

Chemlok®

Chemlok® 5150 Adhesive for Bonding Fluoroelastomers

Description

Chemlok® 5150 adhesive is a solvent-based adhesive used to bond fluoroelastomers to metal and to bond cured fluoroelastomer to itself. It can also be used to bond fluoroelastomers with an incorporated cure system to mechanically prepared metals as well as phosphatized metals, like those used in the manufacture of dynamic seals. Chemlok 5150 adhesive also adheres fluoroelastomers to stainless steel, aluminum, and brass.

Features and Benefits

Clear - provides good cosmetics; resists staining or discoloring of non-black elastomers.

Versatile - bonds a wide variety of fluoroelastomers and metals. This adhesive also accommodates a wide variety of postcures and is tolerant of compounding variables.

Low Viscosity - applies easily.

Typical Properties* of Chemlok 5150 Adhesive

Appearance	Colorless to pale yellow liquid
Color	Clear
Solids Content by weight	4.6% - 5.8%
Viscosity	2 centistrokes TYP
Flash Point	7°C (44°F)
Density kgs/m ³ lbs/gal	803 - 827 6.7 - 6.9
Solvents	Methanol
Shelf Life	One year from date of shipment, unopened container, when stored at 21°C - 27°C (70°F - 80°F).

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

product information

Surface Preparation

Apply to metals that have been mechanically prepared or chemically prepared. Refer to Preparation of Substrates for Bonding, DS10-7101.

Mixing

Use the adhesive as is or dilute. Satisfactory results are usually obtained with dilutions of 1:1 using methanol or ethanol. Dilutions of 10 alcohol and 1 adhesive are possible.

Application

Apply by dip, tumble spray, or regular spray techniques. Then, air dry. Maintain forced air drying temperatures below 93°C (200°F).

Curing

Chemlok 5150 adhesive cures at 160°C to 188°C (330°F to 370°F). Post cures of 12 - 24 hours at 204°C to 232°C (400°F to 450°F) can be used. For exceptionally thick parts, use a step postcure beginning at 149°C (300°F) and increase the temperature in 10°C (50°F) increments at two hour intervals until a temperature of 204°C to 232°C (400°F to 450°F) are achieved.

PV Bonding

When bonding the cured fluoroelastomer to itself, buff the surface of the cured rubber, then coat with Chemlok 5150 adhesive. After drying, bond the joints in a press for 3 - 10 minutes at 160°C - 188°C (330°F - 370°F).

Values stated in this bulletin 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 Service Department.

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Subsequent Processing

Chemlok 5150 adhesive has good resistance to Reference Fuel C, No. 2 diesel and other fluids.

Packaging

- 1 Gallon Container (3.8 Liter)
- 5 Gallon Pail (19 Liter)
- 55 Gallon Drum (208 Liter)

Storage

Store unopened container at 4°C - 32°C (40°F - 90°F), and preferably at 21°C - 27°C (70°F - 80°F).

Cautionary Information

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

For additional information, contact Lord Corporation at: 814/868-3611 extension 3211, FAX: 814/864-3452 or write: **Lord Corporation, Chemical Products, 2000 West Grandview Blvd., P.O. Box 10038, Erie, PA 16514-0038**

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