# Chemlok<sup>®</sup> 485/Curative 44 Adhesive

# Description

LORD Chemlok<sup>®</sup> 485/Curative 44 adhesive is a twocomponent adhesive system used for insert mold bonding of PVC and Alcryn<sup>®</sup> to substrates such as metal, rubber and other thermoplastic elastomers (TPEs).

#### **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-component adhesive system 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.

Alcryn is a trademark of Advanced Polymer Alloys, LLC.

#### **Typical Properties\***

Appearance Viscosity, cps @ 25°C (77°F) Brookfield LVT Spindle 2, 30 rpm Density kg/m<sup>3</sup> (Ib/gal) Solids Content by Weight, % Flash Point (Seta), °C (°F) Solvents **485** Clear to Amber Liquid 400-1000

850.8-874.7 (7.1-7.3) 15-17 -4 (+24) Methyl Ethyl Ketone (MEK), Xylene **Curative 44** Transparent Brown Liquid <10 (typical)

1010.0-1040.0 (8.4-8.7) 47-51.5 29 (85) Xylene



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

# LORD TECHNICAL DATA

**Applying** – Apply adhesive system by spray, brush or dip methods. The recommended dry film thicknesses of Chemlok 485/Curative 44 adhesive is 17.8-25.4 micron (0.7-1.0 mil).

**Drying/Curing** – Allow adhesive to air-dry for 30-60 minutes at room temperature. Full bond strength will take 24 hours at room temperature.

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 is one year from date of shipment when stored in a well ventilated area at 21-27°C (70-80°F) in original, unopened container.

# **Cautionary Information**

Before using this or any LORD product, refer to the Material Safety Data Sheet (MSDS) 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 technical data sheet 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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