CHEMOSIL® 520 ADHESIVE

Technical Data Sheet

Chemosil® 520 one-coat adhesive is used to bond silicone elastomers to metals and suitable plastics during the vulcanization process. It is composed of a mixture of dissolved organic silicon polymers in an organic solvent system.

Features and Benefits

Versatile: bonds a wide variety of silicone elastomer compounds to rigid substrates during vulcanization.

Easy to Apply: applies easily by spray, dip or brush methods.

Environmentally Resistant: provides good resistance to high temperatures, oil, lubricants and other aggressive fluids.

Elastomers

- Silicone (VMQ, PVMQ)

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/Chemosil Adhesives application guide.

Mixing: Transfer amount of adhesive required to a clean container and dilute with MIBK, isopropanol or toluene at a dilution ratio of 1 part adhesive to 0.5-1 part solvent. Slowly add diluent to adhesive while mixing. Continuously stir material to prevent sedimentation.

Applying: Apply bonding agent by brush, dip or spray methods. Unused or diluted material should not be returned to original container.

Drying/Curing: Allow applied adhesive to air-dry for approximately 15 minutes at ambient temperature.

Coated metal parts should be processed within three days. Avoid contamination of coated parts by storing in dry, grease-free environment.

Bonding occurs during the vulcanization process of the rubber at cure temperatures between 140-200°C (284-392°F) as recommended by the rubber manufacturer. Maximum allowable post-bake temperature is 200°C (392°F). For large scale vulcanization, heating rates of 10-20°C (18-36°F) per hour should be maintained.

Shelf Life/Storage

Shelf life is nine months from date of manufacture when stored by the recipient below 25°C (77°F) in original, unopened container.

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.

Typical Properties*

Appearance	Clear to Amber Liquid
Density @ 20°C (68°F) g/cm^3 (lb/gal)	 0.83 - 0.86 (6.9 - 7.2)
Solids Content by Weight, % 60 minutes @ room temperature, 30 minutes @ 130°C (266°F) drying oven	21 - 25
Flash Point, °C (°F) Pensky-Martens	5 (41)
Solvents	Ethanol, Solvent Naphtha

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

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