CHEMOSIL® 231 G ADHESIVE

Technical Data Sheet

Chemosil® 231 G adhesive is a general purpose material suitable for use as a covercoat material over Chemosil 211 primer, or as a one-coat adhesive for bonding non-metallic substrates such as fabric and plastics. Chemosil 231 G adhesive is used to bond a variety of elastomer compounds to metal and plastic substrates during the vulcanization process. It is composed of a mixture of dispersed organic polymers, isocyanate and suspended solids in an organic solvent system.

Features and Benefits

Versatile: bonds a wide variety of elastomer compounds to rigid substrates during vulcanization when used in combination with Chemosil 211 primer.

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

High Temperature Resistant: provides excellent heat resistance at exposure temperatures as high as 149°C (300°F).

Durable: provides rubbing tearing bonds and excellent environmental resistance when used in combination with Chemosil 211 primer.

Convenient: requires only a single coat application to bond textiles and various plastics to a wide variety of elastomer compounds.

Elastomers

- Natural Rubber (NR)
- Polyisoprene (IR)
- Styrene-butadiene (SBR)
- Polybutadiene (BR)
- Chlorosulfonated Polythylene (CSM)
- Polychloroprene (CR)
- Butyl (IIR)
- EPDM Polymers

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.

Allow primer to thoroughly dry before applying Chemosil 231 G adhesive.

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

Mixing: Thoroughly stir adhesive before use, and agitate sufficiently during use to keep dispersed solids uniformly suspended.

Transfer amount of adhesive required to a clean container. If dilution is needed, use xylene. Note proper dilution for the various application methods is best achieved by experience. Give careful attention to agitation since dilution will accelerate settling.

Typical Properties*

Appearance	Black Liquid
Viscosity, cps @ 25°C (77°F) Brookfield LVT Spindle 2, 30 rpm	400 - 1000
Density @ 20°C (68°F) g/cm^3 (lb/gal)	 0.93 - 0.97 (7.76 - 8.10)
Solids Content by Weight, % Dry residue, 30 minutes @ 130°C (266°F)	19 - 23
Flash Point, °C (°F) Pensky-Martens	26 (78)
Solvents	Xylene

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

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Applying: Apply adhesive by brush, roll coat, dip or spray methods. Avoid applying thick coats which result in poor drying and may lead to film displacement during molding.

Regardless of application method, the dry film thickness of Chemosil 231 G adhesive should be 15 micron (0.6 mil).

Drying/Curing: Allow applied adhesive to air-dry for at least 30 minutes at room temperature. Drying time can be shortened by using hot air drying ovens or tunnels up to 90°C (194°F).

Bonding occurs during vulcanization process of the rubber under recommended cure temperatures of 120-170°C (248-338°F).

Cleanup: Use xylene or toluene for clean up.

Shelf Life/Storage

Shelf life is one year from date of manufacture when stored by the recipient below 25°C (77°F) in original, unopened container. Keep container tightly closed when not in use.

Chemosil 231 G adhesive is moisture sensitive. Minimize exposure to moisture. Avoid excessive exposure to high humidity, especially outdoor storage.

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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