

# Circalok™ 6717 Silicone Resin

## Description

LORD Circalok™ 6717 silicone resin is formulated for use with various Circalok catalysts to create a two-component, solvent-free RTV silicone system. The silicone system is ideal for potting, encapsulating and coating applications.

## Features and Benefits

**Low Stress** – exhibits low shrinkage and stress on components as it cures.

**Versatile** – room temperature curing formulation is not subject to catalyst poisoning.

**Excellent Conductivity** – cured system provides excellent electrical and thermal conductivity.

**Broad Temperature Range** – can be used on parts and devices that experience operating temperatures from -55 to +260°C.

## Application

**Mixing** – Thoroughly stir Circalok 6717 resin within its shipping container to ensure uniform dispersion. Transfer amount of resin needed to a clean container and add proper amount of catalyst by weight.

Thoroughly mix silicone system to ensure catalyzation.

**Applying** – Apply material using automatic meter/mix/dispense equipment.

To promote adhesion, substrates can be primed with Thermoset P-1291 primer prior to silicone application.

**Curing** – Cure time will vary depending on catalyst used. Refer to cure schedule indicated on next page. This time-at-temperature profile refers to the time the material should be allowed to cure once it reaches the target temperature. Allowance should be made for oven ramp rates, parts with large thermal mass and other circumstances that may delay material actually reaching the target temperature.

## Typical Properties\*

Appearance	Red Liquid
Viscosity, cps @ 25°C	17,000
Specific Gravity @ 25°C	1.45

\*Data is typical and not to be used for specification purposes.

# LORD TECHNICAL DATA

## Typical Cured Properties\*\*

Volume Resistivity, ohm-cm @ 25°C	1 x 10 <sup>14</sup>
Thermal Conductivity, W/mK	0.3
Coefficient of Linear Thermal Expansion, ppm/°C	110
Hardness Shore A	60
Tensile Strength, MPa @ 25°C	4.8
Elongation at Break, %	140
Dielectric Strength, V/mil	500
Dielectric Constant @ 25°C	4.0
Dissipation Factor @ 25°C	0.02

\*\*Cured properties are the same regardless of the catalyst used.

## Shelf Life/Storage

Shelf life is six months from date of manufacture when stored at 25°C in original, unopened container.

## Cautionary Information

Before using this or any LORD product, refer to the Material Safety Data Sheet (MSDS) and label for safe use and handling instructions.

*For industrial/commercial use only.* Must be applied by trained personnel only. Not to be used in household applications. Not for consumer use.

## Typical Properties\* of Resin Mixed with Catalyst

	<b>Circalok 6731 Catalyst - 0.1%</b>	<b>Circalok 6731 Catalyst - 0.5%</b>	<b>Circalok 6731 Catalyst - 5%</b>
Mix Ratio, Resin to Catalyst by Weight	100:0.1	100:0.5	100:5
Gel Time, hr @ 25°C	6-8	2-3	1.5-2
Cure Time, hr @ 25°C	24	12-16	8-12

\*Data is typical and not to be used for specification purposes.

Values stated in this technical data sheet represent typical values as not all tests are run on each lot of material produced. For formalized product specifications for specific product end uses, contact the Customer Support Center.

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