

CHEMLOK® 402X-HS ADHESIVE

Technical Data Sheet

Chemlok® 402X-HS adhesive is a solvent-based, one-coat adhesive designed for bonding textiles to a wide variety of unvulcanized elastomers. It is composed of a mixture of polymers, organic compounds and fillers dissolved or dispersed in an organic solvent system.

Chemlok 402X-HS adhesive is used in the production of hoses, belts, diaphragms and other textile-reinforced rubber products. It can also be used as an additive to tie cements, primarily as a replacement for isocyanates that are widely used in rubber/textile bonding. When dried, Chemlok 402X-HS adhesive is tack-free.

Features and Benefits

Versatile: bonds a variety of elastomers to a wide variety of textiles during vulcanization of the elastomer.

Non-chlorinated Solvent System: suitable for solvent incineration, saving cost of recovery equipment.

Excellent Adhesion: adheres well to RFL-treated fabric or cord. Chemlok 402X-HS adhesive-treated fabric or cord can be bonded immediately following solvent evaporation.

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

Elastomers

- Natural Rubber (NR)
- Polyisoprene (IR)
- Styrene-butadiene (SBR)
- Polybutadiene (BR)
- Polychloroprene (CR)
- Nitrile (NBR)
- Butyl (IIR)
- EPDM Polymers
- Epichlorohydrin (ECH)
- Hytrel TPE only

Application

Mixing: Thoroughly stir adhesive before use, and agitate sufficiently during use to keep dispersed solids uniformly suspended. If dilution is needed, use xylene or toluene. Note proper dilution for the various application methods is best achieved by experience. Give careful attention to agitation since dilution will accelerate settling.

Applying: Apply adhesive by dip, brush or spray methods. For most applications, 6-10% dry weight pickup is necessary. To optimize both adhesion and flexibility, apply Chemlok 402X-HS adhesive to the fabric at a level just high enough to meet adhesion specifications.

For bonding specialty elastomers such as EPDM and epichlorohydrin, Chemlok 402X-HS adhesive should be topcoated with another specialty adhesive designed for that specific elastomer. Using this method helps ensure strong cohesive strength of the system.

Typical Properties*

Appearance	Black Liquid
Viscosity, cps @ 25°C (77°F) Brookfield LVT Spindle 2, 12 rpm	600 - 1100
Density kg/m ³ (lb/gal)	916.7 - 970.6 (7.65 - 8.1)
Solids Content by Weight, %	23 - 26
Flash Point (Seta), °C (°F)	25 (77)
Solvents	Xylene

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

Drying/Curing: Allow the applied adhesive to dry until the coated fabric is tack-free and visual examination of the film has shown that all solvent has evaporated. This will take approximately 30-60 minutes at room temperature. Drying times can be shortened by oven drying for 10-15 minutes at 65°C (150°F). Higher temperatures may be used to reduce drying times, but care must be taken to ensure that excessive heat does not cause the adhesive to react.

Shelf Life/Storage

Shelf life is six months from date of shipment when stored by the recipient in a well ventilated area at 21-27°C (70-80°F) in original, unopened container.

Do not store container outside. Chemlok 402X-HS adhesive is moisture sensitive. Minimize exposure to moisture by preparing only what is needed for several hours of use.

Cautionary Information

Before using this or any Parker 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.

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