3M

GM Specification 9985281

Annual Test Data

Technical Bulletin

The 3M IATD Quality Laboratory tested the following tapes to the Automotive Specification 9985281. The results of the testing are provided in the following information. Tapes not listed on this document have not been tested to this specification. Date on product chart is valid one year after that date.

3M[™] Double Coated Tape 9490LE 3M[™] Adhesive Transfer Tapes 6035PC and 6035PL 3M[™] Adhesive Transfer Tape 6038PC 3M[™] Adhesive Transfer Tapes 9472, 950, 9672 and 969 3M[™] Adhesive Transfer Tapes 9472LE and 9672LE 3M[™] Adhesive Transfer Tape 9627 3M[™] Double Coated Tape 9629PC

Approved by IATD Quality:

Jurene Lisher

Jurene L. Fisher Test Coordinator

3M [™] Double Coa	ted Tape 9	9490LE		Test Date:	March 3	1, 2017
Lot Number	Substrate	Test	Test Method	Specification	As Received	90 Day Shelf Life @35°C (95°F)
63070617465-004	Stainless	*Adhesive Thickness				
	Steel	As Received	TAPPI 411 & 9985281	0.09 to 0.165mm	0.164	N/A
		90-Day Aged	TAPPI 411 & 9985281	0.09 to 0.175mm	N/A	0.168
		Color	Visual	Translucent	Pass	Pass
		Mass	9985281	0.118 to 0.219 kg/m²	0.173	0.173
		Solids Content	9985281 Appendix A	94.5% min	98.65	98.66
		Adhesion to Steel				
		As Received 3M [™] Laminating Adhesive 300MP	ASTM D3330 E	535 N/m min	611.16	N/A
		90 Day Aged 3M [™] Laminating Adhesive 300MP	ASTM D3330 E	420 N/m min	N/A	574.39
		As Received 3M [™] High Performance Acrylic Adhesive 300LSE	ASTM D3330 E	535 N/m min	564.23	N/A
		90 Day Aged 3M™ High Performance acrylic Adhesive 300LSE	ASTM D3330 E	420 N/m min	N/A	600.48
		Shear Adhesion	ASTM D3330 A	25 min @ 23°C (73°F)	>203	>203
		Liner Removability	ASTM D3330 D	45 N/m max	32.78	29.59

^{*}Adhesive thickness values include 0.0127mm carrier film

3M [™] Adhesive Transfer Tape 6035PC and 6035PL			Test Date: August 31, 2016			
Lot Number	Substrate	Test	Test Method	Specification	As Received	90 Day Shelf Life @35°C (95°F)
K15315	Stainless	Adhesive Thickness				
	Steel	As Received	TAPPI 411 & 9985281	0.09 to 0.165mm	0.112	N/A
		90-Day Aged	TAPPI 411 & 9985281	0.09 to 0.175mm	N/A	0.113
		Color	Visual	Translucent	Pass	Pass
		Mass	9985281	0.118 to 0.219 kg/m²	0.129	0.127
		Solids Content	9985281 Appendix A	94.5% min	99.08	99.02
		Adhesion to Steel				
		As Received	ASTM D3330 E & 9985281	535 N/m min	769.11	N/A
		90-Day Aged	ASTM D3330 E & 9985281	420 N/m min	N/A	818.44
		Shear Adhesion	ASTM D3654 A & 9985281	25 min @ 23°C (73°F)	25+	25+
		Liner Removability				
		6035PC	ASTM D3330 D	45 N/m max	12.06	10.07
		6035PL	ASTM D3330 D	45 N/m max	15.96	12.52

3M [™] Adhesive Transfer Tape 6038PC				Test Da	ite: July 3	1, 2016	
Lot Number	Substrate	Test	Test Method	Specification	As Received	90 Day Shelf Life @35°C (95°F)	
K15316	Stainless Steel	Adhesive Thickness					
	Steel	As Received	TAPPI 411 & 9985281	0.09 to 0.165mm	0.136	N/A	
		90-Day Aged	TAPPI 411 & 9985281	0.09 to 0.175mm	N/A	0.134	
		Color	Visual	Translucent	Pass	Pass	
		Mass	9985281	0.118 to 0.219 kg/m²	0.156	0.150	
		Solids Content	9985281 Appendix A	94.5% min	99.74	99.75	
		Adhesive Thickness					
		As Received	ASTM D3330 E & 9985281	535 N/m min	1702.15	N/A	
			90-Day Aged	ASTM D3330 E & 9985281	420 N/m min	N/A	1446.47
		Shear Adhesion	ASTM D3654 A	25 min @ 23°C (73°F)	25+	25+	
		Liner Removability	ASTM D3330 D	45 N/m max	18.38	15.76	

3M [™] Adhesive Transfer Tape 9472, 9672, 950 and 969			Test Date: August 31, 201			1, 2016
Lot Number	Substrate	Test	Test Method	Specification	As Received	90 Day Shelf Life @35°C (95°F)
K5335	Stainless	Adhesive Thickness				
K5336	Steel	As Received	TAPPI 411 & 9985281	0.09 to 0.165mm	0.1384	N/A
K4356		90-Day Aged	TAPPI 411 & 9985281	0.09 to 0.175mm	N/A	0.122
		Color	Visual	Translucent	Pass	Pass
		Mass	9985281	0.118 to 0.219 kg/m²	0.133	0.135
		Solids Content	9985281 Appendix A	94.5% min	99.76	99.71
		Adhesion to Steel				
		As Received	ASTM D3330 E & 9985281	535 N/m min	736.84	N/A
		90-Day Aged	ASTM D3330 E & 9985281	420 N/m min	N/A	784.41
		Shear Adhesion	ASTM D3654 A & 9985281	25 min @ 23°C (73°F)	25+	25+
		Liner Removability				
		950	ASTM D3330 D	45 N/m max	22.50	14.34
		9472	ASTM D3330 D	45 N/m max	7.42	7.946
		9672	ASTM D3330 D	45 N/m max	11.12	14.27

3M [™] Adhesive Transfer Tape 9472LE, 9672LE				Test Date: August 31, 2016			
Lot Number	Substrate	Test	Test Method	Specification	As Received	90 Day Shelf Life @35°C (95°F)	
15699	Stainless	Adhesive Thickness					
16174	Steel	As Received	TAPPI 411 & 9985281	0.09 to 0.165mm	0.113	N/A	
		90-Day Aged	TAPPI 411 & 9985281	0.09 to 0.175mm	N/A	0.129	
		Color	Visual	Translucent	Pass	Pass	
		Mass					
		9472LE	998521	0.118 to 0.219 kg/m²	0.130	0.129	
		9672LE	998521	0.118 to 0.219 kg/m²	0.132	0.134	
		Solids Content	9985281 Appendix A	94.5% min	98.84	99.07	
		Adhesion to Steel					
		As Received	ASTM D3330 E & 9985281	535 N/m min	619.63	N/A	
		90-Day Aged	ASTM D3330 E & 9985281	420 N/m min	N/A	629.78	
		Shear Adhesion	ASTM D3654 A	25 min @ 23°C (73°F)	25+	25+	
		Liner Removability					
		9472LE	ASTM D3330 D	45 N/m max	10.46	10.31	
		9672LE	ASTM D3330 D	45 N/m max	23.31	19.26	

3M [™] Adhesive Transfer Tape 9627			T	Test Date: September 30, 2016			
Lot Number	Substrate	Test	Test Method	Specification	As Received	90 Day Shelf Life @35°C (95°F)	
K15354	Stainless Steel	Adhesive Thickness					
	Otto	As Received	TAPPI 411 & 9985281	0.09 to 0.165mm	0.134	N/A	
		90-Day Aged	TAPPI 411 & 9985281	0.09 to 0.175mm	N/A	0.141	
		Color	Visual	Translucent	Pass	Pass	
		Mass	9985281	0.118 to 0.219 kg/m²	0.130	0.131	
		Solids Content	9985281 Appendix A	94.5% min	99.82	99.77	
		Adhesion to Steel					
		As Received	ASTM D3330 E & 9985281	535 N/m min	703.22	N/A	
		90-Day Aged	ASTM D3330 E & 9985281	420 N/m min	N/A	809.86	
		Shear Adhesion	ASTM D3654 A & 9985281	25 min @ 23°C (73°F)	25+	25+	
		Liner Removability	ASTM D3330 D	45 N/m max	24.66	23.96	

3M [™] Double Coated Tape 9629PC			Test Date: September 30, 2016			
Lot Number	Substrate	Test	Test Method	Specification	As Received	90 Day Shelf Life @35°C (95°F)
K15332	Stainless Steel	Adhesive Thickness				
		As Received	TAPPI 411 & 9985281	0.09 to 0.165mm	0.105	N/A
		90-Day Aged	TAPPI 411 & 9985281	0.09 to 0.175mm	N/A	0.101
		Color	Visual	Translucent	Pass	Pass
		Mass	9985281	0.118 to 0.219 kg/m2	0.111	0.111
		Solids Content	9985281 Appendix A	94.5% min	99.51	99.63
		Adhesion to Steel				
		As Received	ASTM D3330 E & 9985281	535 N/m min	762.76	N/A
		90-Day Aged	ASTM D3330 E & 9985281	420 N/m min	N/A	866.48
		Shear Adhesion	ASTM D3654 A & 9985281	25 min @ 23°C (73°F)	25+	25+
		Liner Removability	ASTM D3330 D	45 N/m max	12.15	10.97

Technical Information

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ISO 9001: 2008

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Industrial Adhesives and Tapes Division Converter Markets

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