



# JAPANESE PASTE-RESIST DYEING

## NORIZOME

The Japanese word Norizome originates from a combination of the word nori meaning “paste” or “glue” and zome from someru meaning “to dye”. It describes a resist dyeing technique involving the application of a flour based paste to fabric to prevent dye from penetrating into the design areas.

Nori paste is used in many different dye processes in Japan, including:

**Katazome** – a process where paste is squeezed through a laminated rice paper stencil, called “katagami” or “shibugami” that is cut with designs.

**Tsutsugaki** – paste resisting which is done by outlining the designs using a cone made from “katagami”. This process is very similar to cake decorating with a pastry cone.

**Yuzen** – here the paste is often applied in the tsutsugaki method and the fabric is dyed by handpainting.

**Bingata** – this process denotes Okinawa's colorful katazome where the

island's traditional motifs are hand dyed.

**Komon** – katazome with very small repeating designs.

**Aizome** – although the term does not actually mean paste resist dyeing, the term is often used in conjunction with paste resist. Aizome is any fabric that is dyed with indigo that employs paste resist dyeing methods.

Norizome is cooked from a mixture of rice flour and rice bran, the paste is smooth and elastic, with a much higher adhesive quality than that of the wheat-flour based mixtures used in other dye traditions. Whether applied through a stencil or a cone, the paste clings tenaciously to both paper and fabric, allowing even the finest lines to be reproduced with great accuracy. Once dry, the paste resists both brushed on dye and dye applied by brief dips, yet it can be washed away after a relatively short soak in water.

## Materials Needed

**MOCHIKO** (sweet rice flour) This product remains glutinous and elastic, retaining a strong adhesive quality even when boiled or steamed. It enables the nori paste to remain on the surface of the fabric and yet fill in between the warp and filling yarns.

**KOMON NUKA** (rice bran or rice polish powder) This product is used in situations where it is desirable to reduce the elasticity and adhesiveness of the sweet rice flour to make the finished nori paste easier to handle. Komon nuka refers to a special type of rice bran especially for dyeing. It has been ground extremely fine and all the natural oil has been removed. Ordinary rice bran or rice pol may be substituted. However, it must be sifted or re-ground to as fine a powder as possible. Insufficiently refined rice bran will result in a lumpy paste.

**SALT** This product acts as a hygroscopic agent, i.e., it absorbs moisture from the air. A certain amount of moisture is necessary in the paste to prevent it from cracking on the fabric. Too much moisture, however, causes the edges of the nori paste to blur and become "fuzzy" and indistinct. Adjust the amount of salt according to the humidity: less salt during the humid summer weather and more salt during the dry winter season.

**CALX** (calcium hydroxide, hydrated lime or slaked lime) This product is a mild alkali and causes the starch molecules in the mochiko to swell and thus gives the nori paste body. It also acts as a preservative and paste with calx added can be refrigerated for several weeks or frozen. Too much calx will cause the paste to become extremely gelatinous and lumpy, and hence unusable.

Note: Mochiko, Komon Nuka, and Calx are all available at Maiwa Supply and through our mail order catalogue.

**LARGE MIXING BOWL** Making nori paste is a lot like mixing bread dough, so if you have a favorite bowl for this purpose, you can use it. Our favorite is a large, heavy ceramic mixing bowl.

**PESTLE** The Japanese prefer a thick, hardwood dowel rounded at both ends for this purpose. Wooden spoons or spatulas can be substituted, but must be very strong and durable.

**MEASURING CUPS** Pyrex ones are best.

**STEAMER** Asian cuisine makes extensive use of

steaming as a cooking method. Hence, the best steamers are the Japanese-style steamer pots or the Chinese steamers designed to fit in a wok. However, any make-shift steaming apparatus will suffice, including the small stainless steel vegetable steamers inserted into a pot for use.

**STEAMING CLOTH** If you have scrap pieces of muslin around, use these. Otherwise, dish towels seem to work well.

## Procedure

THIS RECIPE MAKES ABOUT 3 CUPS FINISHED PASTE

- 1 cup glutinous sweet rice flour
- 1 1/2 cup rice bran
- 1/4 - 3/4 cup water
- 1/3 cup hot water
- 2 tablespoons salt (dissolved in hot water)
- 2 or more tablespoons calx (dissolved in 1/2 cup warm water)



1. **PREPARE STEAMER FOR USE.** Place on heat source and bring water to boil while you are mixing the paste.



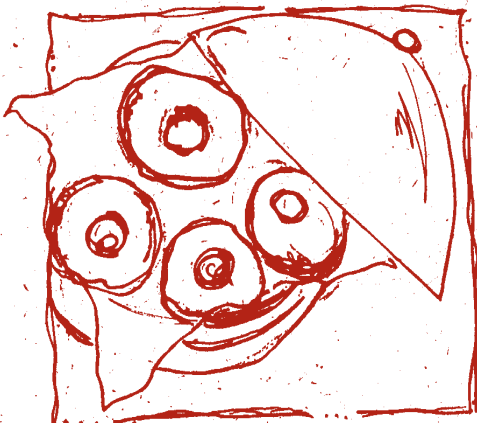
2. SIFT TOGETHER MOCHIKO (sweet rice flour) AND KOMON NUKA (rice bran powder). Mix thoroughly, breaking up lumps in either product.

3. ADD WATER GRADUALLY AND KNEAD WELL. Use only enough water to allow the mixture to form a ball. Under no circumstances should it be sticky. For this amount of paste, it should not require much more than 3/4 cup water. The Japanese say if its consistency is a little softer than your ear lobe and doesn't stick to your hand, it's just right!



5. STEAM FOR 50-60 MINUTES. Dampen and then wring out whatever you're using for a steaming cloth. Spread this cloth out in the steamer and place the doughnuts on the cloth. It's not critical that there be only one layer. They can be piled up slantwise on one another if necessary. Fold up the cloth over the doughnuts or place another dampened cloth on top and put the lid on the steamer. Steam 50-60 minutes.

4. FORM INTO DOUGHNUT SHAPES (you know, the kind with a hole in the middle!). This amount of rice flour/rice bran mixture should make two or three doughnuts 3 to 3 1/2" across and 1/2" high.



6. REMOVE DOUGHNUTS FROM STEAMER AND MASH THOROUGHLY. It's important to work as quickly as possible at this point. Remove the doughnuts from the steamer and place them in

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the mixing bowl. Immediately, take your STEAMING CLOTH and soak it in water as any attached paste will become hard and difficult to remove later. While still steaming hot, thoroughly mash the doughnuts with a WOODEN PESTLE so that all doughnut shape disappears. Continue working the paste until it assumes a smooth, glassy appearance with an even, elastic texture. This part is hard work. The paste will be quite heavy and stiff, and larger quantities may require two people: one to hold the MIXING BOWL, another to stir with the PESTLE.

**7. ADD SALT TO PASTE.** For this quantity of paste, use 4-5 tsp. during summer or humid-weather and up to 6 tsp. during drier weather. Dissolving the salt in a little hot water first and then gradually adding to the paste.

**8. MAKE UP CALX SOLUTION** by dissolving calx powder in water. Let stand 5-6 minutes until most of the solids have settled to the bottom. Gradually add the clear liquid off the top of the settled calx to the paste, stirring thoroughly after each addition. You will notice a color change as you add the CALX solution. When the paste changes from a light tan-brown to a straw yellow, **STOP ADDING THE CALX SOLUTION!** If you add too much, the paste becomes lumpy and gelatinous, and loses its adhesiveness. Sometimes this problem can be corrected by adding a few drops of vinegar and stirring very thoroughly.

**9. COOL THE PASTE** by placing the bottom of the mixing bowl into a bath of cool water for 30 minutes or so. Smooth out the surface of the paste in the bowl and add just enough water to com-

pletely cover the paste. This thin layer of water keeps the paste from drying out by preventing contact with the air.



**10. ADJUST THE CONSISTENCY OF THE PASTE.** Remove the mixing bowl from the cooling bath. Give the paste a stir and gradually add small amounts of warm water until the paste stirs easily and becomes smooth, elastic and somewhat shiny. Proper consistency is very much a matter of personal preference based on experience. However, "good" nori paste should make a kind of "plopping" sound when it is scooped up and then dropped back into the bowl. Also, if you draw up a thin thread of the paste, it should break off easily, i.e., it should not be like taffy. Lastly, if you form it up into a mound shape, it should be "relaxed" enough to revert to level within 10 to 15 seconds.

The paste is ready to use.

