

## RCS Rapid Cure Sealant

Electrolube RCS is a single component, solvent-free, low odour RTV which cures upon exposure to atmospheric moisture. The product offers high bond strength when applied to a variety of surfaces and exhibits rapid tack-free times. It is suitable for applications where there is the need to mechanically support components in order to overcome vibration failures commonly experienced in the automotive industry.

- High viscosity, non-slump paste with good electrical insulation characteristics
- High bond strength and excellent adhesion to a wide variety of substrates
- Modified polymer with silyl functional group; no low molecular weight cyclosiloxanes during cure
- Remains flexible and elastic over a wide temperature range

<b>Approvals</b>	<b>RoHS-2 Compliant (2011/65/EU):</b>	<b>Yes</b>
Typical Properties:	Colour Main Component	White Modified Polymer with Silyl Functional Group
	Viscosity (Pa s)	100
	Consistency	Non-Slump Paste
	Density (g/ml)	1.6
	Skin forming rate*	6-10 minutes
	Cure time (Hours @ 20°C) *	24
	Shelf Life	12 Months
	*Curing rate and skin forming is dependent upon ambient conditions of temperature and humidity	
Cured Properties:	Temperature Range (°C)	-40 to +130
	Glass Transition Temperature (°C)	-45
	Shore Hardness	A40-45
	Shore Hardness after 7 days	A80
	Tensile Strength (MPa)	5
	Elongation at Break (%)	250
	Surface Resistivity (Ω)	1 x 10 <sup>12</sup>
	Volume Resistivity (Ω.cm)	10 x 10 <sup>12</sup>
	Dielectric Constant (@ 50Hz)	4.3
	Heat Aging – Weight Loss (7 days at 130°C / %)	<3
	Moisture Resistance (96 hours at 95% RH, 40°C / Ω)	5 x 10 <sup>9</sup>

**Adhesive Properties**

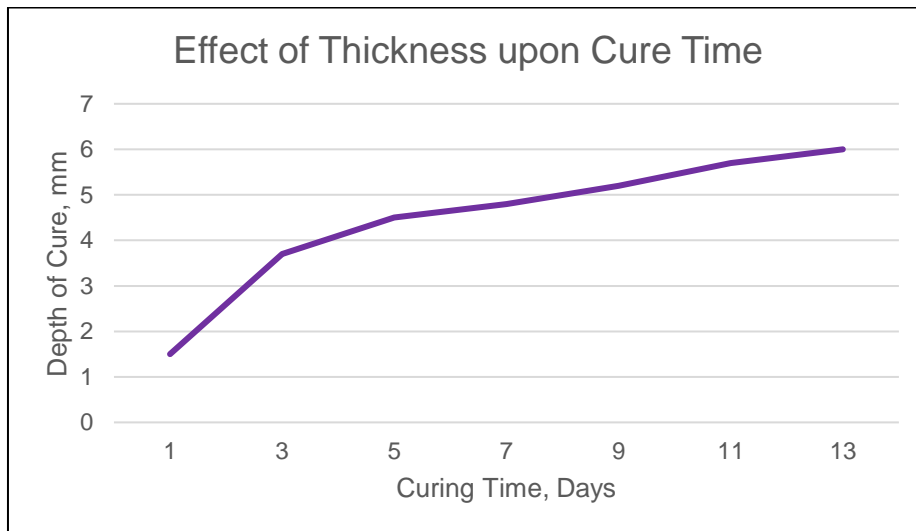
**Adhesion to different substrates:**

Cured for 7 days at 23°C, 50%RH and an open time of 5 minutes

Substrate	Shear Strength (MPa)	Comments
Aluminium	6.8	Cohesion Failure
Stainless Steel	5.1	Cohesion Failure
Polycarbonate	5.4	Cohesion Failure
Nylon	5.1	Cohesion Failure
Glass	6.3	Cohesion Failure

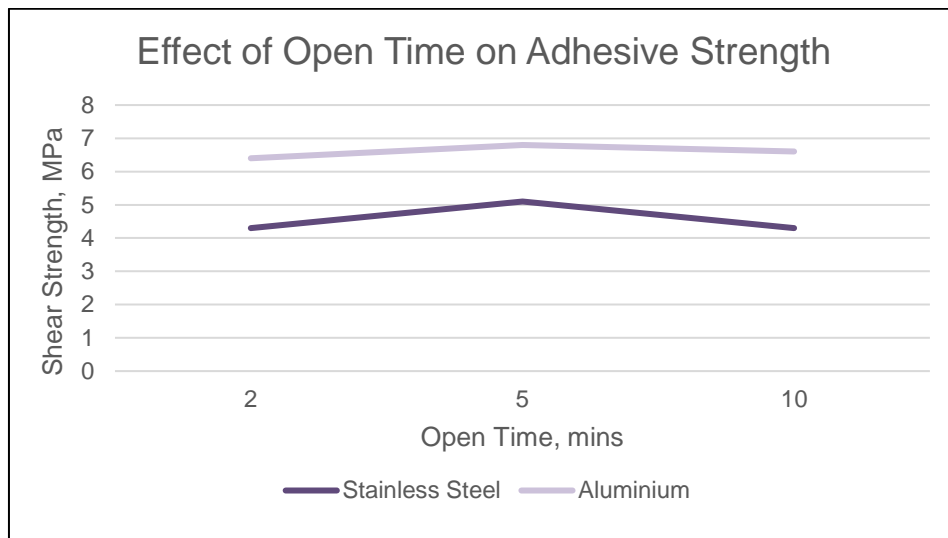
**Cure thicknesses:**

Cured at 23°C, 50%RH and an open time of 5 minutes



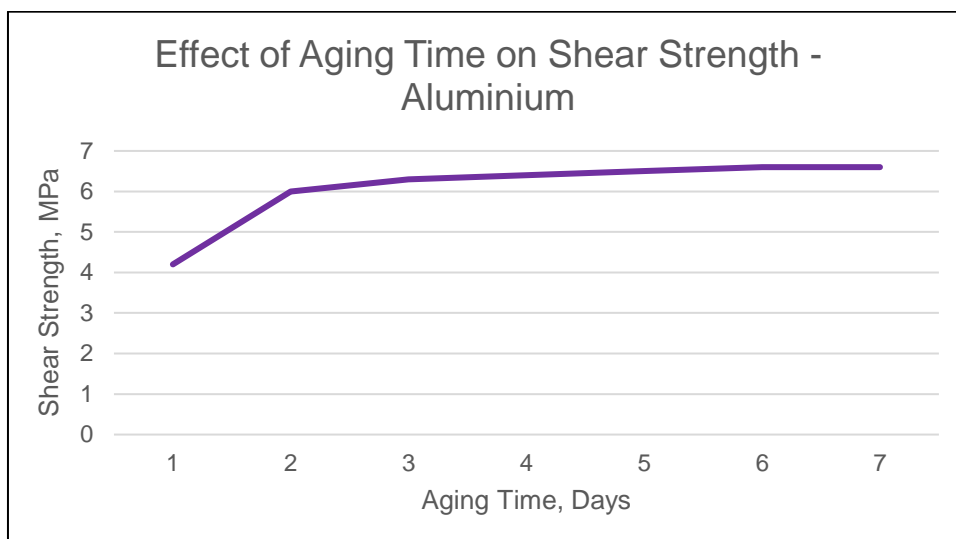
**Open time:**

Cured at 23°C, 50%RH for 7 days



**Full cure properties:**

Cured at 23°C, 50%RH and an open time of 5 minutes



## **Directions for Use**

Surfaces must be clean, dry and free from grease, dust and contaminants; Electrolube offer a range of cleaning products, including Ultrasolve (ULS), for such applications. Ensure that all solvents have completely evaporated prior to application.

RCS is a moisture curing system. Relative humidity of 50% or above is preferred for curing. Apply a thin layer of product onto each bonding surface; the thickness of the layer will affect the rate of initial cure – the higher the thickness applied, the longer it will take to reach the required strength. Final strength is obtained after ~24hours.

## **Bulk Packaging Specifications**

<b>Package Size</b>	<b>Diameter (mm)</b>	<b>Height (mm)</b>
310 ml cartridge	45.9 (inside)	215.5 (without threaded nipple)
17 kg tin	285 (internal)	280 (internal)

Revision 6: January 2018