



4501A CURATIVE 4501B PREPOLYMER

MEMBRANE LEAF ADHESIVE
TECHNICAL DATA BULLETIN

SYSTEM BENEFITS:

CPD 4501A Curative with CPD 4501B Prepolymer is an NSF/ANSI/CAN 61 Certified thixotropic two-part polyurethane adhesive intended for use in the assembly of reverse osmosis elements. NSF/ANSI 61: Drinking Water System Components – Health Effects is an American National Standard that establishes minimum health-effects requirements for the chemical contaminants and impurities that are indirectly imparted to drinking water from products, components and materials used in drinking water systems.



Certified to
NSF/ANSI/CAN 61

- Membrane leaf adhesive
- Reverse osmosis water filters
- 90 Shore A

HANDLING PROPERTIES

	CPD 4501B	Test Method
Part A Density at 25°C, lbs/gal	8.0	ASTM D1475
Part B Density at 25°C, lbs/gal	9.4	ASTM D1475
Part A Viscosity at 25°C, cP	Thixotropic	ASTM D2196
Part B Viscosity at 25°C, cP	630	ASTM D2196
Mix Ratio by Weight	100A : 62.5B	Calculated
Initial Mixed Viscosity 25°C, cP	Thixotropic	ASTM D2196
Gel Time at 25°C, 150g mass, minutes	55	ASTM D2471
Work Life at 25°C, 150g mass, minutes	>20	

PHYSICAL PROPERTIES

	CPD 4501B	Test Method
Color	Amber	Visual
Hardness, 3 hrs at 150°F + 1 hr cool, Shore A	90 +/- 10	ASTM D2240
Hardness, 24 hrs at 25°C, Shore A	90 +/- 10	ASTM D2240

SYSTEM POST CURE OPTIONS:

Select one of the following cure schedules depending on the available time, the physical properties of the mold and the desired physical properties of the final part. Post cure the part to obtain maximum physical and thermal properties of the system. The recommended post cure temperature ramp rate between stages is up 5°F per minute for heating and down 1-2°F per minute for cooling. Heating and cooling ramp rates can vary based on size and thickness of the part. For larger thicker parts use a more conservative ramp. If you need to deviate from the recommended post cure schedule, please contact our technical service department.

CURE INCREMENTS:





CPD 4501B	24 Hours at 77°F (25°C)	7 Days at 77°F (25°C)	3 Hours at 150°F (66°C)
Room Temperature Cure	Supported	Unsupported	
Post Cure	Supported		Unsupported

MIXING AND SURFACE PREP:

Always use the recommended mix ratio for the system. Do not deviate in an attempt to speed up or slow down gel time. Mix together thoroughly, scraping sides and bottom of mixing container, until no streaks or striations are visible, then use immediately. Use only clean dry tools for mixing and applying. Do not mix or apply below 60°F. All surfaces must be clean, dry, and free of any surface contamination. Molds and patterns should be treated with release or parting agents.

STORAGE:

Store between 60-90°F in a dry place. After use, tightly reseal all containers and store products on a raised surface during cold weather and avoid storing near outside walls or doors. Purge with dry nitrogen, or other inert gas, to keep dry. Will react with water. Do not allow to freeze during winter storage.

SAFETY HANDLING:

Wear protective gloves, clothing, and eye/face protection. Use only outdoors or in a well-ventilated area. Avoid contact to the skin and eyes. Avoid breathing dust, fumes, gas mist, vapors and spray. Wash hands thoroughly after handling. Take off contaminated clothing and wash before reuse. These products may cause skin and respiratory allergic reactions. Consult product Safety Data Sheets for complete precautions for use of this product.

Polytek Development Corp. has experience only in the compounding of resins and hardeners and not in the actual manufacture of tools or parts. Each piece is different. The user should run tests to assure the suitability of the system for use in a particular application. The test data and results set forth herein are based on laboratory work and do not necessarily indicate the results that the buyer or user will attain.

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