

CHEMLOK® 218T ADHESIVE

Technical Data Sheet

Chemlok® 218T adhesive is a one-coat, non-chlorinated solvent version of Chemlok 218 adhesive. It is used to bond castable and millable polyurethane elastomers to metals and other rigid substrates.

Features and Benefits

Non-Pigmented: prevents color leaching into the urethane elastomer.

Convenient: requires only a single coat application, eliminating the need for a primer and minimizing application costs.

Elastomers

- Castable Urethane
- Millable Urethane
- Thermoplastic Urethane (TPU)
- Hytrel TPE only

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: No agitation is required before or during use. If dilution is needed, use either a 1:1 isopropanol:toluene blend (by volume) or glycol ether solvents. Note proper dilution for the various application methods is best achieved by experience.

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

Regardless of application method, the dry film thickness of Chemlok 218T adhesive should be 20.3-30.5 micron (0.8-1.2 mil).

Drying/Curing: Allow coated parts to air-dry for at least 60 minutes at room temperature for complete solvent evaporation prior to the bonding operation.

To ensure optimum adhesion to the prepared metal surface, bake Chemlok 218T adhesive coated inserts a minimum of 30 minutes at 149°C (300°F) or 2 hours at 121°C (250°F). Large inserts will require longer baking time at 121°C (250°F) to negate the heat sink effect.

Parts coated with Chemlok 218T adhesive may be vulcanized immediately after air-drying.

Molding procedures that are used with heat vulcanizing urethane elastomers can be used with Chemlok 218T adhesive. The cure time and temperature for bonding is the same as that required to vulcanize the urethane compound being molded. Best results are obtained with curing temperatures above 71°C (160°F).

Cleanup: Use solvents such as alcohol or toluene to remove adhesive before heat is applied. Remove cured adhesive by mechanical blasting or abrasion methods.

Typical Properties*

Appearance	Clear to Slightly Hazy Amber Liquid
Viscosity, cps @ 25°C (77°F) Brookfield LVT Spindle 2, 30 rpm	350 - 900
Density kg/m ³ (lb/gal)	850.8 - 898.7 (7.1 - 7.5)
Solids Content by Weight, %	18 - 21
Flash Point (Seta), °C (°F)	5 (41)
Solvents	Toluene, Isopropanol, Ethanol

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

Shelf Life/Storage

Shelf life is one year from date of shipment when stored by the recipient 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 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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