

April, 2015

3M™ Double Coated Tape 93005LE

Product Description

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

Property	Values		Notes
Total Tape Thickness without liner	0.05 mm	1.97 mil	
Total Thickness with liner	0.314 mm	12.4 mil	
Faceside Adhesive Thickness	0.019 mm	0.75 mil	Faceside adhesive is on the interior of the roll, exposed when unwound and liner removed.
Backside Adhesive Thickness	0.019 mm	0.75 mil	Backside adhesive is on the exterior of the roll, exposed when liner is removed.
Carrier Thickness	0.012 mm	0.5 mil	
Thickness Tolerance	± 10 %		
Faceside Adhesive Type	300LSE Acrylic		Faceside adhesive is on the interior of the roll, exposed when unwound and liner removed.
Backside Adhesive Type	300LSE Acrylic		Backside adhesive is on the exterior of the roll, exposed when liner is removed.
Adhesive Carrier	Transparent Polyester Film		
Primary Liner Type	Polycoated Kraft		Inner liner is primary(stays with die-cut part); Outer liner is secondary (removed first)
Secondary Liner Type	Polycoated Kraft		Inner liner is primary(stays with die-cut part); Outer liner is secondary (removed first)
Primary Liner Thickness	0.107 mm	4.2 mil	
Secondary Liner Thickness	0.157 mm	6.2 mil	

Typical Performance Characteristics

Property	Values		Method	Test Condition	Substrate	Backing
Tensile Strength	1.099 N/mm²	159.4 lb/in²	ASTM D897	10mm/min	Stainless Steel	
Dynamic Shear	1.084 N/mm²	157.2 lb/in²	ASTM D1002	10mm/min	Stainless Steel	Polyester Film
Impact Shear Strength	1.545 J/in²		ASTM D950	Pendulum Impact	Stainless Steel	

Faceside Adhesive 180° Peel Adhesion		Dwell/Cure Time
6.18 N/cm	56.5 oz/in	20 min @ Room Temperature
7.9 N/cm	72.2 oz/in	72 hr @ Room Temperature

Property: Faceside Adhesive 180° Peel Adhesion

Method: ASTM D3330 Substrate: Stainless Steel Backing: 2 mil Polyester Film

Backside Adhesive 180° Peel Adhesion		Dwell/Cure Time	Substrate
7.7 N/cm	70.4 oz/in	20 min @ Room Temperature	Stainless Steel
8.24 N/cm	75.3 oz/in	72 hr @ Room Temperature	Stainless Steel
6.19 N/cm	56.6 oz/in	72 hr @ Room Temperature	ABS
7.74 N/cm	70.7 oz/in	72 hr @ Room Temperature	Polypropylene (PP)
3.76 N/cm	34.4 oz/in	72 hr @ Room Temperature	High Density Polyethylene (HDPE)

Property: Backside Adhesive 180° Peel Adhesion

Method: ASTM D3330 Backing: 2 mil Polyester Film

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.

Information

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Trademarks

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References

Safety Data Sheet (SDS)

 $https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA\&msdsLocale=en_US\&co=ptn\&q=93005LE$

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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