

CHEMLOK® 8116-1 ADHESIVE

Technical Data Sheet

Chemlok® 8116-1 adhesive is a one-coat, water-based adhesive used for vulcanization/bonding of peroxide-cured elastomers to zinc phosphatized steel and other rigid substrates.

With good resistance to hot oils, hot water and other engine fluids, Chemlok 8116-1 adhesive is suitable for use in the manufacture of gaskets, seals and NVH components.

Features and Benefits

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

Environmentally Preferred: uses water for dilution; provides reduced VOC emissions.

Versatile: bonds a wide range of peroxide-cured compounds to many rigid substrates, such as zinc phosphatized steel, nylon and aluminum.

Environmentally Resistant: provides good resistance to high temperature fluid environments; excellent for use in gaskets or seals.

Elastomers

- Nitrile (NBR) - peroxide cure
- Hydrogenated Nitrile (HNBR) - peroxide cure
- Carboxylated HNBR (XHNBR)
- Fluoroelastomer (FKM) - peroxide cure/AFLAS
- Silicone (VMQ, PMQ, PVMQ, FVMQ) - peroxide cure
- EPDM - peroxide cure
- Vamac - peroxide cure

Application

Surface Preparation: Thoroughly clean metal surfaces prior to 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.

For further detailed information on surface preparation of specific substrates, refer to Chemlok Adhesives application guide.

Mixing: Stir adhesive for 10-20 minutes or until uniform in color. Make sure to lift solids from bottom of container. Do not shake. If dilution is needed, use deionized water.

Typical Properties*

Appearance	Black Liquid
Viscosity, cps @ 25°C (77°F) Brookfield LVT Spindle 2, 30 rpm	100 - 900
Density kg/m ³ (lb/gal)	1138 - 1174 (9.5 - 9.8)
Solids Content by Weight, %	32 - 36
Flash Point (Seta), °C (°F)	≥93 (≥201)
Solvents	Deionized Water

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

Applying: Apply adhesive by spray or dip methods. For best results, preheat metal parts to 60-65°C (140-150°F) prior to spray application. Spray application may require up to 20% dilution with deionized water.

Regardless of application method, the dry film thickness of Chemlok 8116-1 adhesive should be 7.6-17.8 micron (0.3-0.7 mil).

Drying/Curing: Allow coated parts to air-dry for 30-60 minutes at room temperature. Use of heat forced air is recommended to thoroughly dry coated parts.

Chemlok 8116-1 adhesive cures during the rubber vulcanization process.

Cleanup: Use soap and water to remove wet adhesive. Remove dried adhesive with solvents such as acetone, MEK or alcohols.

Shelf Life/Storage

Shelf life is nine months from date of shipment when stored by the recipient at 21-27°C (70-80°F) in original, unopened container. Do not freeze product.

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.

Verify Volatile Organic Compounds (VOC) requirements with the applicable local, regional and state air quality authorities before importing, selling or using this product. VOC rules, thresholds and reporting obligations vary by jurisdiction; compliance is the responsibility of the importer/seller/owner.

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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