

Chemlok® EP6804-22 Adhesive

Description

LORD Chemlok® EP6804-22 adhesive is a conductive one-coat adhesive that will bond a wide variety of vulcanized or unvulcanized rubber compounds to metal. It is composed of a mixture of polymers, organic compounds and mineral fillers dissolved or dispersed in an organic solvent system.

A single coat of Chemlok EP6804-22 adhesive will bond compounds based on natural rubber (NR), polyisoprene (IR), styrene-butadiene (SBR), polybutadiene (BR), polychloroprene (CR), nitrile (NBR), butyl (IIR), and EPDM polymers to metal and various other substrates.

Chemlok EP6804-22 adhesive has excellent adhesion and corrosion resistance when used with aluminum and mechanically or chemically treated cold rolled steel.

Features and Benefits

Convenient – requires only a single coat for most applications, reducing labor, inventory and shipping costs.

Versatile – can be used in a variety of applications where conductivity is required.

Application

Surface Preparation – Thoroughly clean metal surfaces prior to adhesive application. Remove protective oils, cutting oils and greases by solvent degreasing or alkaline cleaning. Remove rust, scale or oxide coatings by suitable chemical or mechanical cleaning methods.

- **Chemical Cleaning**

Chemical treatments are readily adapted to automated metal treatment and adhesive application lines. Chemical treatments are also used on metal parts that would be distorted by blast cleaning or where tight tolerances must be maintained. Phosphatizing is a commonly used chemical treatment for steel, while conversion coatings are commonly used for aluminum.

- **Mechanical Cleaning**

Grit blasting is the most widely used method of mechanical cleaning. However machining, grinding or wire brushing can be used. Use steel grit to blast clean steel, cast iron and other ferrous metals. Use aluminum oxide, sand or other nonferrous grit to blast clean stainless steel, aluminum, brass, zinc and other nonferrous metals.

Typical Properties*

Appearance	Black Liquid
Viscosity, cps @ 25°C (77°F) Brookfield LVT Spindle 2, 30 rpm	50-250
Density kg/m ³ (lb/gal)	958.6-1006.5 (8.0-8.4)
Solids Content by Weight, %	24-27
Flash Point (Seta), °C (°F)	9 (48)
Solvents	Toluene, Xylene

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

LORD TECHNICAL DATA

For further detailed information on surface preparation of specific substrates, refer to Chemlok Adhesives application guide. Handle clean metal surfaces with clean gloves to avoid contamination with skin oils.

Mixing – Thoroughly stir Chemlok EP6804-22 adhesive before use, and agitate sufficiently during use to keep dispersed solids uniformly suspended. Use an air-driven or other explosion-proof mixer for agitator drums or on other smaller containers.

If dilution is needed, use toluene or xylene as diluents.

Applying – Apply adhesive by brush, dip, spray or any method that gives a uniform coating and avoids excessive runs or tears.

The conductivity of the adhesive film is dependent on the dry film thickness. For optimum adhesion and environmental resistance, the dry film thickness of Chemlok EP6804-22 adhesive should be 12.7-25.4 micron (0.5-1.0 mil). Where minimum environmental resistance is required, film thickness in the lower range can be used in easy-to-bond rubber compounds.

Thicker films may be necessary on certain hard-to-bond rubber compounds and where maximum environmental resistance is required. For bonding cured rubber, dry film thickness of 25.4-50.8 micron (1.0-2.0 mil) is normally used.

Drying/Curing – Allow Chemlok EP6804-22 adhesive to air-dry for 30-60 minutes at 16-32°C (60-90°F). Longer dry times may be necessary during humid conditions. Moderate drying temperatures of up to 93°C (200°F) can be used for short periods of time; usually 15-20 minutes at 93°C (200°F) is adequate.

Cleanup – Use xylene or toluene to clean up Chemlok EP6804-22 adhesive.

Shelf Life/Storage

Shelf life is six months from date of shipment when stored in a well ventilated area at 21-27°C (70-80°F) in original, unopened container. Do not store or use near heat, sparks or open flame.

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.

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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