Introduction

Multi-Tech Products offers a Granite surface repair system which includes Acrylic filler, granite repair paste, and a clear topcoat. Changes have been made in the clear topcoat to improve the performance in a spa environment. A common problem in the past was the whitening and discoloration of the Granite repair. There are several reasons why a surface repair can become milky or chalked on wet area granite spa repairs.

I. The original standard acrylic clear topcoat had marginal performance when exposed to harsh spa conditions; particularly when ozone generators were introduced to the product category. Ozone is a strong oxidizer and can attack many materials. The new polyurethane topcoat, adopted in 2007, has much better resistance to spa chemicals. However, an individual repair professional could have used the old topcoat even after 2007.

II. No clear coat was applied so the whitening is in the granite repair paste.

Without the protective clear topcoat, the granite paste is subject to attack by ozone and other chemicals, which can turn the repair milky or chalky.

III. The clear coat was exposed to water or moisture too soon! This could happen by:

- Allowing moisture, water or dew to settle onto the fresh repair area within a few hours after the repair was completed.
- Closing the spa lid tight. This will generate moisture from the spa’s jet system causing the dry repair area and surface to stay wet.
- Filling the spa too soon (72 hours minimum @ 70°F) with water. This stops the cure process of the protective clear coat so that it fails to reach its peak hardness and integrity.
- Extreme cold temperature drops within the cure time. Water prevents the clear top coat from fully curing as well.

See Diagrams below:

Multi-Tech Products offers repair materials that match all popular colors and textures that are commonly sold in the industry. For specific color and effects information, refer to the color section on our website. For procedures on Granite and Acrylic filler, colors and effects refer to the Technical section for Spa Repair procedures. We also have a comprehensive video demonstrating the repair procedures, which can be ordered in the website store or by phone. To remedy the whitening problem, it is necessary to remove the chalked layer and reapply the protective clear coat application.
SAFETY PRECAUTIONS

Spa repairs require personal contact with a variety of components, each having its own unique characteristics. When handling these materials, read and follow the safe handling procedures on the labels and the applicable MSDS. During grinding, drilling, sanding, etc., eye and hand protection is required. Do not breathe vapors or mists. Individuals with a history of lung or breathing problems should not use or be exposed to this product. Keep away from heat, sparks and flame. Vapors may cause a flash fire. Close containers after each use. Dispose of properly.

MATERIAL SAFETY DATA SHEETS (MSDS)

All Material Safety Data Sheets can be found on our corporate web site by clicking on the following link: http://www.multitechproducts.com/pages/Material-Safety-Data-Sheets-%28MSDS%29.html

STEP 1:

Sand with a heavy grit sand paper (100 grit) or grind with a 50 grit (drill mount) sanding disk, attached to a variable speed drill. With the drill at a relatively low speed, grind away the chalky product to uncover the repaired surface. Be sure to keep the drill spinning and the grinding motion moving. Move with a side to side motion or circular action. This will help keep the shape of the surface and prevent grinding through the color.

STEP 2:

Wipe the surface clean using isopropyl alcohol and paper towel or a clean cloth. Dry or wet sand the grinding marks using 100 or 220 grit, wet dry sand paper. Wipe the surface dry and repeat the isopropyl alcohol application if necessary.

STEP 3:

Repeat the filling process if grinding was too severe (see Granite repair procedure in website), and reapply the granite color application followed by grinding and sanding. The surface is now ready for the protective clear coat application. The final finish should be sanded with 220 grit wet or dry sandpaper.
**STEP 4:**

With both components, clear topcoat and hardener, at room temperature mix them at a 3:1 ratio and stir. Working time prior to hardening should be about 15 minutes.

**STEP 5:**

To perfect the topcoat application technique using the chip brush as a tool, perform a trial run on a separate surface for practice and repeat until an acceptable gloss and texture is achieved.

**STEP 6:**

With a moderate amount of mixed product, apply the clear coat to achieve a smooth texture, simulating the granite surface. Try to achieve a textured effect by dabbing the product onto the surface. With the brush at a 45° angle apply an even, consistent finish. Avoid air pockets and pinholes by applying the product slowly when dabbing. Be sure to cover the entire sanded area, extending the application approximately 3 inches into the original gloss and texture area. This feathering technique will help make the repair unnoticeable. To create a heavy texture or a non-slip area, add our Texturing additive to the clear coat catalyst mixture at 64:1 ratio.

**KEEP IN MIND:**

During cure time and before returning the spa back to service, remember to:
- Keep the repair surface dry and moisture free for 3 full days.
- Block up the spa cover to allow air circulation.
- Allow a longer curing period of time in colder temperatures.
- *See diagrams on page 2.

Refer to our website for comprehensive procedures that can be downloaded.
DISCLAIMER

MULTI-TECH PRODUCTS CORPORATION assumes no obligation or liability for any advice furnished or for any results obtained with respect to this information. All such advice is given and accepted at the buyer’s risk. The disclosure of information herein is not a license to operate under, or a recommendation to infringe any patent of MTP or others. MTP warrants that the use or sales of any material, which is described herein, and if offered for sale by MTP does not infringe any patent covering the material itself, but does not warrant against infringement by reason of the use thereof in combination with other materials or in the operation of any process.

While there is no implied warranty the materials and techniques described in these procedures have been designed to withstand the normal operating conditions of spas. However, success of the final repair also is dependent on the experience and skill of the individual repair technician.