

TYPE	FILM THICKNESS	APPLICATION METHOD	THINNER	CLEAN UP	DRY TIME		
					TACK	USE	FULL CURE
Clear, Inorganic, Reacted Siloxane	<b>Wet</b> 38.5-50 microns (1.5 - 2 mils) <b>Dry</b> 10 - 15 microns	Spray, then Back-Roll or Pad	MicroKleen™ AD1-103	MicroKleen™ AD1-919	2 Hours (average)	8 - 12 Hours (light use)	5 Days (75° F, 50% RH)

**DESCRIPTION:** MicroGuard® AD1000 (formerly AD00/703/708) is a patented, clear, reacted siloxane finish that provides exceptional abrasion, chemical and stain resistance properties when applied onto ceramic or porcelain hard tile & grout, epoxy terrazzo, painted metals and non-ferrous metals. The non-porous, inorganic coating will not support the growth of microbes or fungi. Coating heavily glazed or high gloss tile surfaces with minimal available anchor pattern (surface profile) is not recommended.

- **Hard Tile & Grout** MicroGuard® AD1000 is designed for installations over bare hard tile surfaces. It may be used on properly prepared ceramic or porcelain tile; horizontal or vertical; interior or exterior installations, wherever resistance to chemicals, water exposure, staining, abrasion, mold mitigation is desired.
- **Epoxy Terrazzo**
- **Slate**

**SURFACE PREPARATION:** The tile and grout must be clean, dry and free from dirt, oil, mildew spores, efflorescence, wax, temporary treatments or any other surface contaminate that could negatively affect adhesion or curing of the installed film.

1. Remove any wax or temporary treatments using a commercially available stripper.
2. Use MicroKleen™ PLC-1 Industrial Cleaner & Degreaser, per label instructions. Use mechanical agitation (swing machine or Square Scrub) with an aggressive cleaning pad. Then, remove residue with extraction equipment. Repeat if necessary until surface is cleaned and rinsed. Check surface pH to establish a 6 to 8 range before product installation.
3. If necessary, neutralize the tile & grout floor surfaces with MicroKleen™ PLC-AN Cleaner/Neutralizer, per label instructions. Pick up acid residues thoroughly with extraction equipment. Check surface pH again.

\*Allow surface to dry before product application. Grout may be porous and can hold water for extended periods. Use fans and dehumidifiers to help with drying. Use a moisture meter to ensure grout moisture content is 40% or less.

**MIXING INSTRUCTIONS:** MicroGuard® AD1000 is a three-component material and must be properly catalyzed before use. AD1000 is packaged, in kit form, with separate (short filled) containers for Components **A, B & C**.

**MS5 -1 Product Mixer Instructions (large quantities):**

1. Pour Component **A** into a clean, white HDPE 5-gallon plastic bucket, then, pour in Component **B**.
2. Using the Adsil MS5-1 Product Mixer, blend the **A & B** Components for 15 minutes. You will notice an exothermic heat reaction during mixing. This is normal. Keep the bucket covered with a cut 'V' notched lid during the mixing process.
3. Next, add the Component **C** into the admixture of the **A & B** Components. Blend for 15 additional minutes.
4. Cover the bucket with a full lid and set aside in a location away from heat sources or direct sunlight. Allow the mixed material to chemically induct for 12 hours before application. The usable pot life of mixed material is up to 72 hours (after induction time has passed) when stored between 60° & 85° F.

**MS-S Magnetic Mixer Instructions (small quantities):**

1. Using an Adsil approved mixer, pour Component **B** into Component **A** bottle. Drop in the magnetic stirrer, place the cap loosely on the container and mix for 15 minutes. You will notice an exothermic heat reaction during mixing. This is normal.
2. Pour Component **C** into the admixture of Components **A & B**. Loosely cover the container and blend for 15 additional minutes.
3. Remove the mixing stirrer, re-cap the container and set aside in a location away from heat sources or direct sunlight. Allow the mixed materials to chemically induct for 12 hours before application. The usable pot life of mixed material is up to 72 hours (after induction time has passed) when stored between 60° & 85° F.

**APPLICATION:** Mask or protect fixtures and adjacent surfaces not to receive coating. Slip on linen booties before stepping onto the previously cleaned surface. Run a Micro-Fiber™ mop wetted with MicroKleen™ AD1-919 over the tile before product installation.

**Sealing & Coloring Grout** – Acrylic color seal (Grout Perfect® ColorSeal) may be utilized to renew and seal porous grout prior to MicroGuard® installations. Allow the acrylic color seal to dry 2-4 hours before MicroGuard® installation.

- **Spraying & Back-Padding** – Strain the product before use utilizing a paint cone strainer. Using a pump-up sprayer to apply the properly mixed and reduced AD1000 onto several rows of tile. Concentrate on grout line areas. With a pre-wetted pad, pull the excess product towards you until it leaves an even film thickness. Never push the coating forward with the pad because it will leave a wave of coating at the far end. Use the edge of the pad to dab any grout that is not uniformly coated and back pull again. Check for any skips or holidays often and touch up while you can still reach those affected areas with the pad. Use the grout lines as a natural guide.
- **Spraying & Back-Rolling** – Use the same method as above, only use the roller to level out the coating. You can push the roller in a forward motion, as long as it is not oversaturated with coating (leaving excess coating on the floor).

# MICROGUARD®

AD1000 Tile, Epoxy Terrazzo Application

## PRODUCT YIELD:

MicroGuard® AD1000 yields approximately 800+ ft<sup>2</sup> per gallon, depending on application method, tile texture and grout porosity. Actual field conditions and application methods will dictate the final product yield.

## THINNING:

After chemical induction, but before installing MicroGuard® AD1000 it may be desirable to add MicroKleen™ AD1-103 Retarder Solvent. Add solvent as needed to promote better flow and leveling properties (typically 25% for non-porous surfaces).

## CURING INFORMATION:

MicroGuard® AD1000 cures by a cross-linking chemical reaction. This protective clear treatment dries to the touch in about 2 hours, but a full cure is not realized for 5 days. Floors can generally be opened for light use after 8 to 12 hours. Avoid premature cleaning of the film and exposure to cleaning chemicals or heavy abrasive use for a minimum of 5 days following application.

- **MicroGuard® AD1000 does not cure when air, material or surface temperatures are below 60° F. Do not mix or apply when air or surface temperatures are below, or will be below 60° F throughout the curing cycle.**

## CLEAN UP:

- Application tools and spray equipment should be cleaned using MicroKleen™ AD1-919 Spray & Equipment Cleaner (IPA).
- Clean up drips, spills and over spray by saturating a cloth with MicroKleen™ AD1-919 and wiping the affected area before the coating dries to touch.
- Dispose of alcohol saturated cloths in a safe manner.

## POST-INSTALLATION CLEANING & MAINTENANCE:

- Clean with water ONLY for the first 5 days after application.
- For most general, post-installation cleaning and maintenance situations, and in order to ensure the best cleaning results without damaging the MicroGuard® AD1000 film, use a neutral pH cleaner (no higher than 8 on the pH scale).
- For best results, Adsil strongly recommends using the OmniFlex (Kaivac) Dispense-and-Vac System for maintaining the floor surface.
- Prolonged use of the mop & bucket technique for cleaning will leave the floors dull and dirty looking.
- **Do not use harsh or abrasive alkaline cleaners for post-installation maintenance.**

## RECOAT:

- When/if a recoat becomes necessary, dull the gloss of the first installed coat by hand sanding or by mechanical agitation using a fine grit sanding screen, nylon grit brush, or abrasive pad. Wet sanding minimizes dust generation.
- Remove sanding dust before product installation. Pick up residue with rinse and vacuum extraction equipment.
- If the recoat 'pulls away' from the first coat, stop immediately, wipe up the fresh coating with MicroKleen™ AD1-919 (ISO) and continue sanding until the gloss is fully removed.
- **Always recoat with the original coating that was installed.**

## ASTM LAB TESTING:

All MicroGuard® product performance testing is performed by accredited, third-party testing laboratories in full compliance with each particular ASTM Testing Protocol.

- ASTM D 4060 Taber Abrasion (CS-17 Wheel @ 1000 Cycles) – 24.2 mg loss ASTM
- G 21 Fungal Growth – Zero (0) Growth
- ASTM D 2047 Coefficient of Friction, Dry
  - Leather - 0.63
  - Standard Neolite (average of 3 test samplings) - 1.17

### Adsil Cares:

**Please handle all chemicals safely and use the proper personal protective equipment (PPE).**

### Adsil

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