

Chemlok® 144

Technical Data Sheet

Chemlok® 144 is a one-coat, moisture-cure surface treatment used to prime and/or affix 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 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, Chemlok 144 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 a surface treatment 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 performance or shelf life.

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

Application:

Surface Preparation – To ensure optimum performance on glass, clean the 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 Chemlok 144 to be used in 4-8 hours.

Applying – Apply Chemlok 144 by spray, dip or polyester felt applicator.

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

Drying/Curing – Allow Chemlok 144 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 performance, apply top coat or encapsulating polymer within 24 hours after Chemlok 144 cures. Depending on application and storage conditions, layover time for coated parts may be as long as 72 hours.

Cleanup – Use methyl ethyl ketone (MEK) or toluene for clean up.

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.

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.



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Chemlok® 144

技术说明书

Chemlok® 144是一款单涂型湿固化表面处理剂，可用于底涂，也可帮助和促进各种极性基材附着。这些基材包括钢、铝、黄铜、电镀层金属、玻璃纤维、建筑和汽车玻璃、瓷砖、陶土管、混凝土和某些塑料。

Chemlok 144含有一种特殊的荧光剂，当暴露于紫外线(UV)光源下时，易于识别材料表面底涂的存在。在正常光线下，Chemlok 144在基材上是透明的。

特征和优点:

用途广泛 – 作为各种极性基材的底涂和反应注射成型(RIM)聚氨酯包边玻璃的表面处理剂使用，产品应用广泛。

紫外荧光 – 暴露在低强度或中等强度的紫外光源下时，涂有底涂的基材发出荧光或“发光”；可以检测表面污染造成的湿润不良；不影响产品附着性或保质期。

易于涂敷 – 使用简单，喷涂、浸涂或聚酯毡涂敷器均可。

使用方法:

表面处理 – 为确保最佳性能，请使用醋改性玻璃清洁剂清洁表面。对于大部分应用，也可以使用合适的溶剂擦拭表面。

混合 – 如果需要稀释，请在聚氨酯级溶剂(含水量非常低的溶剂)中充分混合，并仅稀释需要在4-8小时内使用的Chemlok 144量。

涂敷 – Chemlok 144可采用喷涂、浸涂或聚酯毡涂敷器的涂敷工艺。

无论采用何种涂敷方式，Chemlok 144的干膜厚度为1.78-3.81微米(0.07-0.15密尔)。

干燥/固化 – Chemlok 144可在21-32°C (70-90°F)下，于潮湿空气中水解1-2小时。为了缩短水解时间，零件可在88°C (190°F)的烘箱中固化3分钟。烘箱中的相对湿度为50-80% RH。固化时间根据涂敷件的质量而有所不同。大型零件在烘箱中完成固化的时间更长。

为了获得最佳性能，应在Chemlok 144固化后24小时内涂敷面涂或注射聚合物。根据涂敷和储存条件，涂敷件的保留时间可能长达72小时。

清理 – 使用丁酮(MEK)或甲苯进行清理。

保质期/储藏要求:

自发货之日起，保质期为一年，但是收货人必须使用出厂未开封的原装容器，且保存在21-27°C (70-80°F)通风良好的干燥环境下。

开封后，安装干燥剂盒以免被湿气污染。

典型特性*

外观	透明的浅黄色液体
粘度, cSt @ 25°C (77°F)	1.0-8.0
密度 kg/m ³ (lb/gal)	863-899 (7.2-7.5)
固体含量, %	4.8-6.2
闪点 (Seta), °C (°F)	1 (35)
溶剂	甲苯、正丁醇、乙醇

*典型数据不可作为产品标准之用。



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