LINQCOAT™ RC-6253

One-part solvent-free epoxy coating resin

- Thermally stable polymer with a Tg of 140 °C
- Very long pot life (14 days)
- Low moisture absorption (<0.1%)

LINQCOAT™ RC-6253 is a solvent-free epoxy resin engineered for use as an impregnation and protective coating material for electronic assemblies. Once cured, it forms a high-gloss, Shore-D 87 network that delivers >25 kV mm⁻¹ dielectric strength, resists moisture uptake (0.1 %), and retains mechanical integrity from −20 to 180 °C.

LINQCOAT™ RC-6253 offers a combination of electrical insulation, corrosion protection, and weather resistance, making it a robust, high-performance material for motors, sensors, and outdoor electronics operating in harsh environments. It also meets the requirements of the 2011/65/EU RoHS directive.

Specifications

Property	Value	Unit
Uncured properties		
Appearance	Opaque Liquid	–
Shelf life *at 2–13 °C*	6	month
Viscosity *at 25 °C, S21, 20 rpm*	500–1500	cP
Specific gravity	1.16	–
Non–volatile content	100	%
Pot life *at 25 °C*	14	days
Gel time *at 150 °C*	3	min
Cured properties [1]		
Glass transition temperature *(DSC)*	140	°C
Durometer hardness	87	Shore D
Specific gravity	1.23	–
Water absorption *at 97 °C, 1.5 h*	0.1	%
Surface resistivity	2.3×10^{14}	Ω
Volume resistivity	5.2×10^{15}	Ω · cm
Dielectric constant *at 60 Hz* *at 1000 Hz* *at 10000 Hz*	 2.73 2.72 2.70	–
Dielectric strength	>25	kV/mm
Operating temperature range	−20 to 180	°C

[1] *Sample is cured at 150 °C for 1 hour.*

Europe
Industrieweg 15E,
1566JN Assendelft
The Netherlands
Phone: +31 (20) 893 2224
Email: info@caplinq.com

Canada
80 Sirocco Crescent
Ottawa ON, K2S 2C9
Canada
Phone: +1 (613) 482-2215
Email: info@caplinq.com

North America
36927 Schoolcraft Rd
Livonia, MI 48150
United states
Phone: +1 (313) 558-8243
Email: info@caplinq.com

South East Asia
S-08-07 Persiaran Triangle
B Lepas, Penang 11900
Malaysia
Phone: +60(12)4302223
Email: info@caplinq.com

Recommended Curing Conditions

Parameter	Value	Unit
Through cure time *at 150 °C*	60	min
Through cure time *at 160 °C*	45	min

The curing conditions provided are recommended guidelines based on typical laboratory results. Actual curing parameters should be defined and validated by the user to ensure compatibility with specific materials, part geometries, and end-use requirements. It is the user's responsibility to optimize and confirm curing conditions that meet their performance and quality standards.

Processing Instructions

- LINQCOAT™ RC-6253 can be applied by dipping, brushing, or other standard coating techniques.
- LINQCOAT™ RC-6253 should be stored at 2–13 °C. Before use, keep the sealed container at ambient conditions for 1–2 hours. Do not open the lid until the temperature has equalised to prevent moisture condensation.
- Ensure that the surfaces where RC-6253 will be applied are clean, dry, and free of grease, dust, and mold-release agents. A simple solvent wipe is usually sufficient.
- Use the product before pot life for optimum properties. Avoid large quantity dispensing without using.
- Reseal the container immediately after dispensing to minimise moisture uptake and maintain product performance.
- Wear appropriate protective equipment and minimize direct contact with the human body. Refer to the Safety Data Sheet (SDS) before use.

Storage and Handling

Store in a cold, dry, and clean environment between 2–13 °C with relative humidity below 70%. Keep away from exposure to direct sunlight. Do not store in outdoor environments. At proper storage conditions, shelf life is 183 days.

Europe
Industrieweg 15E,
1566JN Assendelft
The Netherlands
Phone: +31 (20) 893 2224
Email: info@caplinq.com

Canada
80 Sirocco Crescent
Ottawa ON, K2S 2C9
Canada
Phone: +1 (613) 482-2215
Email: info@caplinq.com

North America
36927 Schoolcraft Rd
Livonia, MI 48150
United states
+1 (313) 558-8243
Email: info@caplinq.com

South East Asia
S-08-07 Persiaran Triangle
B Lepas, Penang 11900
Malaysia
Phone: +60(12)4302223
Email: info@caplinq.com