

CHEMLOK® 218GB

Technical Data Sheet

Chemlok® 218GB is a one-coat surface treatment used to affix castable and millable polyurethane elastomers to metals and other rigid substrates. It is composed of a mixture of polymers and resins dissolved in an organic solvent system.

Chemlok 218GB is formulated to meet VOC requirements under China regulatory specification GB33372-2020.

Features and Benefits

Environmentally Resistant: provides excellent resistance to water, salt spray, a variety of solvents and other environmental conditions.

Convenient: requires no primer, reducing labor and costs.

Elastomers

- Castable Urethane
- Millable Urethane

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: No agitation is required before or during use. If dilution is needed, use either a 1:1 isopropanol:toluene blend (by volume) or glycol ether solvents. Note proper dilution for the various application methods is best achieved by experience.

Applying: Apply Chemlok 218GB by brush, dip, spray, roll coat or any method that gives uniform coating and avoids excessive runs and tears. Regardless of application method, dry film thickness of Chemlok 218GB should be 19-32 micron (0.75-1.25 mil).

Chemlok 219 is an excellent primer to use with Chemlok 218GB. For castable urethane, the properties of Chemlok 219 and Chemlok 218GB are complimentary - Chemlok 219 provides excellent protection as a primer for the metal; Chemlok 218GB affixes well to castable polyurethanes. Chemlok 218GB is also tolerant of processing conditions such as long prebakes. Together, they increase resistance to a variety of environmental elements.

When using Chemlok 219 as a primer, first apply Chemlok 219 and allow it to air-dry. Then apply Chemlok 218GB and allow to air-dry. The combination is then prebaked at 121°C for the desired time.

Drying/Curing: Allow coated parts to air-dry for at least 60 minutes at room temperature for complete solvent evaporation. The film may be force dried at higher temperatures for shorter periods of time. Drying for 15 minutes at 121°C has no harmful effect on performance.

To enhance cohesive strength, bake coated inserts a minimum of 2 hours at 121°C. Large inserts will require longer baking time at 121°C to negate the heat sink effect.

Parts coated with Chemlok 218GB may be vulcanized immediately after air-drying.

Molding procedures that are used with heat vulcanizing urethane elastomers can be used with Chemlok 218GB adhesive. The cure time and temperature are the same as the process conditions required to vulcanize the urethane compound being molded. Best results are obtained with curing temperatures above 71°C.

Typical Properties*

Appearance	Clear to Slightly Hazy Amber Liquid
Viscosity, cps @ 25°C Brookfield LVT Spindle 3, 60 rpm	500 -1200
Density, kg/m ³	960 -1020
Solids Content by Weight, %	18.0 - 21.0
Flash Point (Seta), °C Pensky-Martens Closed Cup	2
Solvents	Xylene, Dimethyl Carbonate

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

Cleanup: Use alcohol, such as isopropanol, or a chlorinated solvent, such as trichloroethylene, to clean up small spills.

Shelf Life/Storage

Shelf life is one year from date of manufacture when stored by the recipient in original, unopened container. Recommended storage temperature is 21-27°C. Do not store or use near heat, sparks or open flame.

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® 218GB

技术说明书

Chemlok® 218GB单涂型表面处理剂可用于帮助和促进浇注型和混炼型聚氨酯弹性体附着至金属及其他硬质基材。本品是聚合物和树脂在有机溶剂体系内溶解形成的混合物。

Chemlok 218GB 符合GB33372-2020挥发性有机化合物含量的要求。

特征和优点

耐环境性强: 对水、盐雾、各种溶剂和其他环境条件具有出众的耐受能力。

使用方: 无须使用底涂, 可减少工作量并降低成本。

弹性体

- 浇注型聚氨酯
- 混炼型聚氨酯

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。选择适当的化学清洗或机械清洗方法除去金属表面的锈、氧化层或氧化膜。

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: 使用前或使用过程中无须搅拌。如果需要稀释, 稀释剂可使用体积比为1:1的异丙醇和甲苯混合物, 或乙二醇醚溶剂溶剂。注意, 需要根据经验判断不同涂敷方法的适用稀释程度。

涂敷: Chemlok 218GB可采用刷涂、浸涂、辊涂、喷涂或任何可提供均一涂膜、避免涂膜流淌或撕裂的涂敷工艺。不论采用何种涂敷方式, Chemlok 218GB的干膜厚度应为19-32 微米 (0.75-1.25 密尔)。

Chemlok 219非常适合作为Chemlok 218GB的底涂。对于浇注型聚氨酯, Chemlok 219和Chemlok 218GB的性能值得称道——Chemlok 219为金属提供优良的底涂保护; 而Chemlok 218GB则与浇注型聚氨酯结合良好。Chemlok 218GB还可耐受如长期预烘。二者结合, 可以提高对各种环境的耐受性。

使用Chemlok 219作为底涂时, 首先涂敷Chemlok 219并令其风干。然后涂敷Chemlok 218GB并令其风干。然后将涂敷件在121°C下进行所需要时间的预烘。

干燥/固化: 已涂敷工件在室温下至少自然风干60分钟, 使溶剂完全挥发。也可在更高的温度下强制干燥, 以缩短干燥时间。在121°C的温度下干燥15分钟对性能不会产生不利影响。

为确保内聚强度, 涂敷后的嵌件至少应在121°C的温度下烘烤2小时。大型嵌件需要在121°C的温度下延长烘烤时间, 以减小热沉效应。

涂敷Chemlok 218GB的工件在自然风干后可立即进行硫化。

用于热固化聚氨酯弹性体的成型工艺适用于Chemlok 218GB。固化时间和温度与聚氨酯材料进行固化所需的工艺条件相同。固化温度高于71°C时的效果最好。

清理: 对于少量溅溢的Chemlok 218GB, 可使用异丙醇等醇类或三氯乙烯等含氯溶剂来清除。

典型特性*

外观	透明至略模糊的琥珀色液体
粘度, cps @ 25°C Brookfield粘度计 3号转子, 转速60 rpm	500 - 1200
密度, kg/m ³	960 - 1020
固体含量, %	18.0 - 21.0
闪点 (Seta), °C Pensky-Martens闭杯测试	2
溶剂	二甲苯, 碳酸二甲酯

*典型数据不可作为产品标准之用。

保质期/储藏要求

自生产之日起,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。推荐在21-27°C环境下保存。储藏或使用时不得靠近热源、火花或明火。

警示信息

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