



# Technical Data Sheet

3M™ Low VOC Tape 99015LVC



[Product Details](#)

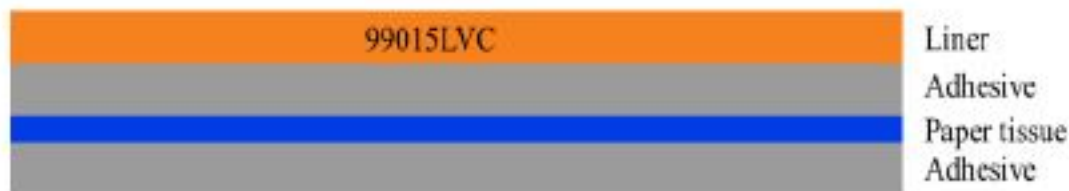


[Regulatory Info/SDS](#)

## Product Description

3M™ Low VOC Tapes with Acrylic Adhesive 98010LVC and 99015LVC are designed for automotive interior applications on commonly used foam substrates, such as PU Ester and EPDM, as well as high surface energy (HSE) substrates. The pure acrylic adhesive on both thin bonding tapes is designed to be low fog and low emission to meet the VOC requirements set forth in the JAMA and VDA278 test methods used by Automotive OEM's and tier suppliers.

98010LVC is a 3.9 mil (0.10 mm) low VOC scrim reinforced transfer tape that provides good dimensional stability for large area lamination. 99015LVC is a 5.9 mil (0.15 mm) low VOC double coated tape with tissue carrier for ease of handling during lamination and excellent die-cutting characteristic.



## 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

| Attribute Name       | Test Method | Value                |
|----------------------|-------------|----------------------|
| Adhesive Type        |             | Acrylic              |
| Total Tape Thickness | ASTM D3652  | 0.15 mm (5.9 mil)    |
| Liner                |             | 58# Densified Kraft  |
| Liner Print          |             | Low VOC              |
| Liner Thickness      |             | 0.08 mm (3.2 mil)    |
| Primary Liner Color  |             | White with red print |

## Typical Performance Characteristics

### 180° Peel Adhesion

Backing: 2 mil Aluminum Foil

Test Method: ASTM D3330

| Dwell Time | Temperature    | Substrate          | Value                            |
|------------|----------------|--------------------|----------------------------------|
| 20 min     | 22 °C (72 °F)  | ABS                | 13 N/cm (120 oz/in) <sup>1</sup> |
| 20 min     | 22 °C (72 °F)  | Polycarbonate (PC) | 14 N/cm (130 oz/in) <sup>1</sup> |
| 20 min     | 22 °C (72 °F)  | Polypropylene (PP) | 2.6 N/cm (24 oz/in) <sup>1</sup> |
| 20 min     | 22 °C (72 °F)  | Stainless Steel    | 13 N/cm (120 oz/in) <sup>1</sup> |
| 72 h       | 70 °C (158 °F) | ABS                | 14 N/cm (130 oz/in) <sup>1</sup> |

| Dwell Time | Temperature    | Substrate          | Value                            |
|------------|----------------|--------------------|----------------------------------|
| 72 h       | 70 °C (158 °F) | Polycarbonate (PC) | 14 N/cm (130 oz/in) <sup>1</sup> |
| 72 h       | 70 °C (158 °F) | Polypropylene (PP) | 2.7 N/cm (25 oz/in) <sup>1</sup> |
| 72 h       | 70 °C (158 °F) | Stainless Steel    | 12 N/cm (110 oz/in) <sup>1</sup> |

<sup>1</sup> 12 in/min (300 mm/min)

### 90° Peel Adhesion

Backing: 2 mil Aluminum Foil

Test Method: ASTM D3330

| Dwell Time | Temperature    | Substrate          | Value                            |
|------------|----------------|--------------------|----------------------------------|
| 20 min     | 22 °C (72 °F)  | ABS                | 2.0 N/cm (18 oz/in) <sup>1</sup> |
| 20 min     | 22 °C (72 °F)  | Polycarbonate (PC) | 9.5 N/cm (87 oz/in) <sup>1</sup> |
| 20 min     | 22 °C (72 °F)  | Polypropylene (PP) | 2.6 N/cm (24 oz/in) <sup>1</sup> |
| 20 min     | 22 °C (72 °F)  | Stainless Steel    | 6.0 N/cm (55 oz/in) <sup>1</sup> |
| 72 h       | 70 °C (158 °F) | ABS                | 7.3 N/cm (67 oz/in) <sup>1</sup> |
| 72 h       | 70 °C (158 °F) | Polypropylene (PP) | 2.1 N/cm (19 oz/in) <sup>1</sup> |
| 72 h       | 70 °C (158 °F) | Stainless Steel    | 14 N/cm (130 oz/in) <sup>1</sup> |

<sup>1</sup> 12 in/min (300 mm/min)

Temperature: 70 °C (158 °F)

| Attribute Name | Test Method | Value                   |
|----------------|-------------|-------------------------|
| Static Shear   | ASTM D3654  | 10,000 min <sup>1</sup> |

<sup>1</sup> 1 in x 1 in sample area, test terminated after 10,000 minutes

| Attribute Name                    | Value                        |
|-----------------------------------|------------------------------|
| Short Term Temperature Resistance | 121 °C (250 °F) <sup>1</sup> |
| Long Term Temperature Resistance  | 93 °C (200 °F) <sup>2</sup>  |

<sup>1</sup> Short Term (minutes, hour)

<sup>2</sup> Long Term (day, weeks)

| Attribute Name | Value                       |
|----------------|-----------------------------|
| Note           | Calipers are nominal values |

## Typical Environmental Performance

### Fogging (Photometric method)

Test Method: SAEJ1756

| Dwell Time | Value             |
|------------|-------------------|
| 1 h        | 97 % <sup>1</sup> |
| 16 h       | 98 % <sup>1</sup> |

<sup>1</sup> Fogging condensate on the glass plate determined by measuring the 60o specular gloss. The 60o specular gloss for the same glass plate is used as a reference value. The higher value indicates less fogging.

## Handling/Application Information

### Application Examples

- Automotive interior bonding
- Door trim and door bolster attachment
- Foam, flock and felt for BSR applications
- Gaskets and seals
- Headliner component and shade attachment

- Acoustic/Thinsulate™ attachment

## **Storage and Shelf Life**

It is suggested that products are stored at room temperature conditions of 70°F (21°C) and 50% relative humidity. Out of direct sunlight.  
If stored properly, product retains its performance and properties for 18 months from date of manufacture.

## **Available Sizes**

| <b>Attribute Name</b> | <b>Value</b>                                     |
|-----------------------|--|
| Master Width          | 1000, 1372, 1500 mm (39, 54, 59 in) <sup>1</sup> |

<sup>1</sup> More sizes may be available. Please talk to your local 3M representative for more information.

## **Automotive Disclaimer**

**Select Automotive Applications:** This product is an industrial product and has not been designed or tested for use in certain automotive applications, such as automotive electric powertrain battery or high voltage applications, which may require the product to be manufactured in a IATF certified facility, meet a Ppk of 1.33 for all properties, undergo an automotive production part approval process (PPAP), or fully adhere to automotive design or quality system requirements (e.g., IATF 16949 or VDA 6.3). Customer assumes all responsibility and risk if customer chooses to use this product in these applications.

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## **ISO Statement**

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

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