



600 RIGID EPOXY REPAIR

INSTRUCTIONS

DESCRIPTION: ConServ 600 Rigid Epoxy Repair is a high strength epoxy designed for various applications where flexibility, tooling or detailed finishing is not required. Use only A and B liquid as a low viscosity rigid consolidant for decay, add 200-D thickener to create a paste for filling small to medium size voids or cast large voids by adding aggregate and a little thickener to hold the resins in suspension while curing. Casting large voids with the use of sand and or stone aggregate will minimize heat generation (exothermic reaction) and increase the volume with less epoxy. **The 600 epoxy is harder to sand and drill than our other epoxies. If unsure about product choice, call ConServ for product support.**

NOTICE: Please take time to acquaint yourself with all labels, instructions and precautions before mixing. Due to the variety of uses, application methods and conditions that customers might use our products for, no warranty is written or implied.

WOOD PREPARATION: Normally, preparation involves removing most of the loose and soft decay close to solid wood prior to applying epoxy 600 as a liquid consolidant. Wood to be epoxied 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: You can put your mixing container on ice and keep it in the shade to delay curing and increase working time. Combine an equal volume of epoxy 600 components A and B in a mixing container. Blend thoroughly for 3 minutes by hand with a firm flat stick or use a powered paddle mixer for larger volumes. This can now be used as an epoxy consolidant. Add 200-D thickener to make a smooth epoxy paste. When casting large voids and using the 600 as a so called epoxycrrete, combine dry washed sand and or stone aggregate to the 600 A and B consolidant at a ratio of 1 part epoxy and up to a max. 3 parts of aggregate by volume. ConServ 200-D is used to thicken the 600 epoxy. Amounts are noted in the YIELD DATA. The 200-D is needed to prevent separation of epoxy from the aggregate during the curing process. After mixing the epoxy, don't expose it to freezing temperatures for approximately 48 hours in order to maintain a reasonably quick cure rate.

CAUTION: The A Resin may **crystallize** in prolonged cool storage and become cloudy or form crystals on the bottom of the container. 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. Hot weather, direct sunlight and large quantities of mixed epoxy will shorten the working time and create excessive heat.

APPLICATION: Apply in a temperature range of 50°-90°F/10°-32°C to achieve a reasonably quick cure rate, but it can be used down to 15°F/-9°C. The cure rate will be slower in **cold weather** so cover areas (esp. small ones) with polyethylene, insulated blankets, power blankets, or safely set up heaters to keep temperatures warmer for faster curing. Large amounts of mixed epoxy will generate their own heat during the curing process. In **hot weather** mix small batches or use sand and stone to absorb heat when making an epoxycrrete. Applying epoxy to large timber will also help absorb heat. Always keep treated areas dry and when working in hot weather, keep the epoxy out of direct sunlight. When using ConServ 600 as a liquid consolidant, it can be applied with a disposable brush or squirt bottle. Temporary forms or potters clay can be used to prevent epoxy from leaking out of affected areas and onto adjacent fabric. As with ConServ 100 flexible consolidant, drilling holes in and around the area to be stabilized can help to promote deeper penetration. Reapply more coats wet on wet for max. saturation. For surface repair of damaged areas after consolidation, ConServ 600 can be thickened with 200-D and applied as paste filler or cast into a mold or form. Surface patches are best repaired with the thickened epoxy paste and applied by putty knife or by filling **ConServ empty caulk tubes 901-32 or 901-16.** **Most areas should be flush filled to minimize tooling of the cured 600 epoxy.** In larger areas of missing or heavily damaged wood, the original shape is best maintained by casting the part using a form. This technique will require planning but can produce a smooth repair that needs minimal tooling to finish. Some release agents that can be used to cover forms for epoxy are glossy packing tape, polyethylene film or a thin coat of paste wax. Potters clay will stop an active leak and caulking or epoxy paste/filler can be preapplied to seal small voids. The addition of washed dry sand and or washed 3/16" to 3/8" stone aggregate becomes more cost effective as the size of the decay zone increases. Adding aggregate allows larger voids to be filled at one time because it absorbs some of the heat generated by the volume of curing epoxy.

CURING: ConServ 600 cure rate will vary depending on temperature. If a large amount of epoxy is mixed without the cooling effect of sand, stone or large timbers, excess heat (not good) can be given off by the exothermic reaction created from combining **600 A and B.** Cure time to be tack free is approximately 1-2 days at 72°F/22°C. Allow 2-5 days for a more complete cure at 72°F/22°C.

CLEAN-UP: Reusable tools and equipment can be scraped with a putty knife, wiped clean with dry paper towels and then cleaned with distilled white vinegar (a mild acid, recommended) or acetone (a toxic solvent, not recommended), if needed, prior to cure.

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: Ideal storage temperature is 50°-75°F/10°-24°C. Keep epoxy cool and dry in tightly sealed containers. ConServ 600 rigid epoxy has a one year shelf life when stored at room temperature in closed containers. DO NOT expose any stored epoxy to freezing temperatures for prolonged periods, because this will promote crystallization of the A resin as mentioned in the **CAUTION** section.

TECHNICAL DATA

MEASURING:

By Volume

By Weight

600 ratio of 1 A : 1 B

OR 600 ratio of 1.19 A : 1 B

200-D White Thickener added as needed to make a thin slurry to a thick paste.

CURE SCHEDULE:

Working Time: 4 fl oz = approximately 30-60 minutes @ 72°F/22°C

Gel Time: 4 fl oz = approximately 60 minutes @ 72°F/22°C

Cure Time: 1-2 days @ 72°F/22°C (75% ultimate strength)

Cold temperature extends cure time, but 600 can be used down to 15°F/-9°C with wind protection. In **hot weather** avoid exposure to intense sunlight until the final cure is complete.

PROPERTIES:

Color: Amber

Viscosity: 500 cps @ 75°F/24°C

Tensile Strength: 4,000 psi

Operating Range: -20°-160°F/-29°-71°C for cured epoxy

Mixing Range: 50°-90°F/10°-32°C

Shelf life: 1 year in unopened original containers

PACKAGING:

ConServ 600 is available in 10 gallon, 2 gallon, 1 gallon, 2 quart, 1 quart, 1 pint and 1/2 pint sets of A and B combined.

YIELD DATA

NOTE: – The yield per set as noted below is in cu. in. All measures of finish yield and amount of fillers needed are approximate.
– Yield for the first line of each size set is for that volume of epoxy (A + B @ 1:1 ratio) with or without 200-D thickener.
– Yield for the second line of each set for that volume of epoxy (A + B @ 1:1 ratio) includes the addition of aggregate up to a ratio of 1 part epoxy (A+B) to 1-3 parts maximum of aggregate plus the 200-D thickener.

600-1 10 Gallon set (2,310 cu. in.) A and B liquid only, or with 25 bags 200-1D thickener
4,620 – 9,240 cu. in. Aggregate fillers and 5 bags 200-1D thickener

600-2 2 Gallon set (462 cu. in.) A and B liquid only, or with 5 bags 200-1D thickener
924 - 1,848 cu. in. Aggregate fillers and 1 bag 200-1D thickener

600-3 1 Gallon set (231 cu. in.) A and B liquid only, or with 2.5 bags 200-1D
462 – 924 cu. in. or (2) 200-1D and (1) 200-2D thickener
Aggregate fillers and 1 bag 200-2D thickener

600-4 2 Quart set (115.5 cu. in.) A and B liquid only, or with 1.25 bags 200-1D
231 – 462 cu. in. or (1) 200-1D and (1) 200-2D thickener
Aggregate fillers and 1 bag 200-3D thickener

600-5 1 Quart set (57.75 cu. in.) A and B liquid only, or with 2/3 bag 200-1D thickener
115.5 – 231 cu. in. Aggregate fillers and 1 bag 200-4D thickener

600-6 1 pint set (28.875 cu. in.) A and B liquid only, or with 1/3 bag 200-1D
57.75 -115.5 cu. in. or (1) 200-2D thickener
Aggregate fillers and 1 bag 200-5D thickener

600-7 ½ pint set (14.437 cu. in.) A and B liquid only, or with 1 bag 200-3D thickener
28.875 – 57.75 cu. in. Aggregate fillers and 1 bag 200-6D thickener