

Circalok™ 6410 Urethane Encapsulant

Description

LORD Circalok™ 6410 urethane encapsulant is a two-component system formulated for tooling mechanical goods and model making. Circalok 6410 encapsulant is an easy handling casting elastomer designed for room temperature mixing, pouring and curing.

Features and Benefits

Low Viscosity – maintains low viscosity for complete and void-free encapsulation.

Durable – cures to flexible system; provides excellent physical properties.

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

Broad Temperature Range – can be used on parts and devices that experience operating temperatures from -50°C to +105°C.

Room Temperature Cure – suitable for curing at room temperature; may be mildly heat cured (65°C) to expedite cure.

Application

Mixing – Transfer amount of Circalok 6410 A resin needed to a clean container. Add Circalok 6410 B hardener at a ratio of 17.5 parts resin to 10 parts hardener, by weight.

Thoroughly mix resin and hardener until uniform in consistency. Be careful not to whip excessive air into material. If necessary, remove entrapped air by evacuating material prior to pouring.

Applying – Pour encapsulant directly from mixing container on to application, or apply using automatic meter/mix/dispense equipment.

Curing – Allow encapsulant to initially cure for 4 hours at 25°C, or for one hour at 65°C. Complete cure will be achieved after one week at 25°C.

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 reaching the target temperature.

Typical Properties*

	6410 A Resin	6410 B Hardener	Mixed
Appearance	Black Liquid	Amber Liquid	Black Liquid
Viscosity, cP @ 25°C	1250	95	600
Specific Gravity	1.02	1.00	1.04
Working Life, min @ 25°C	–	–	30

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

LORD TECHNICAL DATA

Typical Cured Properties*

Hardness Shore 00	55
Tensile Strength, MPa (psi) @ 25°C	2.6 (377)
Elongation at Break, %	700

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

Shelf Life/Storage

Shelf life of each component is six months when stored at 25°C in original, unopened container.

Cautionary Information

Before using this or any LORD product, refer to the Safety Data Sheet (SDS) 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.

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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