

Properties of PVC TrimWelder Products

PVCTRIMWELDER Fast Cure

Mixed (Fluid) Properties

Mix Ratio A:B Viscosity Thixotropy Ratio (Static to Flow) Specific Gravity Color Odor Flash Point Toxicity Work Life

Cured Properties

Functional Cure 90% Cure Full Cure Hardness Elongation Impact Strength Peel Strength Tensile Strength on:

> Cellular PVC Solid PVC FiberGlass ABS

Tensile Shear Strength on: Aluminum As Rec-d CRS

Solvent Resistance

Strength Retention in: Water at 100年/100hrs Mineral Oil 100年/100 hrs

Environmental Properties Post Cure

VOC's CARB Compliant Fillers for improved working properties Color Stability Service Temperature Gap Filling Capability 1 to 1 200,000 centipoise 5:1 1.01 @ 20C White Self Limiting Acrylate 51F COC method per ASTM Moderate 5-8 Minutes

20 – 30 Minutes 90 Minutes 24 Hours 75 Shore D 40% 20 ft/lbs on steel coupons 20 – 25 pli on aluminum

Substrate Failure Substrate Failure Substrate Failure Substrate Failure

3400 psi (ASTM D1002) 2230 psi (ASTM D1002) No Primer Required

92% 94%

> < 2 gms/kg Yes Yes Very Good -50F to 250F < 3/16"

> > 1

EXTREME Adhesives, Inc. 63 Epping Road Raymond, NH 03077 Formerly Adhesive Engineering & Supply, Inc. 603-895-4028 - FAX 603-8956236 http://www.pvctrimwelder.com http://www.extremeadhesives.com/



PVCTRIMWELDER Slow Cure

Mixed (Fluid) Properties

Mix Ratio A:B Viscosity Thixotropy Ratio (Static to Flow) Specific Gravity Color Odor Flash Point Toxicity Work Life

Cured Properties

Functional Cure 90% Cure Full Cure Hardness Elongation Impact Strength Peel Strength

Tensile Strength on:

Cellular PVC Solid PVC FiberGlass ABS

Tensile Shear Strength on: Aluminum As Rec-d CRS

Solvent Resistance

Strength Retention in: Water at 100年/100hrs Mineral Oil 100年/100 hrs

Environmental Properties Post Cure

VOC's CARB Compliant Fillers for improved working properties Color Stability Service Temperature Gap Filling Capability 1 to 1 250,000 centipoise 6:1 1.01 @ 20C White Self Limiting Acrylate 51F COC method per ASTM Moderate 18 -23 Minutes

90 – 120 Minutes 240 Minutes 24 Hours 75 Shore D 40% 20 ft/lbs on steel coupons 20 – 25 pli on aluminum

Substrate Failure Substrate Failure Substrate Failure Substrate Failure

3390 psi (ASTM D1002) 2340 psi (ASTM D1002) No Primer Required

Excellent

91% 96%

> < 2 gms/kg Yes Yes Very Good -50F to 250F 1/2"

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PVCTRIMWELDER Laminating Grade

Mixed (Fluid) Properties

Mix Ratio A:B Viscosity Thixotropy Ratio (Static to Flow) Specific Gravity Color Odor Flash Point Toxicity Work Life

Cured Properties

Functional Cure 90% Cure Full Cure Hardness Elongation Impact Strength Peel Strength	
Tensile Strength on:	
-	Cellular PVC
	Solid PVC
	FiberGlass
	ABS
Tensile Shear Strength	on: Aluminum As Rec-d CRS

Solvent Resistance

Strength Retention in: Water at 100年/100hrs Mineral Oil 100年/100 hrs

Environmental Properties Post Cure

VOC's CARB Compliant Fillers for improved working workability Color Stability Service Temperature Gap Filling Capability 1 to 1 27,000 centipoise 2:1 1.01 @ 20C White Self Limiting Acrylate 51F COC method per ASTM Moderate 18 - 20 Minutes

45 - 60 Minutes 170 Minutes 24 Hours 75 Shore D 60% 20 ft/lbs on steel coupons 20 - 25 pli on aluminum

Substrate Failure Substrate Failure Substrate Failure Substrate Failure

3390 psi (ASTM D1002) 2340 psi (ASTM D1002) No Primer Required

Excellent

97% 94%

< 2 gms/kg Yes Yes Very Good -50F to 250F < 1/16"

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Notes:

The three primary PVC TRIMWELDER products share many cured and uncured properties. The primary functional differences are viscosity and cure speed. This allows the user to utilize the best performing product for their needs.

The Thixotropic Ratio reflects the difference in viscosity between <u>flowing</u> adhesive (as when being mixed and dispensed) and the viscosity when <u>at rest</u>. This property is unique to PVCTRIMWELDER and is what allows the products to flow through the mixer easily with little resistance and still stay within a joint or cling to a vertical surface without sag. The recovery of the full "at rest" viscosity takes only several seconds after dispensing.

The exceptionally low Thixotropy Ratio on the Laminating Grade allows large laminations to be processed with minimal clamping force. This works well for jobsite laminating. The flow characteristics allow completely bubble and void free laminations eliminating the need for post fill and finish operations when cutting or milling the lamination. It is recommended that Laminating grade be applied in the proper amount **only** in the center of the parts bieng glued. Do not spread, brush, or roll out the adhesive to cover the surface. Use pressure on the top part to flow out the adhesive. This will result in the strongest laminations with no voids.

Solvent resistance of PVC TRIMWELDER is many times greater then PVC since, upon curing, PVCTRIMWELDER becomes a cross linked thermosetting plastic.

Work Life is defined as the time which the user has to align and position the parts. They should remain in that position until functional strength is achieved. Although full cure requires 24 hours on all products, it is a laboratory definition and really accomplishes only the last 5% of the cure. Functional cure is the time point when parts my be unclamped and handled.

Note: PVC TrimWelder Fast Cure provides faster and stronger "core to core" or "end cut" bonds then does Slow Cure and actually reinforces the joint.

June 6, 2009 © Extreme Adhesives, Inc

Updated July 16, 2010