

Chemlok® 305-1/310-B Black Epoxy Adhesive

Description

LORD Chemlok® 305-1/310-B Black adhesive is a general purpose, medium viscosity, two-component epoxy adhesive system used for bonding waterworks assemblies.

Features and Benefits

NSF Approved – waterworks assemblies bonded with Chemlok 305-1/310-B Black adhesive have received NSF approval.

Environmentally Recommended – contains no solvent, nonflammable and virtually odorless.

Application

Surface Preparation – Remove soil, grease, oil, fingerprints, dust, mold release agents, rust and other contaminants from the surfaces to be bonded by solvent degreasing or alkaline cleaning.

Handle prepared surfaces carefully to avoid contamination. Assemble as soon as possible.

Mixing – Mix Chemlok 305-1 resin with Chemlok 310-B Black hardener at a ratio of 1:1, by volume. Thoroughly mix the components until uniform in color and consistency. Be careful not to whip excessive air into the adhesive system. Handheld cartridges will automatically dispense the correct volumetric ratio of each component.

Applying – Apply the mixed adhesive in bead form. Use automatic meter/mix/dispense equipment for large applications. For small applications, use handheld cartridges to apply the adhesive in a continuous bead.

Join the parts in such a way as to avoid entrapped air. Apply only enough pressure to ensure good wetting of the adhesive on both surfaces. Squeezing a little adhesive out at the edges is usually a sign of proper assembly. It is not necessary to clamp the assembly unless movement during adhesive cure is likely.

Typical Properties*

	305-1 Resin	310-B Black Hardener
Appearance	Clear Amber Liquid	Black Paste
Viscosity, cps @ 25°C (77°F) Brookfield HBF	10,000-18,000 Spindle 2, 10 rpm	200,000-700,000 Helipath, 5 rpm
Density kg/m ³ (lb/gal)	1126-1198 (9.4-10.0)	1234-1318 (10.3-11.0)
Solids Content by Weight, %	100	100
Flash Point, °C (°F)	>93 (>200) Closed Cup	>93 (>200) Seta

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

LORD TECHNICAL DATA

Curing – Handling strength is achieved after curing for 8-16 hours at room temperature. Chemlok 305-1/310-B Black adhesive will cure to full strength in 24-48 hours at room temperature. Higher temperatures will provide faster cure times.

Once the adhesive has cured, it can be filed, sanded, machined or otherwise handled in the same way as a light metal. Paint, lacquers, enamels and other coatings can be applied to cured adhesive.

Cleanup – Clean excess adhesive on the bonded assembly, as well as the equipment, prior to the adhesive cure with hot water and detergent or an organic solvent such as ketones. Once adhesive has cured, heat the adhesive to 204°C (400°F) or above to soften the cured adhesive. This allows the parts to be separated and the adhesive to be more easily removed. Some success may be achieved with commercial epoxy strippers.

Shelf Life/Storage

Shelf life is two years from date of manufacture when stored at 21-27°C (70-80°F) 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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