



GMW 14892

Adhesion Requirements for Bonded Interior Parts Automotive Interior Spec Testing

Technical Bulletin

April 2020

3M tested the following adhesives to the Automotive OEM Spec: GMW 14892 Adhesion Requirements for Bonded Interior Parts. The results of the testing are provided in the following information. Adhesives not listed on this document have not been tested to this spec.

Automotive specification testing was performed on lab substrates and not on actual automotive production parts. Additional testing by the converter, tier or supplier is needed to show that parts and adhesives meet such specification. Please carefully read the automotive specification for further information.

Revision	Date	Comments
Original release	October 2016	Testing and bulletin complete
Add lab substrate language and revision table	April 2020	

3M™ Adhesive Transfer Tape 468MP
3M™ Adhesive Transfer Tape 9472LE
3M™ Double Coated Tape 99786
3M™ Adhesive Transfer Tape 6035PC
3M™ Scrim Reinforced Adhesive
Transfer Tape 97053

3M™ Low VOC Scrim Reinforced Adhesive Transfer Tape 98010LVC
3M™ Double Coated Tape 9832HL
3M™ Low VOC Double Coated Tissue Tape 99015LVC
3M™ Fastbond™ Contact Adhesive 30NF

Test	Test Condition / Environment	
180° Peel Adhesion 300mm / 12 inch per min	As Received 3.1.5.1	24 hour @ Room Temp
	Humidity 3.1.5.1.1	144 hours GMW14729 Option A: Water Fog
	Heat Age 3.1.5.1.2	24 hours @ 105°C / 221°F
	Environmental Cycle 3.1.5.1.3	GMW14124 Cycle M (2 cycles)
	Dead Load 3.1.5.1.4	200 g - 105 C / 221°F for 24 hours

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Adhesive	Test	SS	PP	ABS
468MP	As received	P	F	P
	Humidity	P	F	F
	Heat	P	F	P
	Cycle	P	F	P
	Dead load	P	F	P
9472LE	As received	P	P	P
	Humidity	P	P	P
	Heat	P	P	P
	Cycle	P	P	P
	Dead load	P	F	F
6035PC	As received	P	P	P
	Humidity	P	F	P
	Heat	P	P	P
	Cycle	P	P	P
	Dead load	P	P	F
98010 LVC	As received	P	P	P
	Humidity	P	P	P
	Heat	P	P	P
	Cycle	P	P	P
	Dead load	P	F	F
Fastbond 30NF	As received	P	P	P
	Humidity	F	F	F
	Heat	P	F	P
	Cycle	P	F	F
	Dead Load	P	P	P

Adhesive	Test	SS	PP	ABS
97053	As received	P	P	P
	Humidity	P	P	P
	Heat	P	P	P
	Cycle	P	P	P
	Dead load	F	F	F
9832HL	As received	P	P	P
	Humidity	P	F	P
	Heat	P	F	P
	Cycle	P	F	P
	Dead load	P	P	P
99786	As received	P	P	P
	Humidity	P	F	P
	Heat	P	F	P
	Cycle	P	F	P
	Dead load	P	F	F
99015 LVC	As received	P	P	P
	Humidity	P	P	P
	Heat	P	P	P
	Cycle	P	P	P
	Dead load	P	F	P

P = Pass, F = Fail

Note: Data reported in this technical bulletin, for all test methods, is the average of three replicates using one typical lot of adhesive.

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468MP Adhesive

3.1.5.1 As received – 24 hour dwell @ Room Temp						
468MP	Substrate	Backing	AVG Peel N/m	AVG Peel oz/in	Observation	Requirement 525 N/m / 47.93 oz/in or substrate failure
	SS	PET	961	87.74	Clean Peel	Pass
	PP		295	26.93	Clean Peel	Fail
	ABS		645	58.89	Clean Peel	Pass

3.1.5.1.1 Humidity – GMW14729 Option A: Water Fog 144 hours						
468MP	Substrate	Backing	AVG Peel N/m	AVG Peel oz/in	Observation	Requirement 525 N/m / 47.93 oz/in or substrate failure
	SS	PET	514	46.93	PET broke	Pass
	PP		257	23.46	Clean Peel	Fail
	ABS		485	44.28	Clean Peel	Fail

3.1.5.1.2 Heat Aging – 24 hours @ 105°C / 221°F						
468MP	Substrate	Backing	AVG Peel N/m	AVG Peel oz/in	Observation	Requirement 525 N/m / 47.93 oz/in or substrate failure
	SS	PET	-	-	PET broke	Pass
	PP		281	26.65	Clean Peel	Fail
	ABS		572	52.22	Clean Peel	Pass

3.1.5.1.3 Environmental Cycle – GMW14124 Cycle M (2 cycles)						
468MP	Substrate	Backing	AVG Peel N/m	AVG Peel oz/in	Observation	Requirement 525 N/m / 47.93 oz/in or substrate failure
	SS	PET	-	-	PET broke	Pass
	PP		293	26.75	Clean Peel	Fail
	ABS		672	61.35	Clean Peel	Pass

3.1.5.1.4 Dead Load – 200 grams						
468MP	Substrate	Size				Requirement
	SS	1" x 1"				Pass
	PP					Fail
	ABS					Pass

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9472LE Adhesive

3.1.5.1 As received – 24 hour dwell @ Room Temp						
9472LE	Substrate	Backing	AVG Peel N/m	AVG Peel oz/in	Observation	Requirement 525 N/m / 47.93 oz/in or substrate failure
	SS	PET	897	81.90	Clean Peel	Pass
	PP		1070	97.69	Clean Peel	Pass
	ABS		820	74.87	Clean Peel	Pass

3.1.5.1.1 Humidity – GMW14729 Option A: Water Fog 144 hours						
9472LE	Substrate	Backing	AVG Peel N/m	AVG Peel oz/in	Observation	Requirement 525 N/m / 47.93 oz/in or substrate failure
	SS	PET	946	86.37	Clean Peel	Pass
	PP		931	85.00	Clean Peel	Pass
	ABS		848	77.42	Clean Peel	Pass

3.1.5.1.2 Heat Aging – 24 hours @ 105°C / 221°F						
9472LE	Substrate	Backing	AVG Peel N/m	AVG Peel oz/in	Observation	Requirement 525 N/m / 47.93 oz/in or substrate failure
	SS	PET	987	90.11	Cohesive	Pass
	PP		925	84.45	Clean Peel	Pass
	ABS		802	73.22	Clean Peel	Pass

3.1.5.1.3 Environmental - GMW14124 Cycle M (2 cycles)						
9472LE	Substrate	Backing	AVG Peel N/m	AVG Peel oz/in	Observation	Requirement 525 N/m / 47.93 oz/in or substrate failure
	SS	PET	851	77.70	Cohesive	Pass
	PP		877	80.07	Clean Peel	Pass
	ABS		749	68.38	Clean Peel	Pass

3.1.5.1.4 Dead Load – 200 grams				
9472LE	Substrate	Size		Requirement
	SS	1" x 1"		Pass
	PP			Fail
	ABS			Fail