

Chemlok® 8216 Adhesive

Description

LORD Chemlok® 8216 adhesive is an aqueous covercoat adhesive used to bond a variety of elastomers to primed metal during vulcanization. It is composed of a mixture of dispersed fillers, resins and latices in aqueous medium.

Chemlok 8216 adhesive is recommended for spray application over Chemlok 8008 or 8009 aqueous primer. When used over the aqueous primer, this adhesive system will also bond cold rolled steel, phosphatized steel, aluminum and other various substrates.

Features and Benefits

Versatile – bonds a variety of natural and synthetic elastomers to primed metal, including NR, SBR and Butyl.

Process Compatible – works well in injection and transfer molding applications; provides good prebake resistance.

Environmentally Friendly – uses water for cleanup while adhesive is still wet, eliminating the need for significant solvent inventory.

Environmentally Resistant – provides excellent resistance to hostile environments including salt water and heat.

Easy to Use – ready to use directly out of the container without dilution; not prone to hard settling; easily redispersed.

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

Typical Properties*

Appearance	Brownish-green Liquid
Viscosity, cps @ 25°C (77°F) Brookfield LVT Spindle 2, 30 rpm	5-100
Density kg/m ³ (lb/gal)	1100-1150 (9.18-9.60)
Solids Content by Weight, %	30-34
Flash Point (Seta), °C (°F)	94 (201)
Solvents	Water

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

LORD TECHNICAL DATA

aluminum oxide, sand or other nonferrous grit to blast clean stainless steel, aluminum, brass, zinc and other nonferrous metals.

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.

Allow primer to thoroughly dry before applying Chemlok 8216 adhesive. For further details on the use of Chemlok 8008 or 8009 primer, refer to the applicable data sheet.

Mixing – Thoroughly mix Chemlok 8216 adhesive before using over the primer. To prevent foaming, mechanical mixing should not exceed 30 rpm. Take care during handling and transfer to avoid foaming. The addition of anti-foaming agents is not recommended.

In most cases, dilution is not required. Deionized water is suggested if dilution is necessary. Add water gradually while stirring either by hand or by using another low-shear mixing method.

Applying – Apply Chemlok 8216 adhesive full strength by spray methods. For best results, preheat the metal parts to 65°C ±10°C (149°F ±18°F) prior to spray application.

For optimum adhesion and environmental resistance, the dry film thickness of Chemlok 8216 adhesive should be 15.2-20.3 micron (0.6-0.8 mil).

Curing – Chemlok 8216 adhesive can be used to bond rubber by compression, transfer and injection molding procedures. Maximum adhesion is obtained when the rubber has completely cured. Ideal bonding conditions exist when both the adhesive and the rubber cure at the same time. To accomplish this, load the adhesive coated metal parts in the mold and quickly fill the cavity with rubber.

Cleanup – Use warm soapy water to clean equipment or parts. Remove dried adhesive with solvents such as xylene or toluene.

Shelf Life/Storage

Shelf life is six months from date of manufacture when stored in a well ventilated area at 21-27°C (70-80°F) in original, unopened container. Do not freeze product. Avoid prolonged storage in higher temperatures.

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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LORD Corporation World Headquarters

111 Lord Drive
Cary, NC 27511-7923
USA

Customer Support Center (in United States & Canada)

+1 877 ASK LORD (275 5673)

www.lord.com

For a listing of our worldwide locations, visit LORD.com.

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