

Electrolube® RCS

Rapid Cure Sealant

DESCRIPTION

Electrolube® RCS is a single component, solvent-free, low odor 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.

READ ENTIRE TECHNICAL DATA SHEET BEFORE USING THIS PRODUCT

FEATURES AND BENEFITS

- 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

APPROVALS

Standard	Status
RoHS Compliant (2015/863/EU)	Yes

PRODUCT INFORMATION

Please contact your customer service representative for information on available package sizes.

PHYSICAL PROPERTIES

Category	Results
Typical Properties	
Color	White
Main Component	Modified Polymer with Silyl Functional Group
Density (g/mL)	1.6
Viscosity (Pa s)	100
Consistency	Non-Slump Paste
Skin Forming Rate*	6 to 10 minutes
Cure Time (Hours @ 20 °C)*	24
Cured Properties	
Thermal Conductivity (W/m.K)	0.55
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)	1×10^{12}
Volume Resistivity (Ω cm)	10×10^{12}
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)	5×10^9
Flame Retardancy	Yes, Meets UL94 HB

* Curing rate and skin forming is dependent upon ambient conditions of temperature and humidity

Adhesive Properties

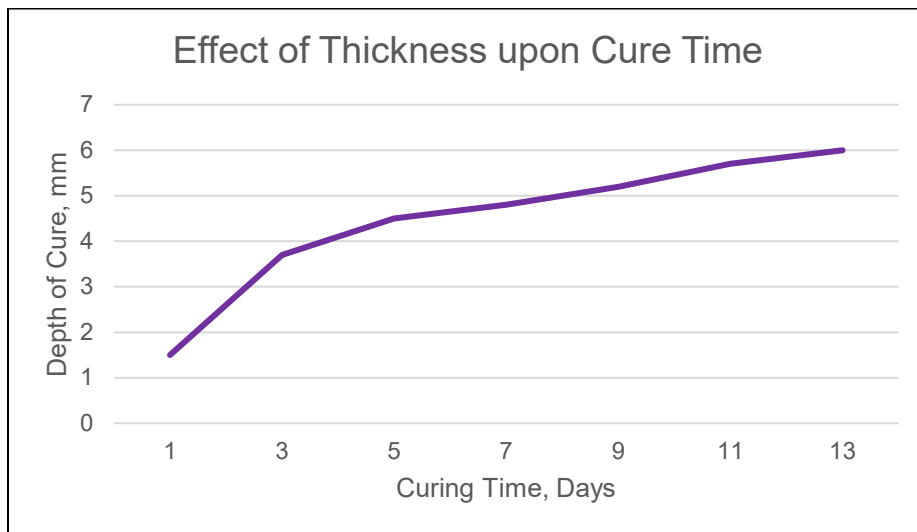
Adhesion to Different Substrates:

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

Substrate	Shear Strength (MPa)	Comments
Aluminum	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

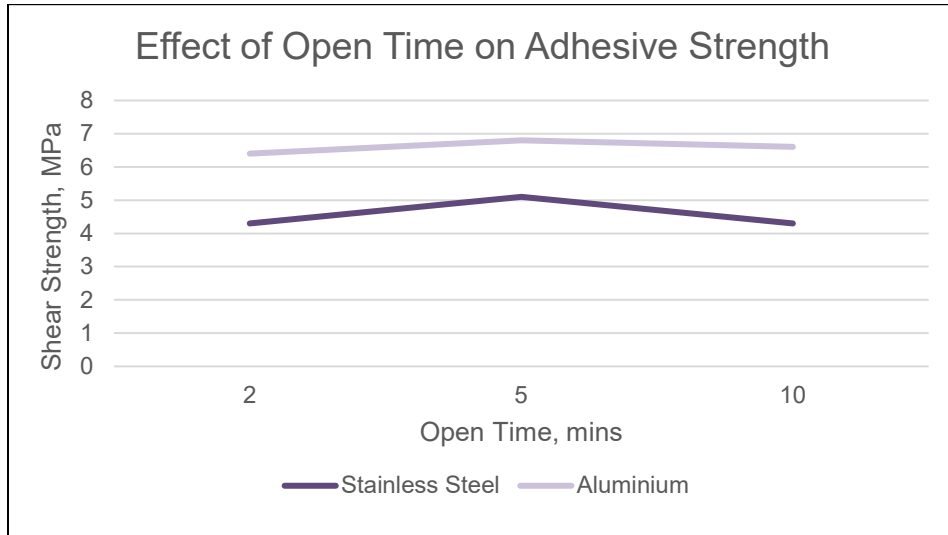
Cure Thicknesses:

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



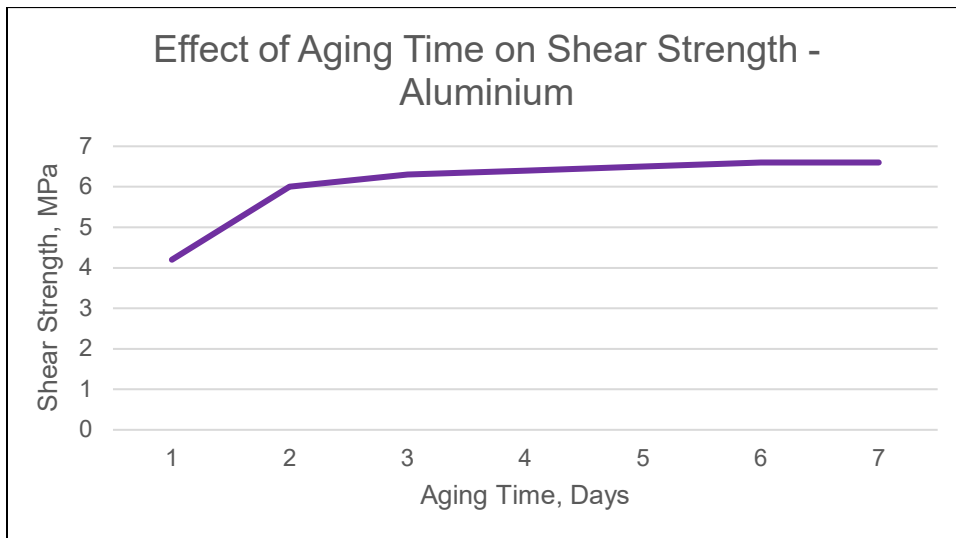
Open Time:

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



APPLICATION GUIDELINES

Surfaces must be clean, dry and free from grease, dust and contaminants; we 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

Package Size	Diameter (mm)	Height (mm)
310 mL cartridge	45.9 (inside)	215.5 (without threaded nipple)
17 kg tin	285 (internal)	280 (internal)

Revision 9: Jul 2021

ADDITIONAL INFORMATION

Shelf Life: 12 Months

SAFETY & WARNING

It is recommended that the company/operator read and review the Safety Data Sheets for the appropriate health and safety warnings before use. **Safety Data Sheets are available.**

CONTACT INFORMATION

www.macdermidalpha.com

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Also read carefully warning and safety information on the Safety Data Sheet. This data sheet contains technical information required for safe and economical operation of this product. READ IT THOROUGHLY PRIOR TO PRODUCT USE . Emergency safety directory assistance: US 1 202 464 2554, Europe + 44 1235 239 670, Asia + 65 3158 1074, Brazil 0800 707 7022 and 0800 172 020, Mexico 01800 002 1400 and (55) 5559 1588

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