

## **TOOLS & SUPPLIES**

You will need the following tools and supplies before you begin working with Mira-Poxy:

- **Mixing Pail**
- **Mixing Stick**
- **Disposable Gloves**
- **Large Bucket (5 Gallon Pail)**
- **Hair Dryer**
- **Brush**
- **Squeegee**

## **PERSONAL PROTECTION**

Epoxy curing agents, including Mira-Poxy Component B, are skin sensitizers. To prevent becoming sensitized to these materials, always wear protective gloves and clothing to keep Mira-Poxy from coming in direct contact with skin. Respiratory protection is not necessary when working with Mira-Poxy since it contains no solvents or other volatile ingredients and has no odor.

## **SURFACE PREPARATION**

Surfaces to be coated must be clean, dry, and free of any dust, dirt, oil, wax, or other contaminants. Wait 24 hours after applying stains, dyes, or base coats to ensure that they are fully dry before coating. Allow new concrete to cure at least 28 days before coating. Mask off and otherwise protect adjacent areas to catch drips or spills. Keep the work space at a temperature between 60 and 80°F for the duration of the project including during the curing process, not just while applying. Keep the work space as clean and dust-free as possible and minimize air movement as much as you can. This will help prevent small airborne particles from landing on the uncured coating and causing a blemish. Organize your work area before you begin to make sure all the materials you need are readily accessible.

If the surface to be coated is porous, such as wood or concrete, it must be sealed to prevent air from escaping any pores and causing a bubble to form in the coating. A thin application of Mira-Poxy reduced with solvent is used as a sealer. Note that since solvent is used in this step, there will be an odor and adequate ventilation and safety precautions are required.

## **MATERIAL PREPARATION**

### **PRODUCT NOTES**

Wear gloves and protective clothing while mixing. Keep all containers closed except when dispensing. Mixing is easier and more complete when the products are at room temperature or above. Part A in particular will become thick and hard to mix at lower temperatures. To reduce the viscosity, heat the product by placing a closed container of Part A in an empty five gallon pail and placing a hair dryer set to low heat in the bucket. After about 5 minutes of heating, the warm Part A will be noticeably lower in viscosity.

Part B will naturally amber with age with exposure to moisture in the air and when exposed to light. Store Part B in a dark, dry place and keep the container closed at all times except when dispensing. If your Part B has become amber, don't worry. While the amber color may be noticeable in the container, it typically becomes unnoticeable when the mixed coating is applied. Application over white surfaces may make the amber color more noticeable and is not recommended. Note that the amber color does not affect the curing or the durability of the finished coating.

## **MATERIAL PREPARATION** *(continued)*

### **SEALER COAT**

Mix Parts A and B together, following the Fill Coat Material Preparation Instructions (below). Then, after Parts A and B are thoroughly mixed, add another 1 part of Xylene (Mira 920 Solvent). The final mixture will be (1 Part A) : (1 Part B) : (1 Part Solvent).

### **FILL COAT**

Mix Part A and Part B together in a clean container at a ratio of 1:1 by volume. Mix by stirring gently but thoroughly, including scraping the sides and bottom of the container. Stirring too vigorously or quickly will introduce air that can cause bubbles in the dried coating. Do not use a drill mixer for this reason. Stir for about 5 minutes. As you mix you will notice that the product will start out clear, then turn cloudy with a swirly pearlescent appearance, and then become clear again. When the mixture becomes clear again the product is ready to use. You will also notice a reduction in viscosity as you mix.

Mix only enough material that you can apply in 30 minutes. If your project requires multiple mixings, use a separate clean mixing container for each mix.

## **APPLICATION**

### **SEALER COAT**

A sealer coat should be applied to porous surfaces such as wood or concrete. The prepared sealer mixture (see above for instructions) will be very low in viscosity, allowing it to seep into small pores in the surface. Use a brush to apply enough sealer to fully absorb into the surface but not so much that it forms puddles. Allow the sealer to dry for 24 hours before applying the Fill Coat.

### **FILL COAT**

Mira-Poxy can be applied as thickly as desired. 1/4" thick applications are common. Pour the mixture out onto the surface and use a squeegee and brush to spread. Work gently to avoid creating air bubbles that may become trapped in the cured coating. Allow the coating to flow and level for 15 - 30 minutes after application is complete. Then wave a hair dryer set to low airflow and heat a few inches above the surface to remove any small bubbles that are in the coating film. The hair dryer works by temporarily reducing the viscosity of the wet coating, allowing the bubbles to rise to the surface and pop. Limit activity and air movement in the workspace until the coating is cured to prevent airborne dust or debris from causing a blemish in the coating.

In some applications such as a counter top, it may be necessary to form a dike or barrier to prevent the coating from flowing over the side of the piece. To do this, use all-weather masking tape (3M 2090 "Blue" tape is recommended) on the edge of the part, extending above the surface to form a barrier. Mira-Poxy will not adhere to the sticky side of the tape allowing for easy removal.

After approximately 8 - 12 hours of cure (depending on temperature), Mira-Poxy will be cured to a cheese consistency. This is an ideal time to remove masking tape. Use a sharp knife to cut through the soft coating at the tape lines before removal. You may find it helpful to coat some sample panels at the same time you do the fill coat and use these panels to test the cure stage of the coating rather than risk blemishing the actual product.

### **ADDITIONAL COATINGS**

After Mira-Poxy has been allowed to develop hardness (24 - 36 hours), it can be finish coated with other products. This is often done if a lower gloss appearance is desired. Sand with 220 grit sandpaper prior to applying additional coatings.

## **CLEANUP**

Use Xylene (Mira 920 Solvent) to remove wet Mira-Poxy from surfaces and tools immediately. Mixing containers and application equipment such as brushes or squeegees should be stored temporarily in a safe place. After coating hardens these items can be disposed of in regular household trash. Often, the cured coating can be popped out of mixing containers, making them suitable for re-use. Cured Mira-Poxy will be very difficult to remove from most surfaces, so make sure your work area is clean immediately after you finish the project.