dwell Time Units: hr

Temp C: 23C

Temp F: 72F

Environmental Condition: 50%RH

Substrate: Silicone Rubber

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

Short Term Temperature Resistance

500 °F

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Short Term Temperature Resistance

260 °C

Long Term Temperature Resistance

90 °C

Long Term Temperature Resistance

194 °F

Static Shear

>10,000 min

View 

Test Method: ASTM D3654

Notes: 1 in<sup>2</sup> sample size

Static Shear

>10,000 min

View 

Test Method: ASTM D3654

Notes: 1 in<sup>2</sup> sample size

Solvent Resistance

Excellent

Available Sizes

Property

Values

Additional Information

Note

Subject to Minimum Order Requirements

Maximum Length

66 m

View 

Width: 1/2 in to 1 in widths

Maximum Length

72 yd

View 

Width: 1/2 in to 1 in widths

Maximum Length

329 m

View 

Width: 3 in and wider

Maximum Length

360 yd

View 

Width: 3 in and wider

Maximum Available Width

48 in

Normal Slitting Tolerance

±0.8 mm

Normal Slitting Tolerance

±1/32 in

Core Size (ID)

76.2 mm

Core Size (ID)

3 in

## Typical Environmental Performance

Humidity Resistance: High humidity has minimal effect on adhesive performance.

No significant reduction in bond strength is observed after exposure for 7 days at 90°F (32°C) and 90% relative humidity.

UV Resistance: When properly applied, nameplates and decorative trim parts are not adversely affected by exposure.

Water Resistance: Immersion in water has no appreciable effect on the bond strength. After 100 hours at room temperature, the high bond strength is maintained.

Temperature Cycling Resistance: High bond strength is maintained after cycling four times through:

8 hours at 194°F (90°C)

16 hours at -40°F (-40°C)

8 hours at 100.4°F (38°C/100% RH)

16 hours at -40°F (-40°C)

Chemical Resistance: When properly applied, nameplate and decorative trim parts will hold securely after exposure to numerous chemicals including oil, mild acids and alkalis.

## Storage and Shelf Life

Store in original cartons at 70°F (21°C) and 50% relative humidity.

If stored under proper conditions, product retains its performance and properties for one year from date of manufacture.

## Bottom Matter

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3M  
Industrial Adhesives and Tapes Division  
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St. Paul, MN 55144-1000  
800-362-3550

## Trademarks

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3M is a trademark of 3M Company.

## Automotive Disclaimer

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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.

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## Handling/Application Information

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### Application Examples

- General purpose silicone bonding.
- Vibration damping.
- High temperature applications.
- Ideal for single liner applications.

### Application Techniques

Bond strength is dependent upon the amount of adhesive-to-surface contact developed. Firm application pressure and moderate heat, from 100°F (38°C) to 130°F (54°C), will assist the adhesive in developing intimate contact with the bonding surface.

To obtain optimum adhesion, the bonding surfaces must be clean, dry and well unified. Some typical surface cleaning solvents are isopropyl alcohol or heptane.\*

Ideal tape application temperature range is 70°F to 100°F (21°C to 38°C). Initial tape application to surfaces at temperatures below 50°F (10°C) is not recommended because the adhesive becomes too firm to adhere readily. However, once properly applied, low temperature holding is generally satisfactory.

\*Carefully read and follow the manufacturer's precautions and directions for use when working with solvents. These cleaning recommendations may not be compliant with the rules of certain Air Quality Management Districts in California; consult applicable rules before use.

### 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.

## References

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Property  
Values

3m.com Product Page

[https://www.3m.com/3M/en\\_US/p/d/b40065869/](https://www.3m.com/3M/en_US/p/d/b40065869/)

Safety Data Sheet SDS

[https://www.3m.com/3M/en\\_US/company-us/SDS-search/results/?gsaAction=msdsSRA&msdsLocale=en\\_US&co=ptn&q=91022](https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&msdsLocale=en_US&co=ptn&q=91022)

## ISO Statement

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

## Information

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