

## **MAIWA EARTH PIGMENTS**

Maiwa has spent over thirty years researching and working with natural colour on cloth. In addition to our well-known work with dyes, we have also developed a line of earth pigments. Earth pigments come from clays and oxides and are best known by names such as burnt sienna, umber, and ochre. Maiwa works with small companies who prepare these pigments using centuries-old traditional methods. Our pigments are ground extra-fine for textile use.

While earth pigments are best known as the colourants used in frescos, lime plaster (Moroccan tadelakt), and artist's paints, they can also be used on textiles.

Earth pigments are not dyes: they do not dissolve in solution, nor do they form molecular bonds with cloth fibres. Earth pigments are minerals and oxides that are collected all over the world for their characteristic colours. To work with textiles the pigment is suspended in a medium and the medium bonds with the cloth. Acrylic is a popular media, however, at Maiwa we prefer soymilk. The protein in soymilk binds the earth pigments to the fibre.

# NOTE:

Among the earth pigments we also include Maiwa's natural indigo. Indigo is not an earth pigment, rather it is extracted from the leaves of indigo plants. In its powdered form it may be used in these recipes to give stunning blues.

At Maiwa we only use earth pigments on natural fibres; cotton, linen, hemp, wool, and silk.

The following instructions will guide you in the application of earth pigments on cloth. There are two basic stages: the fabric is prepared with soymilk and then the pigments are mixed with soymilk before being applied to the prepared fabric.



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Customers are responsible for dye and paint choices and recommendations. Maiwa staff do their best to assist customers in estimating quantities, procedures and products. Maiwa Handprints Ltd. or its staff will not be held responsible for such advice. Dye recipes should be tested proior to all projects. Maiwa Handprints Ltd. will not be held responsible for cost of products and/or labour to produce finished projects. Instructions are available free with each product purchased, please ensure you read and understand them before beginning.

## PREPARING THE FABRIC

All fabric needs to be scoured prior to starting. See Maiwa's natural dye data sheet for scouring instructions.

Place ¼ cup of dry soybeans into a jar and cover with 2 cups of water. Allow to soak overnight. The next morning the beans will have swelled and you can drain off the water and rinse them. Put the soybeans and three cups of warm water into a blender and blend on medium for 4 minutes.

Strain the soybean mash through a piece of cotton sheeting or muslin stretched over a bowl.

Keep the liquid aside. Place the soybean mash back into the blender, add more water and repeat the process two more times – keeping the liquid each time. Blend together all liquids and it should be the consistency of 2% milk – add more water if necessary.

It is best to use fresh soymilk. Do not use soymilk that has gone bad as it will not bind properly with the earth pigments.

Note: store-bought soymilk will not work.

This solution is used to pre-soak the fabric. Completely submerge your fabric in the soymilk solution ensuring that the fabric becomes fully saturated with the liquid. Squeeze out excess liquid and hang the fabric to completely dry. At this stage do not apply heat — such as a clothes dryer or blow dryer.

The presoaked fabric should be used within two weeks.

# PREPARING THE PIGMENT

Combine one teaspoon of earth pigment or powdered indigo with one tablespoon of the soymilk. Stir very well to make sure the pigment is fully mixed with the soymilk. This stage is very important because you want to make sure you have no gritty pieces — these will not bond to the fabric and will simply wash away later.

This mixture can be used as is or it can be thickened with either gum Arabic or gum tragacanth. Add very small amounts of thickener at a time as it can quickly become too thick. If this happens just slowly add more soy milk.

If your pigment mixture dries out as you work add more soymilk to get the consistency right again.

Pigment soy mixture may be stored for up to 2 weeks in the fridge.



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# PAINTING WITH PIGMENTS

Pigments can be applied to soya soaked fabric with brushes or rollers, freehand, or through stencils. Resists such as nori paste or cassava paste can be used. There are endless ways of working with earth pigments on textiles.



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# **FINISHING**

Allow the fabric to fully dry and cure for at least one week before washing. Some people like to steam their fabrics or give them a light steam ironing.

At Maiwa we let our fabrics cure for two weeks before washing. We wash our fabrics by hand in warm water and hang to dry. Larger pieces can be put in a dryer on gentle.

