CHEMLOK® 485/CURATIVE 44 ADHESIVE

Technical Data Sheet

Chemlok® 485/Curative 44 two-component adhesive system is used for insert mold bonding of PVC and Alcryn® to substrates such as metal and rubber.

Features and Benefits

Versatile: bonds a wide range of thermoplastic elastomers.

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

Convenient: requires only a single coat for most applications. For harsh environments, apply Chemlok 205 primer prior to adhesive application.

Application

Surface Preparation: Remove grease, oil, fingerprints, dust, mold release agents, rust and other contaminants from the surfaces to be bonded. Wear chemical resistant gloves. Wipe the surfaces with a clean cloth soaked in a solvent such as acetone, MEK or isopropyl alcohol. On metal surfaces, a suitable alkaline degreasing agent may be used. Rinse metals and allow the surfaces to thoroughly dry.

Mixing: Thoroughly stir Chemlok 485 adhesive. While stirring, add 6-10 parts Chemlok Curative 44 curing agent, by weight, to 100 parts Chemlok 485 adhesive.

Thoroughly mix the two components before using. A mixed working life of approximately one month can be expected when stored at room temperature and sealed from exposure to moisture.

If dilution is needed, use xylene in a ratio of 3 parts mixed adhesive system to 1 part solvent, by weight.

Applying: Apply adhesive by spray, brush or dip methods.

Regardless of application method, the dry film thickness of Chemlok 485/Curative 44 adhesive should be 17.8-25.4 micron (0.7-1.0 mil).

Drying/Curing: Before molding, allow coated parts to air-dry for 1-2 hours at 18-27°C (65-80°F) and at least 45% relative humidity. Drying time can be shortened by oven drying for 4 minutes at 93°C (200°F) or 2 minutes at 138°C (280°F). Larger parts may require more oven time as a result of the heat sink effect.

For best results, injection mold within 24 hours of adhesive application.

Typical Properties*

	485	Curative 44
Appearance	Clear to Amber Liquid	Transparent Brown Liquid
Viscosity, cps @ 25°C (77°F) Brookfield LVT Spindle 2, 30 rpm	400 - 1000	<10 (typical)
Density kg/m^3 (lb/gal)	 850.8 - 874.7 (7.1 - 7.3)	 1010.0 - 1040.0 (8.4 - 8.7)
Solids Content by Weight, %	15 - 17	47 - 51.5
Flash Point (Seta), °C (°F)	-4 (+24)	29 (85)
Solvents	MEK, Xylene	Xylene

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

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Although optimum adhesion is achieved when molding is done shortly after adhesive application and drying, coated parts can sit for one week before bonding if care is taken to protect the coated parts from contamination. Prior to molding, preheat the adhesive coated parts to 107-121°C (225-250°F) and immediately place parts into the mold.

Cleanup: Use solvents such as xylene or MEK to remove adhesive before heat is applied. Remove cured adhesive by mechanical blasting methods.

Shelf Life/Storage

Shelf life of each component is one year from date of shipment when stored by the recipient at 21-27°C (70-80°F) in original, unopened container.

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.

Verify Volatile Organic Compounds (VOC) requirements with the applicable local, regional and state air quality authorities before importing, selling or using this product. VOC rules, thresholds and reporting obligations vary by jurisdiction; compliance is the responsibility of the importer/seller/owner.

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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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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