

Kintsugi Kit

Instruction manual

Kintsugi is a traditional Japanese method for repairing cracked and broken pottery. Pieces are reattached using urushi (lacquer) and the join is finished with a light coating of decorative gold or silver powder, in a process reminiscent of maki-e techniques. Kintsugi is sometimes referred to as kin-tsukuroi, which literally means "gold mending". Tracing its origins mainly to the world of the tea ceremony, kintsugi is uniquely Japanese and embodies an owner's devotion to a prized possession. A kintsugi item may become a sought-after antique, with the visible evidence of repair actually enhancing its value.

Here's how to use the Kintsugi Kit Pro to repair your own possessions.

Items in the Kit

Brushes: Brushes of various sizes and shapes.

Urushi: A component in an adhesive called nori-urushi, which is used to reattach pieces. Urushi is also combined with tonoko to make a fine cement called sabi.

Bengara urushi: A dyed urushi (also called e-urushi). Gold powder adheres to its surface when the surface is still sticky.

Tonoko: Pulverised rock that is mixed with urushi to create sabi.

Jinoko: Pulverised rock that is mixed with urushi to make a coarser cement, which is itself called jinoko.

Mokufun: Pulverised wood that is mixed with urushi to create an even coarser cement called kokuso.

Denpun-nori/durum flower: Mixed with urushi to create nori-urushi.

Turpentine: Used to thin and clean off excess urushi.

Canola oil: Used to clean urushi off brushes. Wet the brush bristles with this oil before putting the brushes away.

Gold powder

Cotton ball: Used to apply gold powder.

Suruga charcoal/sandpaper: Used to polish hardened urushi.

Surface for mixing

Plastic and wooden paddles

Synthetic epoxy

Masking tape

Cotton swabs

Pointed length of wood: Used to scrape away excess sabi and nori-urushi.

Latex gloves: Always wear latex gloves when handling urushi or polishing. Urushi can cause skin rashes.

Other things you'll need

Two-part liquid epoxy adhesive

Rags, tissue paper

Small dish for holding water

Box cutter

Humid box: A wooden box is best, but a cardboard box or plastic box will do. To keep the air in the box humid, wet the inner walls and put a damp cloth on the bottom of the box.

The Kintsugi Process

Reattaching a part

If a broken piece is dirty, use cotton swabs dipped in rubbing alcohol to clean the surfaces that will fit together.

Reattaching using urushi

First, make a small amount of nori-urushi: combine urushi and denpun-nori on the mixing surface with the wooden paddle. Once the mixture is smooth, add a small amount of durum flower until the mix is sticky.

Using a brush, apply a generous amount of nori-urushi to all the surfaces that will be joined. Once the nori-urushi has been applied, fit the pieces back together. Using the wooden paddle, get rid of any excess nori-urushi. Use masking tape to hold the repaired pieces in place during the drying process. Once all the joins have dried, dip a rag in turpentine and clean away any remaining excess nori-urushi.

Reattaching using synthetic epoxy

Mix equal amounts of the two-part liquid epoxy on the mixing surface. Apply the epoxy to the surfaces that will be joined. Make the repair, and wipe away any excess materials, first with the plastic paddle and then a rag dipped in turpentine. Use masking tape to hold the repairs in place while the epoxy dries.

A: Traditional method for making repairs using sabi

Use kokuso cement for rough fills.

To make kokuso, mix urushi, denpun-nori and mokufun. Use the resulting cement for joins and fills, and if necessary to reconstruct the original form. The kokuso will dry in normal room conditions (no need to put it in the humid box).

Use sabi cement for finer fills and repairs.

To make sabi, add water to tonoko until it is wet, then add an equal amount of urushi. Apply the resulting sabi over the kokuso to reconstruct the original shape. If there's a deep depression, use multiple layers of sabi.

Once the sabi has hardened, use wetted sandpaper to refine the

surface. Please wear latex gloves when using the sandpaper, as urushi can cause rashes.

Sabi can be applied in a similar way when using a synthetic adhesive (rather than kokuso).

B : Making repairs using synthetic epoxy

Using the box cutter, cut off a small portion of synthetic epoxy, mix it and mould it onto the broken item to restore its original form. After the epoxy has hardened, use the box cutter to scrape off any excess material and then make minor adjustments to the shape using sandpaper.

Priming

Apply a smooth layer of bengara urushi to each repair. If the bengara urushi is too thick, it will shrink when drying and make wrinkles. To dry, the bengara urushi must be placed (perhaps counter-intuitively) in the humid box. Once it has dried, used wetted sandpaper to polish the surface. For areas too small to polish with sandpaper, use a small amount of suruga charcoal.

Applying gold powder

Apply a second layer of bengara urushi to all areas where gold powder will be used. Place the repaired item back in the humid box. In about 15 minutes, the bengara urushi should be ready for the application of gold powder. To confirm this, exhale on the bengara urushi. If it fogs up, the bengara urushi is hard enough. Use the cotton ball to apply the gold powder. After all of the bengara urushi has been covered with gold powder, gently polish the surface with the cotton ball. Once the powder has been evenly applied, place the repaired item back in the humid box. After the bengara urushi and the gold powder have hardened, use the cotton ball to gently polish the surface once again. Finally, wipe away any excess gold powder.

Sealing the gold powder

Place a small amount of urushi on the mixing palette and thin it with turpentine. Use a brush to apply urushi to the surface of the gold powder, then use a rag or tissue to dab the freshly daubed surface, leaving only a very thin layer of urushi on the gold. Put the repaired item back in the humid box and allow the repaired areas to harden completely. Your kintsugi item is now complete!

Cleaning and caring for brushes

To clean a brush with urushi on it, apply canola oil to the bristles then lightly stroke the brush against a clean surface. Repeat this process until all of the urushi has been removed. Add a little canola oil to the brush before storing. Next time you use the brush, apply some urushi to the brush then use a rag to get the urushi together with any oil out of the bristles. Repeat the process three times until all of the oil has been removed.

If you get urushi on your skin

It is important to get the urushi off your skin as soon as possible. Wipe the affected area with a rag dipped in canola oil, then clean with warm water and soap. If the urushi is not removed, it may cause a rash. If you experience any skin irritation when using urushi, please stop immediately and consult a doctor.

For inquiries and to download the video

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