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3M™ Double Coated Tape 93005LE

Product Description

Finite Element Analysis (FEA) data is available for this product at: 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

Property	Values		Attribute Modifier	Notes
Total Tape Thickness without liner	0.05 mm	1.97 mil		
Total Thickness with liner	0.314 mm	12.4 mil		
Carrier Thickness	0.012 mm	0.5 mil		
Adhesive Type	300LSE Acrylic		Faceside	Faceside adhesive is on the interior of the roll, exposed when unwound and liner removed.
Adhesive Type	300LSE Acrylic		Backside	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		

Adhesive Thickness		Attribute Modifier	Notes
0.019 mm		Backside	The caliper listed is based on a calculation from manufacturing controlled adhesive coat weight. While past data pages have listed nominal thicknesses of 1 and 2 mils, the coat weight (and theoretical caliper) has not changed.
0.75 mil		Backside	Backside adhesive is on the exterior of the roll, exposed when liner is removed.

Table continued on next page

Typical Physical Properties (continued)

Adhesive Thickness		Attribute Modifier	Notes
0.019 mm	0.75 mil	Faceside	Faceside adhesive is on the interior of the roll, exposed when unwound and liner removed.

Property: Adhesive Thickness

Typical Performance Characteristics

Property	Values		Method	Test Condition	Substrate	Backing
Tensile Strength	1.099 N/mm ²	159.4 lb/in ²	ASTM D897	10mm/min	Stainless Steel	
Overlap Shear Strength	1.084 N/mm ²	157.2 lb/in ²	ASTM D1002	10mm/min	Stainless Steel	Polyester Film
Impact Shear Strength	1.545 J/in ²		ASTM D950	Pendulum Impact	Stainless Steel	

180° Peel Adhesion		Attribute Modifier	Dwell/Cure Time	Dwell Time Units	Substrate
6.18 N/cm	56.5 oz/in	Faceside	20	min	Stainless Steel
7.9 N/cm	72.2 oz/in	Faceside	72	hr	Stainless Steel
7.7 N/cm	70.4 oz/in	Backside	20	min	Stainless Steel
8.24 N/cm	75.3 oz/in	Backside	72	hr	Stainless Steel
6.19 N/cm	56.6 oz/in	Backside	72	hr	ABS
7.74 N/cm	70.7 oz/in	Backside	72	hr	Polypropylene (PP)
3.76 N/cm	34.4 oz/in	Backside	72	hr	High Density Polyethylene (HDPE)

Property: 180° Peel Adhesion
Method: ASTM D3330
Temp C: 22C
Temp F: 72F
Environmental Condition: 52%RH
Backing: 2 mil Polyester Film
notes: 12 in/min (300 mm/min)

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.

Trademarks

3M is a trademark of 3M Company

References

Property	Values
3m.com Product Page	https://www.3m.com/3M/en_US/company-us/all-3m-products/-/3M-Double-Coated-Tape-Double-Lined-93005LE?N=5002385+3291148822&rt=rud
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.

Information

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