

## Test Method:

Mactac tape was applied to both the skin side and the cut side of the foam substrate using 50% Compression and a weighted 5# roller.

All tape was applied at room temperature, and peels were conducted manually at an approximate rate of 12"/sec.

**Peel testing** was measured at intervals of 30 mins, 24 hours, 72 hours and 2 weeks at room temperature.

**Accelerated aging** - 1 week @ 140°F was performed to simulate long term performance for the PSA on a given foam substrate.

## Monarch is a manufacturer of high-performance, elastomeric closed-cell foam for use in the following markets:



Gaskets  
& Seals



Heavy  
Machinery



Sports Equipment  
& Padding



Marine



Automotive  
General Sealing, HVAC,  
NVH Applications,  
Door Panel Assemblies



Mass Transit

## Adhesives

- MP 593XT** - High-tack, High-shear, Rubber Adhesive
- MP 899FBT** - Rubber Foam Bonding Adhesive
- MP 410** - NEW! High-peel Acrylic Adhesive



Mactac®  
Foam Bonding Study: Monarch® Elastomeric Component Foam - Gasket and Seals

		"++++" = Foam Destruction	"+++ " = Very Aggressive	"++" = Aggressive	"+" = Mild	"-" = Poor		
		"SL P" = Slight Picking (5-20%)	"P" = Picking (25-50%)	"CF" = Cohesive Failure	"CF&P = Cohesive Failure & Picking			
		3092	3944	2003	3043	4051	6231	
		EPDM	EPDM	Neoprene	EPDM	ECH	Nitrile-PVC Blend	
Formula	Dwell	Skin	Skin	Skin	Skin	Skin	Skin	
Rubber Adhesives	MP-593XT	30 min @ RT	+	+	+	+++	+	
	MP-593XT	24 hour @ RT	+ (SL P)	++	-	+++	++	
	MP-593XT	72 hours @ RT	+++	++	-	+++	++	
	MP-593XT	2 Weeks @ RT	+++	+++	-	+++	+++	
	MP-593XT	1 week @ 140°F	+ (SL P)	+++	++	+++ (CF)	++	
	MP-899	30 min @ RT	+ (SL P)	+++	+	+++	++++	-
	MP-899	24 hour @ RT	+ (P)	++++	+	+++	++++	+
	MP-899	72 hours @ RT	+ (P)	++++	+	++++	++++	+
	MP-899	2 Weeks @ RT	+++	++++	+	++++	+++	+
	MP-899	1 week @ 140°F	+++	++ (CF)	++ (CF)	+ (CF)	++ (CF)	+++ (CF)
Acrylic Adhesives	MP410 LCW	30 min @ RT	+ (SL P)	+	-	+ (SL P)	+++	-
	MP410 LCW	24 hour @ RT	+ (SL P)	+ (SL P)	+	+ (SL P)	++++	+
	MP410 LCW	72 hours @ RT	+ (P)	+ (SL P)	+	+ (SL P)	+++	+
	MP410 LCW	2 Weeks @ RT	+ (P)	++	++	+++	+++	++
	MP410 LCW	1 week @ 140°F	+ (SL P)	+++	- (CF)	+ (CF&P)	+ (CF)	- (CF)
	MP410 HCW	30 min @ RT	+ (SL P)	+	+	+ (SL P)	++++	-
	MP410 HCW	24 hour @ RT	+ (P)	+++	+	+++	++++	-
	MP410 HCW	72 hours @ RT	+ (P)	+++	+++	+++	++++	-
	MP410 HCW	2 Weeks @ RT	+ (P)	++	++	+ (AT)	++++	+
	MP410 HCW	1 week @ 140°F	+ (SL P)	++ (CF)	++ (CF)	+ (CF)	++ (CF)	+ (CF)
		Migration @140°F	Migration @140°F	Migration @140°F	Migration @140°F	Migration @140°F	Migration @140°F	

		"++++" = Foam Destruction	"+++ " = Very Aggressive	"++" = Aggressive	"+" = Mild	"-" = Poor		
		"SL P" = Slight Picking (5-20%)	"P" = Picking (25-50%)	"CF" = Cohesive Failure	"CF&P = Cohesive Failure & Picking			
		2055	5031	6032	5013	8082	8001	
		Neoprene	EPDM-CR-SBR Blend	Nitrile-PVC Blend	EPDM-CR-SBR Blend	EPDM	EPDM	
Formula	Dwell	Skin	Skin	Skin	Skin	Skin	Skin	
Rubber Adhesives	MP-593XT	30 min @ RT	+	+	+	+ (SL P)	+ (SL P)	
	MP-593XT	24 hour @ RT	+	-	+ (SL P)	+ (P)	+ (SL P)	
	MP-593XT	72 hours @ RT	++	+ (SL P)	+ (SL P)	+ (P)	+ (SL P)	
	MP-593XT	2 Weeks @ RT	++	+ (P)	+	+++	+++	
	MP-593XT	1 week @ 140°F	+++	+ (P)	+ (SL P)	+++	+ (CF&P)	
	MP-899	30 min @ RT	+ (SL P)	+ (SL P)	+ (SL P)	+ (SL P)	+++	+++
	MP-899	24 hour @ RT	+++	+ (P)	+ (SL P)	+ (P)	+++	+++
	MP-899	72 hours @ RT	+++	+ (P)	+ (SL P)	+++	++++	+++
	MP-899	2 Weeks @ RT	+++	+++	+ (P)	+++	++++	+++
	MP-899	1 week @ 140°F	+ (CF)	+ (CF)	+ (CF)	+++ (CF)	++++	+++
Acrylic Adhesives	MP410 LCW	30 min @ RT	+ (SL P)	+ (SL P)	+ (SL P)	+ (SL P)	+ (SL P)	
	MP410 LCW	24 hour @ RT	+++	+ (SL P)	+ (SL P)	+ (SL P)	+ (SL P)	
	MP410 LCW	72 hours @ RT	+++	+	+ (SL P)	+ (P)	+ (P)	
	MP410 LCW	2 Weeks @ RT	+++	+ (P)	+ (P)	+++	+++	
	MP410 LCW	1 week @ 140°F	+ (CF&AT)	+ (SL P)	+ (CF)	- (CF)	+ (P)	+++
	MP410 HCW	30 min	++	+ (SL P)	++	++	++	++
	MP410 HCW	24 hour	+++	+++	+++	+++	+++	++ (SL P)
	MP410 HCW	72 hours	+++	+++	+++	+++	+++	++++
	MP410 HCW	2 Weeks	+++	+++	+++	+++	++++	++++
	MP410 HCW	1 week @ 140°F	+ (CF)	+ (CF)	+ (CF)	+ (CF)	+ (P)	++++
		Migration @140°F	Migration @140°F	Migration @140°F	Migration @140°F			

Mactac is ISO9000-2000 certified.  
Mactac is a member of the following organizations:

Gasket Fabricators Association  
National Association of Graphic and Product Identification Manufacturers, Inc. (GPI)  
Pressure Sensitive Tape Council (PSTC)



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