

Chemlok® 144 Primer

Technical Data Sheet

Chemlok® 144 primer is a one-coat, moisture-cure primer used to prime and/or bond a variety of polar substrates. These substrates include steel, aluminum, brass, e-coated metal, glass fabric, architectural and automotive glass, ceramic tile, vitrified clay pipe, concrete and some plastics.

Chemlok 144 primer contains a special fluorescent agent used to identify its presence on the material surface when exposed to an ultraviolet (UV) light source. Under normal light, the primer is transparent on the substrate.

Features and Benefits:

Versatile – provides a wide range of product applications by functioning as a primer to a variety of polar substrates and as an adhesive for encapsulating glass with Reaction Injection Molded (RIM) urethane.

UV Fluorescence – allows the primed substrate to fluoresce or “glow” when exposed to a low or medium intensity UV light source; permits detection of improper wetting due to surface contamination; does not affect product adhesion or shelf life.

Easy to Apply – applies easily by spray, dip or polyester felt applicator.

Application:

Surface Preparation – To ensure optimum adhesion to glass, clean the bond surface with a vinegar-modified glass cleaner. For other applications, wipe surface with a suitable solvent.

Mixing – If dilution is needed, thoroughly mix in a urethane grade solvent (one containing very low water content) and dilute only the amount of primer to be used in 4-8 hours.

Applying – Apply primer by spray, dip or polyester felt applicator.

Regardless of application method, the dry film thickness of Chemlok 144 primer should be 1.78-3.81 micron (0.07-0.15 mil).

Drying/Curing – Allow primer to hydrolyze in moist air (50-80% RH) at 21-32°C (70-90°F) for 1-2 hours. To reduce the hydrolysis time, part can be cured in an oven at 88°C (190°F) for 3 minutes. Air being drawn into the oven should be 50-80% RH. The cure time can vary depending on the mass of the part being primed. Large parts require more time in an oven to complete cure, due to the heat sink effect of the larger mass.

For best adhesion, apply top coat or encapsulating polymer within 24 hours after primer cures. Depending on application and storage conditions, layover time for coated parts may be as long as 72 hours.

Cleanup – Use MEK or toluene for clean up.

Typical Properties*

Appearance	Clear, Straw Yellow Liquid
Viscosity, cSt @ 25°C (77°F)	1.0 - 8.0
Density kg/m ³ (lb/gal)	863 - 899 (7.2 - 7.5)
Solids Content by Weight, %	4.8 - 6.2
Flash Point (Seta), °C (°F)	1 (35)
Solvents	Toluene, n-Butanol, 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 in a dry, well ventilated area at 21-27°C (70-80°F) in original, unopened container.

After opening, protect from moisture contamination by installing a desiccant cartridge.

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.

Values stated in this document represent typical values as not all tests are run on each lot of material produced. For formalized product specifications for specific product end uses, contact the Customer Support Center.

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