

DENSIFIER USER GUIDE

- Content:**
1. One big bag of granular crystal powder that looks like sugar: this is your densifier.
 2. One or more smaller bags of chalky powder: these are for filling pores and top curing.

Prepare Densifier Dissolve densifier in the purest water you can find such as deionized water, or purified drinking water. Add about $\frac{3}{4}$ final volume initially (~11oz per quart), dissolve all the crystals then top it off to the final volume. This solution is quite caustic so the best container to store in is glass containers such as beer bottles. Keep in a warm place and handle with care (gloves and safety glasses recommended). If this solution gets on your skin, rinse off immediately and neutralize the affected area with lemon juice or vinegar.

Prepare Curing solution: Put 1 teaspoon in a gallon size container and fill up with tap water. Shake well and then let the excess powder settle. Collect the clear solution into a spray bottle for use. Add more water to the first container to make more if enough powder remains.

Pre-treatment: with porous granite and concrete

- For concrete and raw granite surface, it may be necessary to pretreat after polishing with grit #200. To pretreat, dry out the surface completely, dilute just enough densifier 3 times in water and brush it on the surface.
- Let it soak in and dry out, then repeat the process until the stone does not absorb any more solution or does not seem to dry out any more. Continue polishing with higher grit.

Densifier treatment:

- One treatment is recommended after polishing with grit #800. Dry the surface completely and spread a thin layer of densifier onto the surface and let it soak. When this layer has almost dried out, squeegee any wet spots around to fill pores and dry spots. When this layer has dried out completely, spread another layer of densifier on and let it soak. Repeat with another layer if the stone is still soaking. Then let it dry slowly and naturally. If you only have a small area, then it is best to cover with a sheet of plastic right after spreading on the last layer of densifier on and let it soak overnight or longer. Then remove the plastic cover, squeegee wet spots around evenly if needed and let it dry completely before curing.
- Spray curing solution on without disturbing the surface: When an area has dried out, spray some more on and repeat at least a few more times when the surface dries out. It's cured when the surface no longer feels soapy when wet. Let it dries out completely before polishing again.

Tips and tricks:

- Your densifier solution only reacts when it is wet, thus you want to keep the surface hydrated for as long as possible during treatments. After three layers of densifier, it is normal to have a dried thin film on top locking in the moisture underneath for hours. This densifier forms concrete bonds with rocks, granite, concrete..., and the chalky curing compound, so it takes almost as long as cement to cure. Densifier can also be used for sealing grout and other cement surfaces as well.
- You can coat the surface with a thin layer of densifier and then cure it into rock and polish them down. If you do this, you'll need to cure it completely in a few days. Higher grits polishing pads have problem removing uncured densifier coatings because they are soft and elastic.
- Most cheaper pre-fab granite slabs today are treated by wax thus they repel water and keep the densifier out so treat only where needed especially newly cut and polished surface areas.
- Densifier solution can be used as a cleaner/sealer so wipe a small amount on a dry surface occasionally and then wipe it off after 5 minutes with a wet rag. A totally densified, sealed, and polished surface has an almost wet look.