

TYPE	DRY FILM THICKNESS	APPLICATION METHOD	THINNER	CLEAN UP	DRY TIME		
					TACK	USE	FULL CURE
Clear Inorganic Reacted Siloxane	WFT = 1.5 to 2 mils DFT = 10 to 15 microns	Spray, T-Bar & Pad,	MicroKleen™ AD1-103 AD1-919	MicroKleen™ AD1-919	2 Hours (average)	8 to 12 Hours (light use)	5 Days (75° F, 50% RH)

DESCRIPTION: MicroGuard® AD708 is an inorganic, clear, reacted siloxane finish, which is designed to provide excellent abrasion, chemical, mildew and stain resistance properties to ceramic or porcelain hard tile & grout, epoxy terrazzo and slate. Extreme caution should be exercised before coating heavily glazed or high gloss tile surfaces with minimal available anchor profile.

- **Hard Tile & Grout**
- **Epoxy Terrazzo**
- **Slate & Décor Stone**

MicroGuard® AD708 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.

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 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) with a commercial black pad or 'Clean-Grit' scrub brush. 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™ Phosphoric Acid Etch & Clean PLC-35, per label instructions. Pick up spent acid residues thoroughly with extraction equipment. Check surface pH again.

Allow surface to dry before product application. Grout may be porous and seams can hold water for extended periods. Use fans and dehumidifiers to help with drying. Use a moisture meter to ensure grout moisture content is 20% or less.

MS5-1 Product Mixer Instructions: MicroGuard® AD708 is a three-component material and must be properly catalyzed before use. AD708 is packaged, in kit form, with separate (short filled) containers for Components **A**, **B** & **C**. To mix:

- Pour the Component **A** into a clean, white HDPE 5 gallon plastic bucket, then, pour in the Component **B**.
- 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 bucket covered with a cut 'V' notched lid during the mixing process.
- Next, add the Component **C** into the admixture of the **A** & **B** components. Blend for 15 additional minutes.
- Cover the bucket with a full lid and set aside. Allow the mixed material to chemically induct for 12 hours before application. The usable pot life of mixed material is up to 72 hours when stored between 60° & 85° F.
- After chemical induction, but before application, add MicroKleen™ AD1-103 Retarder Solvent as needed.

Magnetic Mixer Instructions:

- Using a standard lab magnetic mixer, pour the Component **B** into the Component **A** bottle. Drop in the magnetic stirrer, place the cap loosely on the container and mix for 15 minutes. An exothermic reaction will occur.
- Pour the Component **C** into the admixture of Components **A** & **B**. Cover the container and blend for 15 additional minutes.
- Remove the mixing stirrer, re-cap and seal the container and set aside for 12 hours to chemically induct. Set aside in a location away from heat sources or direct sunlight. The usable pot life of mixed material is up to 72 hours.

APPLICATION: – 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. Mask or protect fixtures or adjacent surfaces not to receive coating.

CONVENTIONAL SPRAY – Use an air compressor rated at 3+ CFM @ 90 PSI. Strain properly mixed product through a 100 mesh cone filter into an Adsil AS1-1 General Spray System pressure pot. Using quick connects, attach the fluid line to the spray wand /gun housing a #5 or #10 cone tip seated into the 45° connector. Set the fluid (pot) pressure gauge to 85 PSI. With fluid (pot) pressure alone, apply by over lapping each spray pass by 50%. Always apply in a thin and even film deposit. Back pad with a T-bar, if necessary. Maintain a working wet edge. Coat to natural breaks. Use grout lines as guides so skips are avoided. Wear respirator & safety glasses. In most instances it is best to spray and back-pull with a T-Bar/Pad. Spray AD708 as noted above, then, back-pull using a T-Bar and quality pad. Use slow, continuous strokes and feather edges.

T-Bar & Pad – Strain product before use. Pour out a thin line of properly mixed and reduced AD708 onto several rows of tile. With a pre-wetted pad, back pull the product, then, pull in a right angle cross-hatch and finish stroke in the direction of your original pull. Use continuous strokes and feather edges. Make sure grout lines are fully coated. Use the nose of the pad to dab any grout that is not uniformly coated and back pull again. Check for any skips or holidays often and while you can still reach those affected areas with the T-Bar. Use grout lines as natural breaks.

Sealing Grout – One coat of MicroGuard® AD708 is generally sufficient for protecting hard tile. However, to fully seal porous grout or to uniformly 'wet' porous colored grout it may be desirable to first install a coat of MicroGuard® AD702 Sealer, per Technical Sheet TS-34. Acrylic Color Seal may also be utilized to seal and renew porous grout preliminary to the MicroGuard® installations.

CLEAN UP:

Application tools and spray equipment should be cleaned using MicroKleen™ AD1-919 Spray & Equipment Cleaner (IPA). Flush the pot, reservoir, hose, tip and gun thoroughly until all AD708 residue has been cleaned from the spray system. Remove the tip/ nozzle and clean thoroughly before replacing.

Clean up drips, spills and over spray by saturating a cotton 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.

PRODUCT YIELD:

MicroGuard® AD708 will yield 800 + ft² per gallon, depending on application method, tile texture and grout porosity. Actual field conditions and application methods will dictate the final product yield.

When a recoat becomes necessary, dull the gloss of the first installed coat by sanding or by mechanical agitation using 200 grit sanding screens. Remove sanding dust before product installation. Wet sanding minimizes dust generation. 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.

ASTM LAB TESTING:

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 – 0.63 Leather; 1.17 Standard Neolite (average of 3 test samplings)

Note: All MicroGuard® product performance testing has been accomplished by accredited, third party testing laboratories and in full compliance with each particular ASTM Testing Protocol.

POST CLEANING:

For most general post cleaning maintenance situations and in order to ensure the best cleaning results without damaging the MicroGuard® AD708 film, use Adsil MicroKleen™ PLC-20 MAINTAIN Neutral pH Cleaner. For best cleaning results, dilute MicroKleen™ PLC-20 1 part cleaner to 10 parts water. Wet mop the surface with the PLC-20 solution, then, mop thoroughly with clean water or pick up cleaning residues with extraction equipment. For difficult grime removal, incorporate the use of a swing machine and white pad or non-aggressive brush. Then, pick up residue with extraction equipment.

Do not use harsh or abrasive alkaline cleaners for post maintenance.

THINNING:

Before installing MicroGuard® AD708 it may be desirable to post add MicroKleen™ AD1-103 Retarder Solvent into the product after its induction period. Add solvent as needed to promote better flow and leveling properties.

In cooler ambient or surface environments, thin using MicroKleen™ AD1-919 Isopropyl Alcohol as needed.

CURING INFORMATION:

MicroGuard® AD708 cures by a cross-linking chemical reaction. Whereas this protective clear treatment dries to touch in about 2 hours, 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® AD708 does not cure when air, material or surface temperatures are below 50° F. Do not mix or apply when air or surface temperatures are below, or will be below 55° F throughout the curing cycle.

Adsil, 1901 Mason Avenue, Suite 101, Daytona Beach, Florida 32117 USA

PH: 386-274-1382

FAX: 386-274-1798

WEB: www.mymicroguard.com

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