

# Technical Data Sheet Armstrong<sup>™</sup> C-4 with Activator A

2/25/2020

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

### **DESCRIPTION:**

ResinLab® Armstrong™ C-4 with Activator A is a two-part clear low viscosity room temperature curing epoxy adhesive. It was designed for bonding glass, ceramics, most metals, and many plastics. Once cured it will produce a clear rigid bond line. Armstrong™ C-4 with Activator A is well suited for fiber optic bonding applications as well as other electronic and aerospace applications. It will have excellent chemical and solvent resistance as well as electrical insulation properties.

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### **TYPICAL PROPERTIES:**

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

Property:	Value:	Test Method or Source:
Color	Transparent, Clear	Visual
Mix Ratio	Part A to Part B	Calculated
By weight	9.1 to 1	Extrapolated from Henkel LDS Sheet
By volume	7.8 to 1	
Cure Schedule	24 hours @25 °C	Extrapolated from Henkel LDS Sheet
	4 hours @ 65 °C	
Viscosity – Part A	795 cps @1/s	Rheometer parallel plate 25mm
Viscosity – Part B	30 cps @1/s	455300006291
Viscosity - Mixed	300 cps @1/s	
Specific Gravity – Part A	1.11	Calculated
Specific Gravity – Part B	0.95	
Specific Gravity - Mixed	1.10	
Pot Life, defined as the time it takes for	1 hour, 30 minutes	Rheometer parallel plate 25mm@1/s
initial mixed viscosity to double		455300006291
Glass Transition Temperature/Tg	77 °C	Extrapolated from Henkel LDS Sheet
Hardness	80 Shore D	455300006287/ASTM D2240
Dielectric Constant / Dissipation Factor		Extrapolated from Henkel LDS Sheet
@ 1 kHz	4.3 / 0.02	
AC Dielectric Strength	410 V/mil	Extrapolated from Henkel LDS Sheet
Operating Temperature Range	-60 to 130 °C**	Extrapolated from Henkel LDS Sheet

<sup>\*</sup> Asterisk denotes values considered typical to associated resin systems or extrapolated from other test results.

<sup>\*\*</sup> 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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## **INSTRUCTIONS:**

- 1. Bring both components to room temperature prior to mixing.
- 2. Cartridge format: Mixer should be attached keeping the cartridge vertical and any air pocket purged this way. After the mixer contains material, the mixer tip can be dropped to dispense pre-bleed amount. Attach a new static mixer with each cartridge, then pre-bleed the first 3 inches of dispensed material or until a uniform color is obtained. Maintain adequate velocity during dispensing to ensure complete mixing.
- 3. Bulk format: 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.
- 4. Allow to cure undisturbed until product is fully gelled or tack-free to the touch.
- 5. Clean up uncured resin with suitable organic solvent such as MEK, acetone or other organic solvent.

SHELF LIFE AND STORAGE: 12 months at 25 °C

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.