



# Technical Data Sheet

3M™ Double Coated Tape 93005LE



Product Details



Regulatory Info/SDS

## Product Description

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

3M™ 93005LE is a 50µm Double Coated Polyester Tape featuring 3M™ Type 300LSE Acrylic Adhesive. Performance features include superior adhesion to Polypropylene, great resistance to consumer chemicals and excellent holding power. 3M type 300LSE acrylic adhesive has a long history of successfully bonding a wide variety of similar and dissimilar materials such as metals, most plastics, glass, papers, and painted surfaces.

## 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	Test Condition	Value
Adhesive Type			300LSE Acrylic
Adhesive Carrier			Transparent Polyester Film
Adhesive Thickness		Faceside	0.019 mm (0.75 mil) <sup>1</sup>
Carrier Thickness			0.012 mm (0.5 mil)
Adhesive Thickness		Backside	0.019 mm (0.75 mil) <sup>2</sup>
Total Tape Thickness	ASTM D3652		0.05 mm (1.97 mil)
Total Thickness with liner			0.314 mm (12.4 mil)
Liner Print			300LSE
Primary Liner Type			Polycoated Kraft <sup>3</sup>
Secondary Liner Type			Polycoated Kraft <sup>3</sup>
Primary Liner Thickness			0.107 mm (4.2 mil)
Secondary Liner Thickness			0.157 mm (6.2 mil)

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

<sup>2</sup> Backside adhesive is on the exterior of the roll, exposed when liner is removed.

<sup>3</sup> Inner liner is primary (stays with die-cut part); Outer liner is secondary (removed first)

## Typical Performance Characteristics

### 180° Peel Adhesion

Temperature: 22 °C (72 °F)

Backing: 2 mil PET

Test Method: ASTM D3330

Dwell Time	Test Condition	Substrate	Value
20 min	Faceside	Stainless Steel	6.18 N/cm (56.5 oz/in) <sup>1</sup>
20 min	Backside	Stainless Steel	7.7 N/cm (70.4 oz/in) <sup>1</sup>
72 h	Backside	ABS	6.19 N/cm (56.6 oz/in) <sup>1</sup>
72 h	Backside	High Density Polyethylene (HDPE)	3.76 N/cm (34.4 oz/in) <sup>1</sup>
72 h	Backside	Polypropylene (PP)	7.74 N/cm (70.7 oz/in) <sup>1</sup>
72 h	Faceside	Stainless Steel	7.9 N/cm (72.2 oz/in) <sup>1</sup>

Dwell Time	Test Condition	Substrate	Value
72 h	Backside	Stainless Steel	8.24 N/cm (75.3 oz/in) <sup>1</sup>

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

Substrate: Stainless Steel  
Temperature: 22 °C (72 °F)  
Backing: 2 mil PET

Attribute Name	Test Method	Value
Overlap Shear Strength	ASTM D1002	1.084 N/mm <sup>2</sup> (157.2 lb/in <sup>2</sup> ) <sup>1</sup>

<sup>1</sup> 10mm/min

Attribute Name	Value
Short Term Temperature Resistance	149 °C (300 °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)

Substrate: Stainless Steel

Attribute Name	Test Method	Test Condition	Value
Impact Shear Strength	ASTM D950	Pendulum Impact	1.545 J/in <sup>2</sup>
Tensile Strength	ASTM D897	10mm/min	1.099 N/mm <sup>2</sup> (159.4 lb/in <sup>2</sup> )

## Industry Specifications

### **FDA Statement**

This product might be suitable for use in indirect food contact applications. Please see the applicable Regulatory Data Sheet for more information relating to FDA compliance.

## Storage and Shelf Life

Store at room temperature conditions of 70°F (21°C) and 50% relative humidity.  
If stored properly, product retains its performance and properties for 24 months from date of manufacture.

## 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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### **For Additional Information**

To request additional product information or to arrange for sales assistance, call 3M Technical Service at 651-736-8205. Address correspondence to: 3M Industrial Adhesives and Tapes Division, 3M Center, Building 230-2E-10, St. Paul, MN 55144-1000.

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