

TECHNICAL DATA SHEET

AR5848

Revision date: 7/22/2024

N109 W13300 ELLSWORTH DRIVE GERMANTOWN, WI 53022 1-877-259-1669

DESCRIPTION:

ResinLab® AR5848 is a high performance magnet bonding adhesive that will fixture in 30-60 seconds. It was designed for high speed manufacturing processes that require a streamlined automation process with high yield.

AR5848 forms strong durable bonds and adhesion to metal and glass substrates. It is a medium viscosity product that will limit migration on parts and has excellent gap curing with the activator. This material will dry quickly and can fixture on cold rolled steel. A heat cure is also an option with cure time determined by temperature and bond line geometry used.

TYPICAL PROPERTIES:

All properties given are at 25 °C unless otherwise noted

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|--|---|------------------------|--|--|--|
| Property: | Value: | Test Method or Source: | | | |
| Color | Part A: Amber translucent | Visual | | | |
| | Part B: Green to dark brown | | | | |
| Viscosity - Part A | 20,000 cP | TD 20 rpm | | | |
| Viscosity - Part B | 1 cP | | | | |
| Viscosity - Mixed | N/A | | | | |
| Specific Gravity - Part A | 1.08 | Calculated | | | |
| Specific Gravity - Part B | 0.79 | | | | |
| Specific Gravity - Mixed | N/A | | | | |
| Thermal Shock, Steel/Steel | 1 hr @ -20 °F/-6 °C to 300 °F/148 °C, 2 | | | | |
| | cycles - 82% strength retained | | | | |
| Impact Strength | 5.25 J | | | | |
| Operating Temperature Range | -53 to 162 °C** | | | | |

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

^{**} 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.

| Additional Performance Data – Lap Shear Adhesion, 4535601224468/ASTM D1002: | | | | | |
|---|-----------|------------------|---------------|----------------------------|--|
| Substrate Type | Strength | Test Temperature | Cure Schedule | Bond Line Thickness | |
| Steel to Steel | 1,500 psi | 25 °C | After 1 hr | 0.005 " | |
| Steel to Steel | 2,100 psi | 25 °C | After 24 hrs | 0.005 " | |



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INSTRUCTIONS:

- 1. Bring to room temperature prior to use.
- 2. Ambient cure: Apply activator with a brush to one surface in a thin coating, do not over apply. Material will dry in 15-30 seconds depending on the ambient temperature. Then, apply the adhesive as a bead or in drops to ensure adequate amount of material is applied to fill the bond-line. Assemble the part and fixture with a slight clamp pressure for 60 seconds minimum at points of good contact. Larger gaps will have a longer fixture time and time to full cure strength. For gaps above 0.020", apply the activator to both parts and apply the adhesive over one of the activator primed surfaces. Do not touch the adhesive applicator to the other primed surface.
- 3. Heat cure: If a heat cure is desired, the adhesive can be used without primer. Apply the Part A and cure at 200 °F/93 °C for 30 minutes. Increasing the temperature will result in a faster cure. Validation of cure profile and performance should be carried out on production parts.

SHELF LIFE AND STORAGE:

6 months at 75 °F/23 °C when sealed and stored in original container.