

TECHNICAL DATA SHEET SEC1233RC

08/05/2020

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

DESCRIPTION:

Resinlab® SEC1233RC is a silver filled, two-component, room temperature curing epoxy adhesive. SEC1233RC has excellent electrical conductivity useful in many electronic applications. It is a soft 100% solids thixotropic paste provided in a 1:1 ratio. It is recommended to mix by weight but extrusion of equal length beads from syringes is commonly used as a method of measurement as small quantities are commonly used. It also can be packaged in small side-by-side dispensing cartridges for use with static mixers. SEC1233RC has been formulated to remove Substances of Very High Concern listed as of January 2020.

This system is also available in a pre-mixed and frozen format.

SEC1233RC provides exceptionally high conductivity starting immediately after mixing and improves during the curing process. It also has high thermal conductivity due to its high silver content. It provides environmental protection and has tenacious adhesion to various metals and other common assembly materials.

TYPICAL PROPERTIES:

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

Property:	Value:	Test Method or Source:
Color	Silver	Visual
Mix Ratio	Part A to Part B	Calculated
By weight	0.98 to 1	
By volume	1 to 1	
Cure Schedule	24-72 hours @ 25 °C	
	1 hour @ 60 °C	
Viscosity – Part A	85,000 cps @1/s	Rheometer parallel plate 25mm@1/s
Viscosity – Part B	88,000 cps @1/s	455300006291
Viscosity - Mixed	86,000 cps @1/s	
Specific Gravity – Part A	3.87	Calculated
Specific Gravity – Part B	3.95	
Specific Gravity - Mixed	3.91	
Pot Life, defined as the time it takes	25-30 minutes	Rheometer parallel plate 25mm@1/s
for initial mixed viscosity to double		455300006291
Glass Transition Temperature/Tg	10 °C	453560822409 by DSC
Hardness	70 Shore D	455300006287/ASTM D2240
Lap Shear Strength		4535601224468/ASTM D1002
0.010" bond line Al to Al	1,000 psi	
Volume (Bulk) Resistivity	0.001 ohm-cm	455300004460/Jandel 4 point probe
Surface (Sheet) Resistivity	0.250 ohm/sq	



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INSTRUCTIONS:

- 1. Bring 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:

As a Dual syringe: 6 months DOP @ -20 °C or below As one-part pre-mixed and frozen 5cc syringe: 6 months DOP @ -40 °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.