

TECHNICAL DATA SHEET

ArmstrongTM A-661

Revision date: 8/5/2024

N109 W13300 ELLSWORTH DRIVE GERMANTOWN, WI 53022 262-253-5900 FAX 262-253-5919

DESCRIPTION:

ResinLab® Armstrong™ A-661 is a two-part room temperature curing adhesive that produces bonds with excellent shear strength and will maintain its performance after long term exposure to temperatures up to 400 °F / 205 °C.

Armstrong™ A-661 is a smooth, brushable, non-sag, easy to apply paste that cures to handling strength overnight at room temperature. An elevated cure schedule at or above 165 °F (75 °C), for example 10 minutes @ 150 °C, can be used to accelerate final properties.

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TYPICAL PROPERTIES:

All properties given are at 25 °C unless otherwise noted.

Property:	Value:	Test Method or Source:	
Color	Gray	Visual	
Mix Ratio	Part A to Part B	Calculated	
Mix Ratio by weight	4 to 1		
Mix Ratio by volume	2.45 to 1		
Cure Schedule	24 hrs @ 25 °C		
	10 min @ 150 °C		
Viscosity - Part A	640,000 cP	TA HR20 Rheometer 25mm parallel plate @ 1/s DCV6100723	
Viscosity - Part B	11,000 cP		
Viscosity - Mixed	185,000 cP		
Specific Gravity - Part A	1.59	Calculated	
Specific Gravity - Part B	0.97		
Specific Gravity - Mixed	1.41		
Pot Life defined as the time it takes for	1.5 hours	TA HR20 Rheometer parallel plate 25mm @	
initial mixed viscosity to double		1/s DCV6100723	
Work Life	3 hours (100g sample)	Extrapolated from Henkel LDS	
Hardness	85 Shore D	455300006287/ASTM D2240	
Tensile Properties:		Extrapolated from Henkel LDS	
Strength	2,800 psi	Cure Schedule: 10 min @ 149 °C	
Elongation	2 %		
Modulus	5,300 psi		
Operating Temperature Range	-40 to 205 °C**		
Relative Thermal Index (RTI)	90 °C	UL746B, Table 7.1	
		Generic Value Based on Composition	

^{*} Asterisk denotes values considered typical to associated resin systems or extrapolated from other test results.

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Page 1 of 2

^{**} Operating Temperature Range is based on average design requirements and is not intended as a guarantee of suitability for all applications operating at that temperature.



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*** This TDS contains values that have been updated. The values reported in this technical data sheet are typical values of the product, and are highly dependent on test conditions and methodology. We actively seek the most precise and accurate ways to measure and interpret performance of our products, and to update estimated values with measured values. The formula has not been revised or changed in any way. Although the values on paper have changed, you can expect the same performance of the product.

Additional Performance Data – Lap Shear Adhesion, Extrapolated from Henkel LDS:					
Substrate Type	Strength	Test Temperature	Cure Schedule	Bond Line Thickness	
Al to Al	3,300 psi	25 °C	10 min @ 149 °C	0.005 "	
Al to Al	3,460 psi	82 °C	10 min @ 149 °C	0.005 "	
Al to Al	760 psi	149 °C	10 min @ 149 °C	0.005 "	
Al to Al	430 psi	204 °C	10 min @ 149 °C	0.005 "	

INSTRUCTIONS:

- 1. Bring to room temperature prior to use.
- 2. Bulk format: stir until homogeneous weigh and mix parts A and B accurately and thoroughly, scraping sides of container often. Do not pour from mixing container, transfer to a new container as residual unmixed material may cause a tacky spot on the surface of the casting. Maintain adequate velocity during dispensing to ensure complete mixing.
- 3. Clean up uncured resin with suitable organic solvent such as MEK or acetone.
- 4. Allow to cure undisturbed until product is fully gelled or tack-free to the touch.

SHELF LIFE AND STORAGE:

12 months at 25 °C. 9 months DOP at 25 °C in C-kit Specialty packaging may be less.

Many epoxy resin systems are prone to crystallization as epoxy resin is a super-cooled fluid. This condition may give the product a gritty or grainy appearance (or hazy in clear products). Products in this state will not usually cure to normal and expected properties. In extreme cases it may appear solid and cured. Fluctuating temperatures (within 5 to 50 °C) aggravate this phenomenon. Heating the individual component to 50 to 60 °C while stirring can usually restore products to original state. Storage at 25 +/- 10 °C is optimum for most products.