RESTORE-RITE
"THE RIGHT WAY TO RESTORE WOOD"

TECHNICAL DATA SHEET

STRONGBOND EPOXY WOOD FILLER

NON-SAG, HIGH-STRENGTH EPOXY WOOD FILLER & REPAIR ADHESIVE

PRODUCT DESCRIPTION

STRONGBOND EPOXY WOOD FILLER is a two-component, rapid-curing, high-strength epoxy wood filler and multi-purpose repair adhesive. Its non-sag formula fills voids left by dry-rot, restoring strength and shape to damaged wood. It is moisture-insensitive and can be applied on damp surfaces. Because it is shrink-free and does not slump or sag, it is perfect for vertical and overhead repairs.

The Filler creates a high-strength, chemical bond to STRONGBOND EPOXY WOOD SEALER, making repairs to dry-rotted wood last longer. It can be used as a fairing compound to fill air bubbles and voids that may occur during the sanding process, then the repaired wood can be carved or machined to recreate the desired shape before applying a topcoat.

This product also is an excellent multi-purpose adhesive. It will bond to most surfaces, such as brick, ceramic tile, concrete, fiberglass, or stone.

USES

- Epoxy resin bonding for dry-rot repair. Fills voids left by dry-rot, nail holes, or missing wood
- Can be used as a fairing compound
- Cured filled surfaces may be carved or machined to restore the shape of the damaged wood
- Ideal for repairing wooden window frames and sills, rafter tails, exposed beams, decks, doors, floors, fences, boat hulls, and other wooden structural and decorative elements. The restored wood can be primed and painted with water-based paint or other epoxy-compatible topcoat
- As a multi-purpose adhesive, it creates a high-strength bond to most surfaces, such as stone, concrete, ceramic tile, and fiberglass
- Intended to be used outdoors or in well-ventilated indoor areas, in temperatures between 40 °F (4 °C) and 110 °F (43 °C)

FEATURES / ADVANTAGES

- Rapid initial 3-hour cure time at room temperature
- Non-sag, no-shrink formula makes it excellent for vertical and overhead applications
- Low VOC, low odor, and solvent-free

- Creates a high-strength, chemical bond to STRONGBOND EPOXY WOOD SEALER. Once the sealer is tacky, apply Filler over uncured sealer and the two will cure together, saving time to complete projects
- Moisture-insensitive; can be applied on damp surfaces and underwater
- Easy-dispensing with coaxial cartridges, which are packaged with a nozzle that automatically mixes the product in the precise ratio. Cartridges fit into standard 10 oz. caulking guns for flow-control installation

PRODUCT INFORMATION

Availability	**Restore-Rite™ products are available through select distributors.**
Available Sizes	**Coaxial Cartridge – 8.6 oz**. (256 ml) Includes one mixing nozzle that automatically mixes precise ratio of Parts A and B. (Cartridges fit into standard 10 oz. caulking guns.) **Bulk-Packaging – Quart Kit** Kit contains 16 oz. (473 ml) Part A and 16 oz. (473 ml) Part B for 1:1 mixing ratio **Bulk-Packaging – 102 oz. Kit** Kit contains 51 oz. (1.5L) Part A and 51 oz. (1.5L) Part B for 1:1 mixing ratio
Application Temperature	**40°F and 110°F (4°C and 43°C)**
Color	**Part A (Resin) White: Part B (Hardener) Dark Gray; Mixed: Gray**
Cure Time	**3 hours at 75°F initial cure; fully cured in 24 hours**
Mix Ratio	**1:1 by volume (refer to MPII in this TDS)**
Gel Time	**26 minutes at 75°F (based on 60 gram mass)**
Shelf Life	**24 months in unopened containers stored in dry and dark conditions.**
Storage	**Between 40°F (4°C) and 95°F (52°C). Store in closed containers, in a secure, dry place not exposed to direct sunlight or extremely low or high temperatures**
VOC Content	**17 g/L (mixed)**
Working Time	**45 minutes at 75°F (nozzle)**

LIMITATIONS & WARNINGS

- Cartridge balancing and other installation instructions must be strictly followed. (Refer to MPII)
- Do not thin with solvents, as this will prevent cure.
- Before applying Filler over STRONGBOND EPOXY WOOD SEALER, the sealer must first become tacky.
- Product will cure slower in thinner film and/or colder temperatures and faster in a larger mass and/or elevated temperatures.
- Best when applied in increments at a thickness of 1 inch or less. A larger mass will generate excessive heat. For filling larger voids, a dry piece of scrap wood treated with STRONGBOND EPOXY WOOD SEALER can be used as a filler block, and attach it inside the void with wood screws. This process will allow a smaller mass of Filler to be used.
- May discolor from UV exposure. Filler should cure at least 3 hours prior to sanding and coating with water-based paint or other epoxy-compatible topcoat to meet the desired appearance. Use of solvent-based coatings should be avoided. Coating in a small test area is recommended prior to completing the entire project.
- Product is not intended for repairing weight-bearing structural elements. Consult an architect.
- NEVER leave mixed epoxy in an unattended open container as its thermolytic process generates heat and it will eventually heat-up and produce smoke.
- When dispensing underwater, product may sag.

Clean Up: Always wear appropriate protective equipment such as chemical-resistant nitrile rubber gloves and splash-proof safety chemical goggles during cleanup. Clean uncured materials from tools and equipment with a mild solvent, such as mineral spirits. Cured material can only be removed mechanically. Dispose of product in accordance with federal, state and local regulations.

Safety:. Always refer to the Safety Data Sheet (SDS) for both Part A and Part B at www.restore-rite.com. Be sure to wear protective chemically-resistant gloves, clothing and goggles during application and clean-up. Ensure indoor areas are properly ventilated. For more information, call New Enterprises at 1-415-722-9098. In an emergency, contact CHEM-TEL 1-800 255-3924 (24 hours).

INSTRUCTIONS

In order to achieve maximum results, **proper application is imperative**. Carefully read the Manufacturer's Printed Installation Instructions (MPII) in this TDS. Always use the most current version of the MPII, due to occasional updates and revisions.

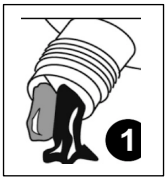
MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII)

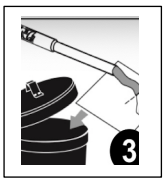
SURFACE PREPARATION

Surface preparation will depend upon the application of the product. The wood being treated must be clean of all dry-rot debris, paint, dust, oil, and wax. A clean surface free of loose material and dust is imperative for good adhesion. Always be sure the bonding surfaces are prepared and sealed with STRONGBOND EPOXY WOOD SEALER in advance before starting a new cartridge or mixing the Filler. To create a long-lasting bond, apply Filler over uncured Sealer once the sealer becomes tacky and the two will cure together. If possible, schedule dispensing to consume an entire cartridge at one time with no interruption of epoxy flow. For bulk, mix only enough product that can be used within the gel time.

CARTRIDGE PREPARATION

CAUTION: Always check the expiration date on the cartridge. **Do not use expired product!**





1. Remove the protective cap from the adhesive cartridge and insert the cartridge into the recommended dispensing tool. Before attaching the mixing nozzle, balance the cartridge by dispensing a small amount of material until both components are flowing evenly.
2. Screw on the mixing nozzle supplied with the cartridge after properly balancing the cartridge. Do not modify mixing nozzle. Confirm that the internal mixing element is in place prior to dispensing adhesive. Take note of the air and base material temperatures and review the working/full cure time prior to injection**.**
3. Dispense the initial amount of material from the mixing nozzle onto a disposable surface until the product is a uniform gray color with no streaks. Adhesive must be properly mixed in order to perform as published. Dispose of the initial amount of adhesive according to federal, state and local regulations.

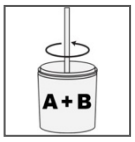
   CAUTION: When changing cartridges, **never re-use nozzles**. A new nozzle should be used with each new cartridge and Steps 1 - 3 should be repeated.

NOTE: When the work environment or substrate falls below 70°F (21°C) warm the cartridge to 70-75°F (21-24°C) prior to use. All usable material is completely dispensed when plunger reaches halfway**.** Schedule dispensing to consume an entire cartridge at one time with no interruption of flow to prevent material from hardening in mixing nozzle. If you have any problems in dispensing product, replace the nozzle; the product may have begun to cure in the nozzle which will affect the mix ratio. ***NEVER transfer a used nozzle to a new cartridge and DO NOT attempt to force adhesive out of a hardened nozzle.***

Mixing Without A Nozzle: Remove the protective cap from the cartridge and insert the cartridge into the recommended dispensing tool. Begin to dispense product through the opening until both products dispense equally and discard this small amount. Dispense equal portions of Part A and Part B onto a flat surface. Mix both components together using a putty knife or similar flat tool until a consistent gray color without streaks is achieved.

BULK MIXING

Thoroughly stir Part B with a mixing paddle (i.e. Jiffy mixer or similar) before mixing Parts A and B together. Smaller batches can be mixed by hand in a graduated mixing cup with a paint stir stick, or with a putty knife on scrap cardboard. Blend until a consistent gray color without streaks is achieved. **NOTE:** Cold product may become too thick. Product that is too warm will react faster than normal.



1. Before mixing Parts A and B together, thoroughly mix Part B in a clean pail with a low-speed drill (400 – 600 rpm) that has a paddle attachment.
2. Proportion equal parts by volume at an exact 1:1 mix ratio. STRONGBOND EPOXY WOOD FILLER uses 1 part by volume of component Part A and 1 part by volume of component Part B. Mix only the amount of material that can be used before the gel time expires (refer to Product Information in this TDS).
3. Mix thoroughly with a low-speed drill, carefully scraping the sides and the bottom of the container while mixing. Keep the paddle below the surface of the material to avoid entrapping air. Proper mixing will take at least 3 minutes. When well-mixed, the material will be free of streaks or lumps.
4. Smaller batches may be mixed by hand in a graduated mixing cup with a paint stir stick, or with a putty knife on scrap cardboard. Blend until a consistent color without streaks or lumps is achieved.

Once the product is mixed, immediately fill voids and trowel slightly above the surface level, leaving enough material to later sand the surface down to the desired shape. After voids are filled, use a putty knife or plastic spreader to reconstruct the desired shape. For a textured finish, sawdust may be added. Once the uncured Filler no longer sticks to the sandpaper, it may be mechanically sanded. Product can be used as a fairing compound during the sanding process to fill any air bubbles or voids that may occur.

USE AS A MULTI-PURPOSE ADHESIVE

STRONGBOND EPOXY WOOD FILLER is an excellent multi-purpose adhesive. It will bond to most surfaces, such as fiberglass, ceramic tile, concrete, stone, or brick. Use an appropriate amount of material for bonding to clean and prepared surfaces.