

Care and Maintenance of Epoxy Resin Laboratory Work Surfaces

Epoxy Resin work surfaces are durable, non-porous, man-made stone products that are relatively unaffected by most chemicals, heat, flame and moisture. These super-tough surfaces' physical properties are seldom compromised; however, they do require periodic care and maintenance throughout the life of the lab or school room to keep the surfaces looking like new. Whether you are a facility owner, manager, custodian or lab user, it is helpful to know how to maintain the good appearance of your lab's work surfaces.



Chemical Resistant • Non-Absorbant • Self-Extinguishing

Regular Care Procedures

Durcon recommends instituting a regimen of monthly or quarterly inspections of all surfaces, sinks and joints, plus daily or weekly cleanings to maintain your epoxy resin's original finish and to help ensure a safe, uncontaminated working environment. The following list contains items you may wish to have on-hand for regular cleaning and to handle most problems that may occur.

- Acetone or Paint Thinner
- Crystal Simple Green®
- White Scotch Brite® Pads (always use moist or wet)
- Finish Oil (Mineral Oil)
- Murphy's Oil
- Clean Rags or Sponges
- Chamois Cloth
- Mild Soap or Household Cleaner
- Two-part Smooth-On® epoxy grout

Note: Never use wax or polish containing wax on epoxy resin work surfaces or sinks. Also, never use abrasive pads, powders or liquids (such as Soft Scrub) as dulling of the surface will result.

Work Surface Care

Promptly wipe up all spills. Acetone should be used (where allowed) to thoroughly clean surfaces. Apply and wipe away with a paper towel or a clean rag. As an alternative, Crystal Simple Green® (or comparable household cleaning product) can be used to clean surfaces.

An occasional application of finish oil or Murphy's Oil® can restore the luster to the surface, but remember; too much oil can cloud the surface.

- Apply oil by pouring the minimum amount of oil necessary to cover the surface area onto a clean rag.
- Thoroughly rub in oil using a circular motion.
- Wipe away excess oil with a clean rag.
- A chamois can be used to buff the surface to the desired sheen.

Epoxy Resin Sink Care

Laboratory sink areas usually present the greatest cleaning and maintenance challenges. Sinks are a collection point for dirty and wet lab ware which leaves liquids, residue and chemicals on the surface for extended periods of time. Sink areas will require a more thorough cleaning regimen than dry bench tops as well as more frequent inspections. Sink inspections should include all sink surfaces and joints in sink the area including the outlet joint and the sink rim joint above and below the work surface. Cracked or pitted joints should be filled immediately with two-part Smooth-On® epoxy grout to prevent leaking and damage to the supporting casework.

Marring, Scratches & Stains

If there is a more serious cleaning issue it is important to identify the problem before trying to remedy it.

Marring

Most metals are softer than the work surface and can leave a mar if pulled across the top. Marring is matter left on the surface that appears as a line and remains smooth to the touch. Marring can almost always be removed with acetone or with mild cleaning products and elbow grease.

Always try the softest cloth and the weakest solution (soap and water) first.

If marring persists, progress to a white Light Duty Scotchbrite® Pad moistened with stronger solutions. Never use a dry Scotchbrite pad or a more abrasive pad and always apply the minimum amount of pressure required on the surface to remove the mar.

Scratches

Harder metals, abrasives and heavy or sharp items can dig into the surface resulting in a scratch. Scratches usually appear as a lighter shade of the surface and will be rough to the touch. Scratches in epoxy resin are permanent but will not affect work surface performance.

An aesthetic remedy for scratches is coloring in the void with a permanent marker. This option will never perfectly match the color and gloss of the surrounding surface.

Stained Surfaces

Staining can be caused by chemicals left to dry on the surface. Chemical stains usually lighten or bleach the surface but can also roughen and even crack the top. Like scratches, chemical stains are permanent and, if they have caused too much damage, you may need to replace the top.

Special Care Issues

Epoxy resin products (especially glued in sinks) are subject to thermal shock and are not warranted against damage from liquid nitrogen or dry ice. Possible effects caused by the improper disposal of these materials include joint failure and/or sink fractures.



Work Surface Care

The performance of Durcon epoxy resin work surfaces will not be compromised by normal laboratory use. Maintaining the appearance depends upon good housekeeping practices. If you wish, copy and post the following "Do's and Don'ts" around the lab as a reminder to users.

Do's

- Do clean up liquid and dry spills immediately
- Do protect the feet of lab apparatus with rubber, felt or a protective pad
- Do place a trivet under all hot containers and components
- Do extinguish all flames on the worksurface
- Do apply a thin coat of finish oil or Murphy's Oil periodically
- Do educate all users in the proper care of epoxy resin work surfaces

Don'ts

- Do not drag items across the surface
- Do not cut, chop or strike items directly on the surface
- Do not drop items onto the surface
- Do not use abrasive sandpaper or metallic scouring pads on work surfaces or sinks
- Do not store chairs on the worksurface without a protective covering such as cardboard
- Do not melt dry ice with hot water directly on the surface or in the sink as the thermal shock may break the joints or cause the sink to fracture
- Do not wax the surface (or use polish containing wax)



By following these simple guidelines your Durcon laboratory work surfaces will look good for the life of the lab. Please take time to share this document with your lab workers and cleaning personnel and institute a maintenance program to help ensure the safety and beauty of your lab. If you have further questions, please contact our customer service department at 512-595-8000 or send an e-mail to sales@durcon.com.