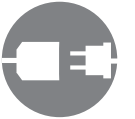
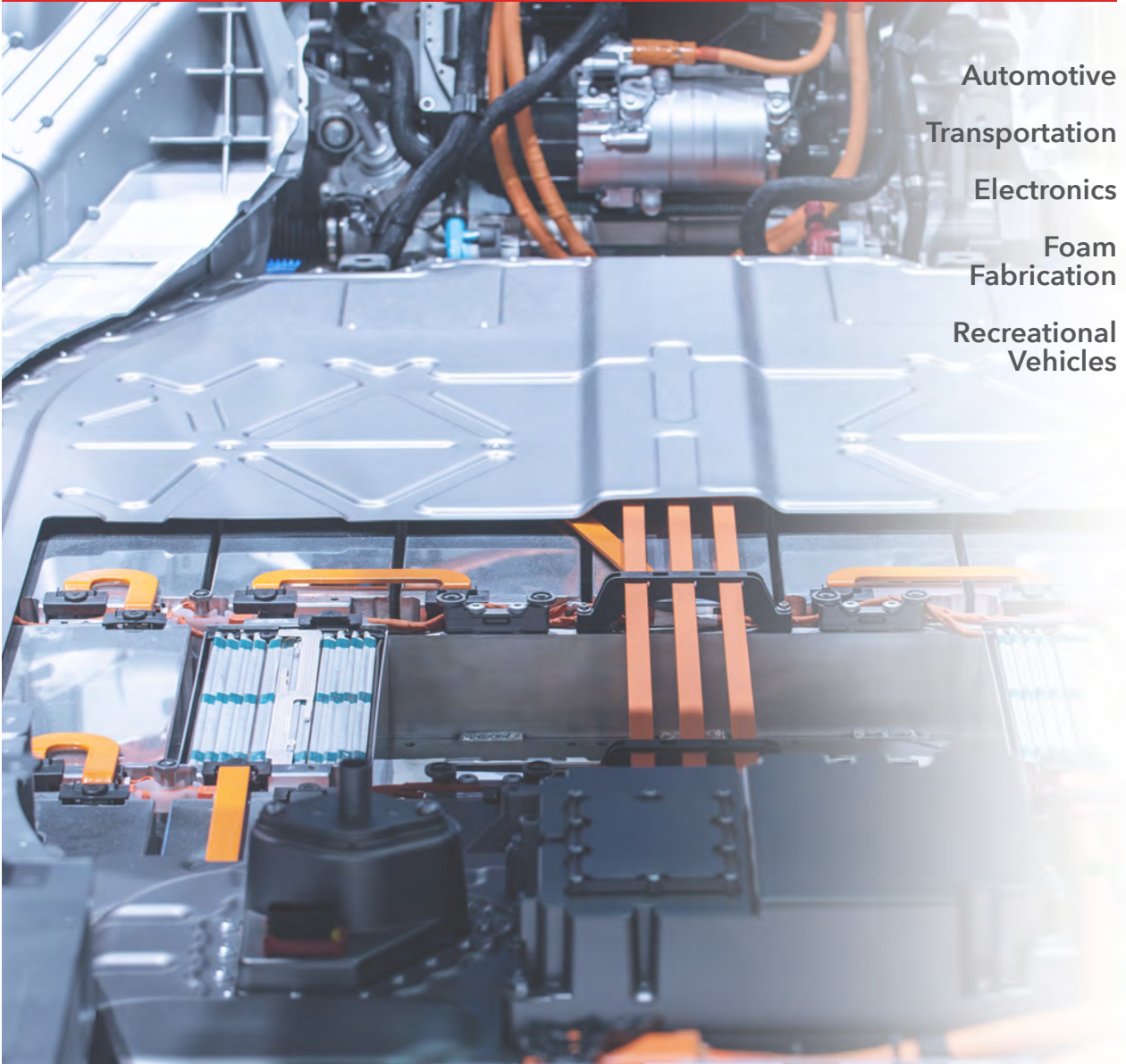


Materials Guide for EV

Engineered Tapes & Laminates



Automotive
Transportation
Electronics
Foam
Fabrication
Recreational
Vehicles



Mactac engineered tapes and laminates offer pressure sensitive adhesive solutions for bonding, mounting, and reinforcing specialty materials for the battery market. PSA-backed specialty materials offer thermal management, electrical insulation, NVH dampening, and other properties that can improve pack safety, increase efficiency, reduce weight, and simplify design.



Materials Guide for EV

Engineered Tapes & Laminates

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Mactac® Adhesion Testing on Armacell Foam Grades

		FC0 NBR/PVC		AHC NBR/PVC		IG3 NBR/PVC/CR		IVC NBR/PVC/CR		OER NBR/PVC	IV2 NBR/PVC/CR		
Formula	Dwell	Skin	Cut	Skin	Cut	Skin	Cut	Skin	Cut	skin	Skin	Cut	
Rubber Adhesives	LV790	30 min @ RT	++++	++++	-	+	+	-	-	-	++++	-	-
		24 hour @ RT	++++	++++	-	+	++	+	-	-	++++	-	-
		72 hours @ RT	++++	++++	-	+	+++ (CF, SL P)	+	+	-	++++	-	+
		2 Weeks @ RT	++++	++++	-	+	+++ (SL P)	+(SL P)	+	+	++++	-	+
		1 week @ 140°F	++++	++++	+++ (CF)	++ (SL P)	+++ (CF)	+(SL P)	+++ (SL P)	++ (SL P)	++++	+++ (P)	+(SL P)
	LV780	30 min @ RT	++++	++++	++	++	+++ (CF)	++ (SL P)	+	+++ (P)	++++	+	++ (SL P)
		24 hour @ RT	++++	++++	++	+++ (CF)	+++	++ (SL P)	++	++ (SL P)	++++	++	++ (SL P)
		72 hours @ RT	++++	++++	++	+++ (CF)	+++ (CF)	++ (SL P)	++	+++ (CF)	++++	++	++ (SL P)
		2 Weeks @ RT	++++	++++	++	+++ (P)	++++	+++ (CF)	++	++++	++++	++	++++
		1 week @ 140°F	++++	++++	+++ (CF)	+++ (CF)	+++ (CF)	+++ (CF)	+++ (CF)	+++ (CF)	++++	++ (CF)	+++ (CF)
	LV750	30 min @ RT	++++	++ (P)	-	-	+	-	-	+	++++	-	-
		24 hour @ RT	++++	++ (P)	-	-	+	-	+	+	++++	+	-
		72 hours @ RT	++++	++ (P)	+	-	++ (SL P)	-	+	+	++++	+	-
		2 Weeks @ RT	++++	++++	+	-	+++	-	+	+	++++	+	-
		1 week @ 140°F	++++	++++	+++	+	+++	+	++	+(SL P)	++++	+++ (SL P)	+
Acrylic Adhesives	LV820 2.0 mil	30 min @ RT	++++	++++	++	+++	+	++ (SL P)	+	+++ (CF, P)	++++	++	+++ (CF, P)
		24 hour @ RT	++++	++++	+++	+++ (CF, SL P)	++	++ (SL P)	+++ (CF, SL P)	+++ (CF, P)	++++	+++ (SL P)	++++ (CF)
		72 hours @ RT	++++	++++	+++	+++ (CF, SL P)	+++ (SL P)	++ (SL P)	++++ (CF)	+++ (P)	++++	+++ (SL P)	++++ (CF)
		2 Weeks @ RT	++++	++++	+++ (SL P)	++++	+++ (SL P)	++ (SL P)	++++	++++	++++	+++ (CF, SL P)	++++ (CF)
		1 week @ 140°F	++++	++++	+++ (CF)	++ (CF)	++ (CF)	+	++++	+++ (CF, P)	++++	+++ (CF, P)	++ (CF, SL P)
	LV820 4.0 mil	30 min @ RT	++++	++++	+++	+++ (CF, SL P)	++	+++ (SL P)	+++	+++ (CF, P)	++++	+++	++++ (CF)
		24 hour @ RT	++++	++++	+++ (CF)	+++ (CF, AT)	+++	+++ (SL P)	++++	+++ (P)	++++	++++	++++ (CF)
		72 hours @ RT	++++	++++	+++ (CF, AT)	+++ (CF, P)	+++ (CF, P)	+++ (CF, SL P)	++++ (CF)	++++	++++	++++	++++ (CF)
		2 Weeks @ RT	++++	++++	+++ (AT)	+++ (CF)	+++ (CF)	+++ (CF, P)	++++	++++	++++	+++ (AT)	++++ (CF)
		1 week @ 140°F	++++	++++	+++ (CF)	+++ (CF)	+++ (CF)	++ (CF, SL P)	++++	+++ (CF, P)	++++	+++ (CF, P)	+++ (CF, P)
	LV840	30 min @ RT	++++	++++	++	++	+	+	++	++ (P)	++++	++	++ (CF, P)
		24 hour @ RT	++++	++++	++	++ (SL P)	++	+	+++ (CF, SL P)	++ (SL P)	++++	++ (SL P)	++ (CF, P)
		72 hours @ RT	++++	++++	++	++ (SL P)	+++ (SL P)	+	++++ (CF)	++ (SL P)	++++	++ (CF, SL P)	++ (CF, P)
		2 Weeks @ RT	++++	++++	++	++++	+++ (SL P)	++++ (CF)	++++	+++ (P)	++++	+++ (CF, P)	++++
		1 week @ 140°F	++++	++++	+++ (CF, SL P)	++ (CF, AT)	++	+(SL P)	++++	+++ (P)	++++	++++	++ (SL P)
LV860	30 min @ RT	++++	++++	+	+++	+	++ (SL P)	+	+++ (P)	++++	+	+++ (P)	
	24 hour @ RT	++++	++++	+	++++	+++	++ (SL P)	++	+++ (P)	++++	++ (SL P)	++++	
	72 hours @ RT	++++	++++	+++ (CF)	++++	+++ (CF, P)	++ (SL P)	++++ (CF)	++++	++++	++ (CF, SL P)	++++	
	2 Weeks @ RT	++++	++++	+++ (CF)	++++	+++ (CF, P)	+++ (P)	++++	++++	++++	++++	++++	
	1 week @ 140°F	++++	++++	+++ (CF)	++ (CF)	+++ (CF)	+(SL P)	++++	++++	++++	++++	++ (SL P)	
LV850	30 min @ RT	++++	+++ (P)	-	++	+	++	+	+++ (SL P)	++++	-	+	
	24 hour @ RT	++++	+++ (P)	+	++++	+	++ (SL P)	++	+++ (SL P)	++++	++	+++ (P)	
	72 hours @ RT	++++	+++ (P)	+	++++	+++ (CF)	++ (SL P)	++	++++	++++	+++ (P)	+++ (P)	
	2 Weeks @ RT	++++	++++	+	++++	+++ (CF, P)	++ (SL P)	+++ (SL P)	++++	++++	++++	++++	
	1 week @ 140°F	++++	++++	+++	++++	+++ (CF, P)	++ (SL P)	+++ (P)	++++	++++	+++ (CF, P)	++	

Key
 +++++ Foam Destruction
 +++ Very Aggressive
 ++ Aggressive
 + Mild
 - Poor

SL P Slight Picking 20%
 P Picking 20-50%
 CF Cohesive Failure
 CF & P Cohesive Failure & Picking

Mactac® Adhesion Testing on Armacell Foam Grades

		1800 NBR/PVC		MLC-2 NBR/PVC		APH NBR/PVC		ALC NBR/PVC		IG1 NBR/PVC/CR		
Formula	Dwell	Skin	Cut	Skin	Cut	Skin	Cut	Skin	Cut	Skin	Cut	
Rubber Adhesives	LV790	30 min @ RT	++++	++ (P)	++	+++ (P)	++++	++ (P)	-	-	+	+(SL P)
		24 hour @ RT	++++	++ (P)	++++	+++ (P)	++++	++ (p)	-	-	+	+(SL P)
		72 hours @ RT	++++	++ (P)	++++	++++	++++	++++	-	-	++ (SL P)	+(SL P)
		2 Weeks @ RT	++++	++ (P)	++++	++++	++++	++++	-	-	+(SL P)	+(SL P)
		1 week @ 140°F	++++	++++	++++	++++	++++	++++	+(SL P)	+(SL P)	++++ (CF)	+(SLP)
	LV780	30 min @ RT	++++	++++	+++ (P)	++++	++++	++++	+	++	++++	++++
		24 hour @ RT	++++	++++	++++ (CF)	++++	++++	++++	++	++	++++	+++ (P)
		72 hours @ RT	++++	++++	++++ (CF)	++++	++++	++++	++	+++ (CF)	++++	++++
		2 Weeks @ RT	++++	++++	++++	++++	++++	++++	++	+++ (SL P)	++++	++++
		1 week @ 140°F	++++	++++	+++ (CF)	++++	++++	++++	+++ (CF)	+++ (CF)	+++ (CF)	+++ (CF)
	LV750	30 min @ RT	++++	++ (P)	++	++++	++++	+++ (P)	-	-	+	+(SL P)
		24 hour @ RT	++++	++ (P)	++ (P)	++++	++++	+++ (P)	-	-	++ (P)	++ (SL P)
		72 hours @ RT	++++	++ (P)	++++	++++	++++	++++	-	-	++ (P)	++ (SL P)
		2 Weeks @ RT	++++	++++	++++	++++	++++	++++	-	-	++ (P)	++ (SL P)
		1 week @ 140°F	++++	++ (P)	++++	++++	++++	++++	+	-	++++	++++
Acrylic Adhesives	LV820 2.0 mil	30 min @ RT	++ (P)	++ (P)	+++	++++	++++	++++	+	++	++ (SL P)	++ (P)
		24 hour @ RT	++++	+++ (P)	+++ (SL P)	++++	++++	++++	++ (CF)	+++ (CF, SL P)	++ (SL P)	++ (P)
		72 hours @ RT	++++	+++ (P)	++++	++++	++++	++++	++ (CF)	+++ (CF, SL P)	++ (SL P)	++ (P)
		2 Weeks @ RT	++++	++++	++++ (CF)	++++	++++	++++	++ (CF)	+++ (AT)	++ (SL P)	++++
		1 week @ 140°F	++++	++++	++++	++++	++++	++++	++ (CF)	++ (CF)	++ (CF)	++++
	LV820 4.0 mil	30 min @ RT	++++	++++	+++ (CF)	++++	++++	++++	++	+++	+++ (SL P)	++++
		24 hour @ RT	++++	++++	++++ (CF)	++++	++++	++++	+++ (CF)	+++ (AT, SL P)	++++	++++
		72 hours @ RT	++++	++++	++++ (AT)	++++	++++	++++	+++ (CF)	+++ (AT, SL P)	++++	++++
		2 Weeks @ RT	++++	++++	++++ (AT)	++++	++++	++++	+++ (CF, SL P)	++++ (AT)	++++	++++
		1 week @ 140°F	++++	++++	++++	++++	++++	++++	+++ (CF)	+++ (CF, SL P)	+++ (CF)	++++
	LV840	30 min @ RT	++ (SL P)	+(SL P)	++	++++	+++ (P)	++ (SL P)	+	++	+	+
		24 hour @ RT	++++	+(SL P)	++	++++	+++ (P)	+++ (P)	++	++ (SL P)	+	+
		72 hours @ RT	++++	+(SL P)	+++ (CF, SL P)	++++	++++	+++ (P)	++	++ (SL P)	++ (P)	+(SL P)
		2 Weeks @ RT	++++	++ (P)	++++	++++	++++	++++	+++ (CF)	++ (SL P)	++	++++
		1 week @ 140°F	++++	++ (P)	++++	++++	++++	++++	++ (SL P)	++ (SL P)	+(SL P)	++++
LV860	30 min @ RT	++++	++ (P)	++	++++	++++	++++	+	+	+	++ (SL P)	
	24 hour @ RT	++++	++ (P)	++	++++	++++	++++	++	+++ (CF, SL P)	+	+++ (P)	
	72 hours @ RT	++++	++ (P)	++++	++++	++++	++++	+++	+++ (CF, SL P)	+	+++ (P)	
	2 Weeks @ RT	++++	++++	++++	++++	++++	++++	+++ (CF, SL P)	++++	+	++++	
	1 week @ 140°F	++++	++++	++++	++++	++++	++++	+++ (CF, SL P)	++(CF, SL P)	+(SL P)	++++	
LV850	30 min @ RT	+	++ (SL P)	+	++++	++ (SL P)	++ (SL P)	+	+	+	++ (SL P)	
	24 hour @ RT	++ (P)	++ (SL P)	++	++++	++++	+++ (P)	+	+++ (CF, SL P)	+	++ (SL P)	
	72 hours @ RT	++++	++ (SL P)	++++	++++	++++	+++ (P)	++	+++ (CF, SL P)	++ (P)	++ (P)	
	2 Weeks @ RT	++++	++++	++++	++++	++++	++++	++ (CF)	++++	+(SL P)	++++	
	1 week @ 140°F	++++	++++	++++	++++	++++	++++	+	+++ (CF, P)	+(SL P)	++++	

Key
 +++++ Foam Destruction
 +++ Very Aggressive
 ++ Aggressive
 + Mild
 - Poor

SL P Slight Picking 20%
 P Picking 20-50%
 CF Cohesive Failure
 CF & P Cohesive Failure & Picking

Mactac® Adhesion Testing on Armacell Foam Grades

		GIC NBR/PVC		IV3 NBR/PVC/CR		IV1 NBR/PVC/CR		IG2 NBR/PVC/CR		IGB NBR/PVC/CR		
Formula	Dwell	Skin	Cut	Skin	Cut	Skin	Cut	Skin	Cut	Skin	Cut	
Rubber Adhesives	LV790	30 min @ RT	+	++ (P)	-	-	-	-	-	-	++	+(SL P)
		24 hour @ RT	++ (SL P)	++++	-	-	-	+	+	-	+++	+
		72 hours @ RT	++ (SL P)	++ (P)	-	-	-	+(SL P)	+(SL P)	+	++++	++ (SL P)
		2 Weeks @ RT	++++	++ (P)	-	-	-	+(SL P)	+(SL P)	+	++++	++ (SL P)
		1 week @ 140°F	++++	++++	+	+	+(SL P)	++ (P)	++ (CF)	++ (SL P)	+++ (CF, SL P)	++ (SL P)
	LV780	30 min @ RT	+++ (SL P)	++++	+	+	+	++++	++	+++ (SL P)	+++ (SL P)	+++ (P)
		24 hour @ RT	++++	++++	+	+	+	++++	+++ (CF)	+++ (SL P)	++++	+++ (P)
		72 hours @ RT	++++	++++	+	++	++ (CF, SL P)	++++	+++ (CF)	+++ (SL P)	++++	+++ (P)
		2 Weeks @ RT	++++	++++	+	+++ (P)	+++ (CF, SL P)	++++	+++ (CF)	++++	++++	+++ (P)
		1 week @ 140°F	++++	++++	+++ (CF)	+++ (CF)	+++ (CF)	+++ (CF)	+++ (CF)	+++ (CF)	+++ (CF)	+++ (CF)
	LV750	30 min @ RT	+	+(SL P)	-	-	-	-	+	-	++	+
		24 hour @ RT	+(P)	++ (P)	-	-	+	-	+	+	++	+
		72 hours @ RT	+(P)	++ (P)	-	-	+	+	+	+	++ (SL P)	+
		2 Weeks @ RT	++ (P)	++ (P)	-	-	+	+(SL P)	+	+	++ (SL P)	+
		1 week @ 140°F	++++	+++ (P)	+	+	++ (SL P)	+(SL P)	++	++	++ (CF, SL P)	++ (SL P)
Acrylic Adhesives	LV820 2.0 mil	30 min @ RT	++ (SL P)	+++ (P)	+	++	++ (SL P)	++++	++	++ (SL P)	+	++ (SL P)
		24 hour @ RT	++++	++++	++ (CF)	+++ (CF, SL P)	+++ (CF, SL P)	++++	+	++ (SL P)	++	++ (P)
		72 hours @ RT	++++	++++	++ (CF)	+++ (CF, SL P)	+++ (CF, P)	++++	+	++ (SL P)	++	++ (P)
		2 Weeks @ RT	++++	++++	++ (CF)	++++	++++	++++	+	++ (P)	++	++ (P)
		1 week @ 140°F	++++	++++	++ (CF)	+(CF)	+++ (CF, P)	+++ (CF, SL P)	+(CF)	+(CF)	++ (CF)	+
	LV820 4.0 mil	30 min @ RT	+++ (P)	++++	++	+++ (SL P)	+++ (SL P)	++++	++	+++ (P)	++	+++ (P)
		24 hour @ RT	++++	++++	+++ (CF)	+++ (CF, P)	++++	++++	++	+++ (P)	+++	+++ (P)
		72 hours @ RT	++++	++++	+++ (CF)	+++ (CF, P)	++++	++++	+++	+++ (P)	+++ (CF, P)	++++
		2 Weeks @ RT	++++	++++	+++ (CF)	++++ (AT)	++++	++++	+++	++++	+++ (CF, P)	++++
		1 week @ 140°F	++++	++++	+++ (CF)	+++ (CF)	+++ (CF, P)	+++ (CF, SL P)	++ (CF)	++ (CF)	+++ (CF)	++ (CF)
	LV840	30 min @ RT	++ (SL P)	++ (P)	+	++	++	++++	+	++	++	+
		24 hour @ RT	++++	+++ (P)	+	++	++ (SL P)	++++	+	++	++	++ (SL P)
		72 hours @ RT	++++	+++ (P)	+	++	++++	++++	+	++	++	++ (SL P)
		2 Weeks @ RT	++++	++++	+	+++ (P)	++++	++++	+	+(SL P)	++	++ (SL P)
		1 week @ 140°F	++++	++++	++ (SL P)	++ (SL P)	+++ (P)	++++	+	+	+(CF)	-
LV860	30 min @ RT	++ (SL P)	++++	+	++	+	++++	+	++ (SL P)	+	++ (SL P)	
	24 hour @ RT	++++	++++	+	+++ (P)	++ (SL P)	++++	+	++ (SL P)	++	+++ (SL P)	
	72 hours @ RT	++++	++++	++	+++ (P)	++++	++++	+	++ (SL P)	++	++ (SL P)	
	2 Weeks @ RT	++++	++++	++ (CF)	++++	++++	++++	+	++ (P)	++ (SL P)	++ (SL P)	
	1 week @ 140°F	++++	++++	+++ (CF)	+(CF)	++++	+++ (CF, P)	+	++	+(CF)	+	
LV850	30 min @ RT	+(SL P)	++ (SL P)	-	++ (SL P)	+	++++	+	+	+	+	
	24 hour @ RT	++ (SL P)	+++ (P)	+	++ (SL P)	++	++++	+	++	+	++ (SL P)	
	72 hours @ RT	++++	++++	+	++ (SL P)	+++ (P)	++++	+	++ (SL P)	+	++ (SL P)	
	2 Weeks @ RT	++++	++++	++	+++ (P)	+++ (P)	++++	+	++ (SL P)	+	++ (SL P)	
	1 week @ 140°F	++++	++++	++	+++ (SL P)	++ (SL P)	++++	+	+	++	+	

Key
 +++++ Foam Destruction
 +++ Very Aggressive
 ++ Aggressive
 + Mild
 - Poor

SL P Slight Picking 20%
 P Picking 20-50%
 CF Cohesive Failure
 CF & P Cohesive Failure & Picking

Mactac® Adhesion Testing on ARPlank Foam Grades

	Formula	Dwell	EPP 28	EPP 19	EPE 23	EPE 46
Rubber Adhesives	LV790	30 min @ RT	+	+	++ (SL P)	++
		24 hour @ RT	+	+	++ (SL P)	++ (SL P)
		72 hours @ RT	++	+	++ (SL P)	+++ (SL P)
		2 Weeks @ RT	++ (SL P)	++ (SL P)	++ (SL P)	+++ (SL P)
		1 week @ 140°F	++ (SL P)	++ (SL P)	++ (P)	++++
	LV780	30 min @ RT	++ (P)	++ (SL P)	++++	+++ (SL P)
		24 hour @ RT	++ (CF, SL P)	+++ (CF, P)	++++	+++ (CF, SL P)
		72 hours @ RT	++++	+++ (CF, P)	++++	+++ (CF, SL P)
		2 Weeks @ RT	++++	++++	++++	++++ (CF)
		1 week @ 140°F	++++	++++	++++	++++
	LV750	30 min @ RT	+	+	++	++
		24 hour @ RT	+	+	++	++
		72 hours @ RT	+	+	++	++
		2 Weeks @ RT	+	+	++	++
		1 week @ 140°F	++	++ (SL P)	++ (SL P)	++++
Acrylic Adhesives	LV820 2.0 mil	30 min @ RT	+	+	++++	+
		24 hour @ RT	+	+	++++	+(P)
		72 hours @ RT	+(SL P)	++ (SL P)	++++	++ (SL P)
		2 Weeks @ RT	+(SL P)	++ (SL P)	++++	++++
		1 week @ 140°F	+(SL P)	++ (SL P)	++++	++++ (CF)
	LV820 4.0 mil	30 min @ RT	++ (SL P)	+++ (SL P)	++++	+++
		24 hour @ RT	+++ (P)	+++ (P)	++++	+++ (AT, P)
		72 hours @ RT	+++ (P)	+++ (P)	++++	+++ (AT, P)
		2 Weeks @ RT	++++	++++	++++	++++ (AT)
		1 week @ 140°F	++++	++++	++++	++++ (AT)
	LV840	30 min @ RT	+	-	+(SL P)	+
		24 hour @ RT	+	-	+(SL P)	+(SL P)
		72 hours @ RT	+	-	+(SL P)	+(SL P)
		2 Weeks @ RT	+	-	++ (SL P)	+++ (P)
		1 week @ 140°F	+	+	++ (P)	+++ (P)
LV860	30 min @ RT	+++ (SL P)	+(SL P)	++++	+++ (P)	
	24 hour @ RT	+++ (SL P)	+(SL P)	++++	+++ (CF, P)	
	72 hours @ RT	+++ (SL P)	+(SL P)	++++	++++	
	2 Weeks @ RT	+++ (P)	++ (SL P)	++++	++++	
	1 week @ 140°F	+++ (P)	++ (SL P)	++++	++++	
LV850	30 min @ RT	+	+	++ (SL P)	++	
	24 hour @ RT	+	+	++ (SL P)	++ (P)	
	72 hours @ RT	++ (SL P)	+(SL P)	+++ (P)	++++	
	2 Weeks @ RT	++ (SL P)	+(SL P)	++++	++++	
	1 week @ 140°F	++ (P)	+(SL P)	++++	++++	

++++	Foam Destruction	SLP	Slight Picking 20%
+++	Very Aggressive	P	Picking 20-50%
++	Aggressive	CF	Cohesive Failure
+	Mild	CF & P	Cohesive Failure & Picking
-	Poor		

Mactac® Adhesion Testing on World Wide Foam Grades

	Formula	Dwell	Foam Dunnage				Foam in Battery		
			SC-30 XLPE	SC-41 XLPE	SC-61 XLPE	XP-18UL FIRE RETARDANT XLPE	3091 EPDM	XE-20 XLPE CHEMICAL ROLL	XEV-20 XLPE
Rubber Adhesives	LV790	30 min @ RT	++ (P)	++ (P)	+ (SL P)	++ (SL P)	++ (P)	+++ (P)	++ (P)
		24 hour @ RT	++ (P)	++ (P)	+ (SL P)	+++ (SL P)	++ (P)	++ (SL P)	++ (P)
		72 hours @ RT	++ (P)	++ (P)	+ (SL P)	++++	++ (P)	++ (SL P)	++ (P)
		2 Weeks @ RT	+++ (P)	++ (P)	+ (SL P)	++++	++++	++ (SL P)	++ (P)
		1 week @ 140°F	++++	+++ (P)	+ (SL P)	++++	++ (P)	++ (SL P)	++ (SL P)
	LV780	30 min @ RT	++++	+++ (P)	++ (SL P)	++++	++++	++++	++++
		24 hour @ RT	++++	++++	++	++++	++++	++++	++++
		72 hours @ RT	++++	++++	+++ (P)	++++	++++	++++	++++
		2 Weeks @ RT	++++	++++	+++ (P)	++++	++++	++++	++++
		1 week @ 140°F	++++	++++	+++ (P)	++++	++++ (CF)	++++	++++
	LV750	30 min @ RT	+ (SL P)	++ (P)	+ (SL P)	+ (SL P)	+ (SL P)	++ (SL P)	+ (SL P)
		24 hour @ RT	++ (P)	+ (SL P)	+ (SL P)	++ (SL P)	+ (SL P)	+ (SL P)	+ (SL P)
		72 hours @ RT	++ (P)	+ (SL P)	+ (SL P)	++ (SL P)	++++	+ (SL P)	+ (P)
		2 Weeks @ RT	++ (P)	++ (SL P)	+ (SL P)	++++	++++	+ (SL P)	++ (P)
		1 week @ 140°F	++ (P)	+ (SL P)	+ (SL P)	++++	++ (P)	+ (SL P)	+ (SL P)
Acrylic Adhesives	LV820 2.0 mil	30 min @ RT	++++	+	-	++++	++++	-	+++ (P)
		24 hour @ RT	++++	+	-	++++	++++	-	+++ (P)
		72 hours @ RT	++++	+ (SL P)	-	++++	++++	-	+++ (P)
		2 Weeks @ RT	++++	+ (SL P)	-	++++	++++	-	+++ (P)
		1 week @ 140°F	++++	+ (SL P)	+ (SL P)	++++	++++	+ (SL P)	+++ (P)
	LV820 4.0 mil	30 min @ RT	++++	+ (SL P)	+	++++	++++	+	++++
		24 hour @ RT	++++	+ (SL P)	+	++++	++++	+	++++
		72 hours @ RT	++++	++++	+	++++	++++	++ (P)	++++
		2 Weeks @ RT	++++	++++	++	++++	++++	++ (P)	++++
		1 week @ 140°F	++++	++++	++ (SL P)	++++	++++	++ (P)	++++
	LV840	30 min @ RT	++++	-	-	++++	++ (P)	-	++ (SL P)
		24 hour @ RT	++++	-	-	++++	++ (P)	-	++ (SL P)
		72 hours @ RT	++++	-	-	++++	++++	-	+ (SL P)
		2 Weeks @ RT	++++	-	-	++++	++++	-	+ (SL P)
		1 week @ 140°F	++++	+	+	++++	++++	-	+ (SL P)
LV860	30 min @ RT	++++	+ (SL P)	+ (SL P)	++++	++++	+ (SL P)	+++ (P)	
	24 hour @ RT	++++	+	+ (SL P)	++++	++++	+ (SL P)	+++ (P)	
	72 hours @ RT	++++	++ (P)	+ (SL P)	++++	++++	++ (P)	+++ (P)	
	2 Weeks @ RT	++++	++ (P)	+ (SL P)	++++	++++	++ (P)	+++ (P)	
	1 week @ 140°F	++++	++ (P)	+ (SL P)	++++	++++	++ (P)	+++ (P)	
LV850	30 min @ RT	++++	+ (SL P)	+ (SL P)	++++	++++	+ (SL P)	++ (P)	
	24 hour @ RT	++++	+ (SL P)	+ (SL P)	++++	++++	+ (SL P)	++ (P)	
	72 hours @ RT	++++	+ (SL P)	+ (SL P)	++++	++++	++ (P)	++ (P)	
	2 Weeks @ RT	++++	+ (SL P)	+ (SL P)	++++	++++	++ (P)	++ (P)	
	1 week @ 140°F	++++	+ (SL P)	+ (SL P)	++++	++++	++ (P)	++ (SL P)	

Key
 +++++ Foam Destruction
 +++ Very Aggressive
 ++ Aggressive
 + Mild
 - Poor
 SLP Slight Picking 20%
 P Picking 20-50%
 CF Cohesive Failure
 CF & P Cohesive Failure & Picking

Mactac® Adhesion Testing on Rogers Corporation Foam Grades

Formula	Dwell	40V0 - 12236 - 04 23 - 7 - 45 CAST UL-V0 PU	40V0 - 12236 - 04 23 - 7 - 45 TOP UL-V0 PU	43-20PCF PORON	43-16PCF PORON	4701-41-15500- 04 PORON	4701-30-15500- 04 PORON	4790-92-15500- 04 P ORON	
Rubber Adhesives	LV790	30 min @ RT	-	+ (SL P)	+	-	-	-	+
		24 hour @ RT	-	+ (SL P)	+	-	-	-	++ (P)
		72 hours @ RT	+	+ (SL P)	+	-	-	-	++++
		2 Weeks @ RT	+	++ (P)	+	-	-	++ (P)	++++
		1 week @ 140°F	++++	++++	++++	++++	++++	++++	++++
	LV780	30 min @ RT	++++	++++	+++ (CF)	+++ (SL P)	++++	++++	++++
		24 hour @ RT	++++	++++	+++ (CF, SL P)	+++ (SL P)	++++	++++	++++
		72 hours @ RT	++++	++++	+++ (CF, SL P)	+++ (SL P)	+	++++	++++
		2 Weeks @ RT	++++	++++	++++	++++	+	++++	++++
		1 week @ 140°F	++++	++++	++++	++++	+ (SL P))	++++	++++
	LV750	30 min @ RT	-	-	+	-	-	-	++++
		24 hour @ RT	-	+ (SL P)	+	-	-	-	-
		72 hours @ RT	+	+ (SL P)	+	-	-	-	-
		2 Weeks @ RT	+ (SL P)	++ (P)	++	+	-	-	-
		1 week @ 140°F	-	+ (SL P)	++++	++++	-	++++	++++
Acrylic Adhesives	LV820 2.0 mil	30 min @ RT	++++	++++	+++	+++ (SL P)	++	++++	++++
		24 hour @ RT	++++	++++	+++	+++ (SL P)	++++	++++	++++
		72 hours @ RT	++++	++++	+++	+++ (P)	++++	++++	++++
		2 Weeks @ RT	++++	++++	+++ (SL P)	++++	++++	++++	++++
		1 week @ 140°F	++++	++++	+++ (AT)	++++	++++	++++	++++
	LV820 4.0 mil	30 min @ RT	++++	++++	+++	+++ (SL P)	+++	++++	++++
		24 hour @ RT	++++	++++	+++	+++ (SL P)	++++	++++	++++
		72 hours @ RT	++++	++++	+++	+++ (P)	++++	++++	++++
		2 Weeks @ RT	++++	++++	+++ (CF)	+++ (AT, P)	++++	++++	++++
		1 week @ 140°F	++++	++++	+++ (AT)	++++	++++	++++	++++
	LV840	30 min @ RT	++++	++++	++	+++ (P)	++	++++	++++
		24 hour @ RT	++++	++++	++	+++ (P)	+++ (P)	++++	++++
		72 hours @ RT	++++	++++	++	+++ (P)	++++	++++	++++
		2 Weeks @ RT	++++	++++	++	+++ (P)	++++	++++	++++
		1 week @ 140°F	++++	++++	++++	++++	++++	++++	++++
	LV860	30 min @ RT	++++	++++	++	++	+	++++	++++
		24 hour @ RT	++++	++++	++	++	+	++++	++++
		72 hours @ RT	++++	++++	+++	++ (SL P)	+	++++	++++
		2 Weeks @ RT	++++	++++	+++	++ (P)	++	++++	++++
		1 week @ 140°F	++++	++++	++++	++++	++++	++++	++++
LV850	30 min @ RT	++++	+++ (P)	+	+	-	+	+	
	24 hour @ RT	++++	++++	++	++	-	++ (P)	++++	
	72 hours @ RT	++++	++++	++	++	-	++++	++++	
	2 Weeks @ RT	++++	++++	++	++ (SL P)	+	++++	++++	
	1 week @ 140°F	++++	++++	++++	++++	++++	++++	++++	

Key
 +++++ Foam Destruction SLP Slight Picking 20%
 +++ Very Aggressive P Picking 20-50%
 ++ Aggressive CF Cohesive Failure
 + Mild CF & P Cohesive Failure & Picking
 - Poor

Mactac® Adhesion Testing on Bergad Foam Grades

Formula		Dwell	4811V	2604V	6032	5018	2130	3015
Rubber Adhesives	LV790	30 min @ RT	-	-	-	-	-	-
		24 hour @ RT	-	-	-	-	-	-
		72 hours @ RT	-	-	-	-	-	-
		2 Weeks @ RT	-	-	-	-	-	-
		1 week @ 140°F	-	-	-	-	-	-
	LV780	30 min @ RT	++ (SL P)	+	-	++ (SL P)	++	++ (SL P)
		24 hour @ RT	-	+(SL P)	-	++ (SL P)	++++	+
		72 hours @ RT	-	+(SL P)	-	+++ (P)	++ (SL P)	+
		2 Weeks @ RT	-	++ (P)	-	+++ (P)	+	+
		1 week @ 140°F	-	+++ (P)	+(SL P)	++++	++++	++ (CF, P)
	LV750	30 min @ RT	-	-	-	-	-	-
		24 hour @ RT	-	-	-	-	-	-
		72 hours @ RT	-	-	-	-	-	-
		2 Weeks @ RT	-	-	-	-	-	-
		1 week @ 140°F	-	-	-	-	-	-
Acrylic Adhesives	LV820 2.0 mil	30 min @ RT	++++	++++	++++	++++	+(SL P)	++++
		24 hour @ RT	++++	++++	++++	++++	++++ (CF)	++++
		72 hours @ RT	++++	++++	++++	++++	++++	++++
		2 Weeks @ RT	++++	++++	++++	++++	++++	++++
		1 week @ 140°F	++++	++++	++++	++++	++ (CF, P)	++++
	LV820 4.0 mil	30 min @ RT	++++	++++	++++	++++	++++	++++
		24 hour @ RT	++++	++++	++++	++++	++++ (CF_)	++++
		72 hours @ RT	++++	++++	++++	++++	++++	++++
		2 Weeks @ RT	++++	++++	++++	++++	++++	++++
		1 week @ 140°F	++++	++++	++++	++++	++++	++++
	LV840	30 min @ RT	++++	++++	+++ (P)	++++	++ (CF, SL P)	++++
		24 hour @ RT	++++	++++	+++ (P)	++++	+++ (CF, SL P)	++++
		72 hours @ RT	++++	++++	+++ (P)	++++	+++ (SL P)	++++
		2 Weeks @ RT	++++	++++	++ (SL P)	++++	++ (SL P)	++++
		1 week @ 140°F	++++	++++	++ (SL P)	++++	+++ (CF, SL P)	++++
	LV860	30 min @ RT	++++	++++	++ (SL P)	++++	++ (CF, SL P)	++++
		24 hour @ RT	++++	++++	++ (SL P)	++++	++ (CF, SL P)	++++
		72 hours @ RT	++++	++++	++ (SL P)	++++	++ (SL P)	++++
		2 Weeks @ RT	++++	++++	++ (SL P)	++++	++ (SL P)	++++
		1 week @ 140°F	++++	++++	++ (SL P)	++++	++ (CF, SL P)	+++ (P)
LV850	30 min @ RT	+++ (SL P)	++ (SL P)	+	++ (SL P)	+(SL P)	+(SL P)	
	24 hour @ RT	+++ (SL P)	++ (SL P)	+	+++ (SL P)	+(SL P)	+(SL P)	
	72 hours @ RT	+++ (SL P)	++ (SL P)	+	++ (SL P)	+(SL P)	++ (SL P)	
	2 Weeks @ RT	++ (SL P)	++ (SL P)	+	++ (SL P)	+(SL P)	++ (SL P)	
	1 week @ 140°F	++++	++ (SL P)	+	++ (SL P)	+(SL P)	+(SL P)	

Key
 +++++ Foam Destruction SLP Slight Picking 20%
 +++ Very Aggressive P Picking 20-50%
 ++ Aggressive CF Cohesive Failure
 + Mild CF & P Cohesive Failure & Picking
 - Poor

Mactac® Adhesion Testing on Neograf Solution, LLC eGraf® SpreaderShield™

Formula		Dwell	TG-829CR-0.040	SS400-0.51-P1GP1	SS600-0.127	SS400-0.94	SS400-0.51	SS400-0.25
Rubber Adhesives	LV790	30 min @ RT	++++	++	++++	++++	++++	++++
		24 hour @ RT	++++	+++	++++	++++	++++	
		72 hours @ RT	++++	+++	++++	++++	++++	
		2 Weeks @ RT	++++	++++	++++	++++	++++	
		1 week @ 140°F	++++	++++	++++	++++	++++	
	LV780	30 min @ RT	++++	+++ (CF)	++++	++++	++++	++++
		24 hour @ RT	++++	+++ (CF)	++++	++++	++++	++++
		72 hours @ RT	++++	+++ (CF)	++++	++++	++++	++++
		2 Weeks @ RT	++++	+++ (CF)	++++	++++	++++	++++
		1 week @ 140°F	++++	+++ (CF)	++++	++++	++++	++++
	LV750	30 min @ RT	++++	++	++++	++++	++++	++++
		24 hour @ RT	++++	+++	++++	++++	++++	++++
		72 hours @ RT	++++	+++ (CF)	++++	++++	++++	++++
		2 Weeks @ RT	++++	+++ (CF)	++++	++++	++++	++++
		1 week @ 140°F	++++	+++ (CF)	++++	++++	++++	++++
Acrylic Adhesives	LV820 2.0 mil	30 min @ RT	++++	++	++++	++++	++++	++++
		24 hour @ RT	++++	++	++++	++++	++++	
		72 hours @ RT	++++	++	++++	++++	++++	
		2 Weeks @ RT	++++	++	++++	++++	++++	
		1 week @ 140°F	++++	++++	++++	++++	++++	
	LV820 4.0 mil	30 min @ RT	++++	++	++++	++++	++++	++++
		24 hour @ RT	++++	++ (CF)	++++	++++	++++	
		72 hours @ RT	++++	++ (CF)	++++	++++	++++	
		2 Weeks @ RT	++++	++ (CF)	++++	++++	++++	
		1 week @ 140°F	++++	++++	++++	++++	++++	
	LV840	30 min @ RT	++++	++	++++	++++	++++	++++
		24 hour @ RT	++++	++	++++	++++	++++	
		72 hours @ RT	++++	++	++++	++++	++++	
		2 Weeks @ RT	++++	++ (CF)	++++	++++	++++	
		1 week @ 140°F	++++	++	++++	++++	++++	
LV860	30 min @ RT	++++	++	++++	++++	++++	++++	
	24 hour @ RT	++++	+++	++++	++++	++++		
	72 hours @ RT	++++	+++	++++	++++	++++		
	2 Weeks @ RT	++++	+++	++++	++++	++++		
	1 week @ 140°F	++++	+++	++++	++++	++++		
LV850	30 min @ RT	++++	++	++++	++++	++++	++++	
	24 hour @ RT	++++	+++	++++	++++	++++		
	72 hours @ RT	++++	+++	++++	++++	++++		
	2 Weeks @ RT	++++	+++	++++	++++	++++		
	1 week @ 140°F	++++	+++ (CF)	++++	++++	++++		

Key
 +++++ Foam Destruction
 +++ Very Aggressive
 ++ Aggressive
 + Mild
 - Poor
 SL P Slight Picking 20%
 P Picking 20-50%
 CF Cohesive Failure
 CF & P Cohesive Failure & Picking



Materials Guide for EV

Engineered Tapes & Laminates

For Regulatory Information, please visit www.mactac.com for all product regulatory compliance.
For Quality information, please visit www.mactac.com/quality for all manufacturing site ISO 9001 certificates.

For Technical Data Sheets please visit www.mactac.com/industrialtapes.

Mactac is a member of the following organizations:
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Pressure Sensitive Tape Council

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