



100, W100 and X100 FLEXIBLE EPOXY CONSOLIDANT

INSTRUCTIONS

DESCRIPTION: ConServ 100 FLEXIBLE EPOXY CONSOLIDANT is a slow curing, low viscosity liquid epoxy series designed for saturating and encapsulating wood decay, or priming damaged areas. The W100 is faster curing and the X100 accelerated formula is the fastest curing in the 100 series. These two speeds can be used in temperatures down to 15°F/-9°C, but the cure rate will slow down accordingly. The **ConServ 100 series** is flexible to withstand some of the ongoing expansion and contraction of wood. The properties of these formulas are ideally suited for consolidating and stabilizing pockets of wood decay, checks, fissures and other surface imperfections due to weather exposure, insect infestation or minor charring from fire damage. Applications include porous end grain, window and door sills, sash, jambs, trim, siding, porch elements, stair parts, framing, log and timber elements, etc. Use as a stabilizing primer for ConServ 200 Flexible Epoxy Patch or ConServ 300 Flexible Epoxy Paste.

NOTICE: Please take time to acquaint yourself with all labels, instructions and precautions before mixing. Instructional videos can be viewed at conservepoxy.com. Due to the variety of uses, application methods and conditions that customers might use these epoxy products for, no warranty is written or implied.

WOOD PREPARATION: This normally involves removing most of the loose and soft decay close to good wood prior to the application of the epoxy consolidant. If serious decay exists and if practical, drill 1/8" to 1/4"/3mm to 6mm holes approximately 1-1/2"/38mm apart in the decay zone to provide for better penetration. Wood to be consolidated should be **clean and dry with a moisture content below 20%**. For vulnerable moisture prone areas that have sustained decay, consider first treating with liquid borate preservative 700-BC or 700-BD, then allow the wood to dry.

MIXING: *In hot weather put the container of A resin on ice* and keep it in the shade to slow the curing process and increase working time. **This can be done with the 100, but is especially important for faster curing large batches of the W100 or X100.** The preferred mixing method is to pour the entire contents of bottle B (curing agent) into can A (epoxy resin). Blend **thoroughly** for 3–5 minutes by hand with a firm flat stick or power mixer. If you intend to use less than a full matched set, the easiest basic method is to break down components A and B into as many sets as you choose of equal volume using clear wide mouth plastic bottles, then return A into mixing containers and keep B in bottles. (ConServ offers various sizes of bottles and cans). A simple break down video of this method is on our website. Or, see the Technical Data sheet for more advanced options using volume or weight. Notice that each formula/speed has a different ratio of A:B.

CAUTION: The A resin may crystallize or become cloudy in prolonged cool storage. This condition can easily be corrected and **does not** in any way alter or inhibit the effectiveness of the epoxy. Simply dissolve by gradually warming the A resin in direct sun, use a hair dryer or heat gun on low temperature and stir gently until the material is almost clear. **Do not overheat.** Allow epoxy to regain normal room temperature before using.

APPLICATION: To achieve a reasonably quick cure, apply in an optimal temperature range of 50°–90°F/10°–32°C. Consider using W100 or X100 when the temperature is below 50°F/10°C and as low as 15°F/-9°C. Temporary covers will protect the epoxy from wet weather, hold in heat and shorten the cure time which is especially helpful in cold weather. The original 100 formula is our slowest curing epoxy and can be used in warm temperatures; but if possible, avoid applying epoxy in direct sunlight during hot weather, or in rain. Apply 100 by funneling epoxy into a narrow mouth squirt bottle used to saturate areas like checks and fissures or brush on directly from the can or a wide mouth bottle. Spraying should only be done by experienced professionals. When practical, apply consolidant repeatedly until the wood glosses over and accepts no more epoxy. The objective is fiber saturation to encapsulate and stabilize any remaining decay. Protect treated areas with clear polyethylene or another type of cover to keep the repair zone warm in cold weather and dry until epoxy has cured. Protect unaffected areas from drips or spills. The 100 consolidant **does not need to be fully cured** before applying ConServ 200 Patch or 300 Paste. Apply 200 or 300 on wet 100 (preferred) or at a later time.

CURING: The cure rate at 72°F/22°C is approximately 4 days for the 100, 2 days for the W100 and 1.5 days for the ConServ X100 epoxy consolidant. The 100 cures slowly in hot weather to maximize penetration, W100 and X100 will cure slowly at 50°F/10°C and very slow at 15°F/-9°C. Heat causes epoxy to cure faster and cold causes epoxy to cure slower. Expect to double the cure time for approximately every 20°F/11°C drop in temperature.

CLEAN-UP: Reusable tools may be wiped clean with dry paper towels ASAP after the epoxy has been applied. Discard paper towels, non-reusable containers, brushes, etc. according to local regulations. Distilled white vinegar will clean up wet epoxy and soften cured epoxy on tools or equipment if allowed to soak for an extended period of time. Acetone, Methylene chloride and MEK softens cured epoxy for easy removal, but should be avoided due to their toxicity.

SAFETY: Use common sense and good housekeeping. **Wear chemical resistant disposable gloves, dust mask as required, eye protection, and work clothes.** Don't get epoxy on your skin or clothing and work with good ventilation.

STORAGE: ConServ 100 series epoxy consolidant has a **one year shelf life if stored at cool temperatures and kept dry in tightly sealed containers.** Epoxy stored at 50°–75°F/10°–24°C is a guideline for an ideal long term storage temperature.

TECHNICAL DATA

MEASURING: If you choose not to mix an entire set of epoxy at one time, the MIXING section on this document and the website "Breakdown Video" show one method, or you can measure either by volume or weight as follows:

By Volume

100 ratio of 3.75 A : 1 B
W100 ratio of 3.25 A : 1 B
X100 ratio of 3 A : 1 B

I
OR

100 ratio of 4.5 A : 1 B
W100 ratio of 3.5 A : 1 B
X100 ratio of 3 A : 1 B

CURE SCHEDULE:

100 Epoxy	Working Time: 4 fl oz = approximately 4 hours @ 72°F/22°C Cure Time: 4 days @ 72°F/22°C (75% cured, tack free)
W100 Epoxy	Working Time: 4 fl oz = approximately 2 hours @ 72°F/22°C Cure Time: 2 days @ 72°F/22°C (75% cured, tack free)
X100 Epoxy	Working Time: 4 fl oz = approximately 1.5 hours @ 72°F/22°C Cure Time: 1.5 days @ 72°F/22°C (75% cured, tack free)

Cold temperature extends cure time, but W100 or X100 can be used down to 15°F/-9°C with wind protection. **Hot temperature** speeds cure time, but 100 can be used up to 100°F/38°C in shade and small quantity. In hot weather avoid exposure to intense sunlight until final cure is complete. Large volumes speed up cure time due to heat generating exothermic reaction of the epoxy.

PROPERTIES:

Color: Clear

Viscosity: Consistency of vegetable oil @ 72°F/22°C

Operating Range: -30°–160°F/-34°–71°C for cured epoxy

Mixing Range: 50°–90°F/10°–32°C is ideal. In very cold temperature consider using warm epoxy or mix for 5–10 minutes to start a reaction

Shelf life: 1 year in unopened original containers

PACKAGING and YIELD: ConServ 100, W100 and X100 standard sizes are ½ gallon, 1 quart, 1 pint, ½ pint, ¼ pint and 2 fl oz. Call to request larger sizes such as 1 gallon, 1.5 gallon, 2 gallon or 2.5 gallon. Also, both A and B liquids can be packaged in clear HDPE containers for easy dispensing to measure out into smaller sizes. Yield is equivalent to the set size purchased. **Coverage is variable** depending on the extent of the decay and subsequent degree of saturation. Sufficient saturation to stabilize the damaged material is imperative for proper protection and preparation for the ConServ 200 Patch or 300 Paste.