

CHEMLOK® 8600

OBSOLETE

Technical Data Sheet

Chemlok® 8600 is a one-coat, water-based surface treatment used to affix castable urethane elastomers to metal. Chemlok 8600 will also affix a wide variety of both polyether- and polyester-based urethanes of varying hardness to all types of metals.

Features and Benefits

Durable: provides high strength performance that, in many instances, is equal to or greater than the tear strength of the urethane elastomer being molded.

Environmentally Preferred: has low VOC emissions.

Versatile: affixes a wide variety of both polyether- and polyester-based urethanes.

Process Compatible: accommodates a wide range of processing conditions, including extended prebake.

Convenient: requires only a single coat for most applications, reducing labor, inventory and shipping costs.

Elastomers

- Millable Urethane
- Castable Urethane
- Thermoplastic Urethane (TPU)

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 application guide.

Mixing: Thoroughly mix Chemlok 8600 before use. Do not shake. To prevent foaming, mechanical mixing should not exceed 60 rpm. The addition of anti-foaming agents is not recommended.

If dilution is needed, use deionized water. Slowly add water while mixing.

Applying: Apply Chemlok 8600 by dip, spray or brush methods using stainless steel or plastic application equipment.

Regardless of application method, dry film thickness of Chemlok 8600 should be 30.5-40.6 micron (1.2-1.6 mil). If diluted, multiple coats may be required in order to attain the recommended film thickness.

Drying/Curing: Allow Chemlok 8600 to air-dry for 30-60 minutes at room temperature. Drying time can be shortened by either preheating the metal parts or oven drying after application. Metal parts may be preheated to 49-60°C (120-140°F) prior to application. For coated parts, oven dry at 49-60°C (120-140°F) in a recirculating forced air oven.

Typical Properties*

Appearance	White Liquid
Viscosity, cps @ 25°C (77°F) Brookfield LVT Spindle 2, 30 rpm	200 - 600
Density kg/m ³ (lb/gal)	1018.5 - 1066.4 (8.5 - 8.9)
Solids Content by Weight, %	31 - 35
Flash Point (Seta), °C (°F)	≥93 (≥201)
Solvents	Deionized Water
pH	6.85

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

To ensure optimum performance on the prepared metal surface, cure coated parts a minimum of 2 hours at 121°C (250°F). Large parts will require longer baking time at 121°C (250°F) to negate the heat sink effect.

Although optimum performance is achieved when molding is done shortly after Chemlok 8600 has cured, coated parts may be stored up to one month before processing if protected from contamination and excessive humidity. Large metal parts can be preheated up to 30 minutes at 148°C (300°F) or 16 hours at 100°C (212°F) without affecting performance when hot molding.

Molding procedures that are used with heat-vulcanizing urethane elastomers can be used with Chemlok 8600. The cure time and temperature 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 soap and water to remove wet Chemlok 8600. Remove dried Chemlok 8600 with alcohol or ketone-type solvents.

Shelf Life/Storage

Shelf life is six months from date of shipment when stored by the recipient in a well ventilated area at 21-27°C (70-80°F) in original, unopened container. Do not freeze product.

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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CHEMLOK® 8600

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技术说明书

Chemlok® 8600是一款单涂型水基表面处理剂,用于浇注型聚氨酯与金属基材的粘接。聚氨酯类型包括聚醚型和聚酯型。

特征和优点

耐久性强: 提供高强度性能,在许多情况下,其强度等于或大于成型中的聚氨酯弹性体的撕裂强度。

环保: VOC排放量低。

用途广泛: 粘结多种聚醚基和聚酯基聚氨酯。

工艺兼容: 适应多种工艺条件,包括长时间预烘烤。

使用方便: 大多数应用仅需要涂一层,可减少人工、库存和运输成本。

弹性体

- 混炼型聚氨酯
- 浇铸型聚氨酯
- 热塑性聚氨酯

使用方法

表面处理: 在涂敷前,应彻底清洗金属表面。使用溶剂型除油剂或碱性清洗剂去除金属表面的保护油、切削油和油脂。选择适当的化学或机械清洗方法,除去金属表面的锈、腐蚀层或氧化层。

对于特定基材的表面处理的详细信息请参阅Chemlok/Chemosil应用指南。

混合: 使用前充分搅拌Chemlok 8600。请勿摇晃。为防止起泡,机械搅拌不应超过60rpm。不建议加入消泡剂。

如需稀释,请使用去离子水。搅拌时缓慢加水。

涂敷: 使用不锈钢或塑料涂敷设备,通过浸涂、喷涂、刷涂方法涂敷Chemlok 8600。

无论何种涂敷法,Chemlok 8600的干膜厚度应为30.5-40.6微米(1.2-1.6密尔)。如果被稀释,可能需要多次涂敷,以达到推荐的膜厚度。

干燥/固化: 让Chemlok 8600在室温下风干30-60分钟。可以通过预热金属件或涂敷后用烤炉干燥的方式,缩短干燥时间。在涂敷之前,可以将金属零件预热到49-60°C (120-140°F)。对于涂敷部件,在强制循环烤炉中以49-60°C (120-140°F)的温度进行烘干。

为确保预处理的金属表面达到最佳性能,在121°C (250°F)的温度下,将涂敷部件预烘2小时。大型部件在121°C (250°F)下所需的预烘时间更长。

虽然在Chemlok 8600固化后不久就进行成型,可以达到最佳性能,但在防止污染和过度潮湿的储存环境下,涂敷部件可在加工前存放一个月。大型金属件可以在148°C (300°F)下预热30分钟,或在100°C (212°F)下预热16小时,热成型时不会影响性能。

用于热硫化聚氨酯弹性体的成型程序也可用于Chemlok 8600。固化时间和温度与正在成型的聚氨酯化合物的硫化要求相同。固化温度高于71°C (160°F)时,可获得最佳效果。

清理: 使用肥皂和水除去未干的Chemlok 8600。使用溶剂(例如酒精或酮类溶剂)除去硫化的Chemlok 8600。

典型特性*

外观	白色液体
粘度, cps @ 25°C (77°F) Brookfield粘度计 2号转子, 转速30 rpm	200 - 600
密度 kg/m³ (lb/gal)	1018.5 - 1066.4 (8.5 - 8.9)
固体含量, %	31 - 35
闪点 (Seta), °C (°F)	≥93 (≥201)
溶剂	去离子水
pH	6.85

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

保质期/储藏要求

保质期为自发货日起六个月, 收货人必须使用未开封的原装容器, 且保存在21-27°C (70-80°F)的良好通风处。切勿冻结。

警示信息

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