

Technical Data Sheet TS-22a

AD1000 All-In-One Hard Surface Finish - Concrete

TYPE	FILM THICKNESS	APPLICATION METHOD	THINNER	CLEAN UP		DRY TIME	
					TACK	USE	FULL CURE
Clear, Inorganic, Reacted Siloxane	Wet 38.5-50 microns (1.5 - 2 mils) Dry 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 when applied onto bare concrete, concrete terrazzo floors or brick-paver surfaces. The non-porous, inorganic coating will not support the growth of microbes or fungi. MicroGuard® AD1000 is ideal for interior diamond honed & polished concrete or concrete terrazzo floors. AD1000 can also be applied as a penetrating, wet-look sealer onto exterior concrete or concrete pavers.

	Concrete Floors	MicroGuard® AD1000 is designed for installations over interior honed & polished concrete or
	Concrete Terrazzo	concrete terrazzo floors (400 grit minimum), bare exterior concrete, open decorative stone or
	Brick Pavers	brick-pavers. Apply as an impregnating wet-look sealer or wherever resistance to abrasion,
\triangleright	Décor Stone	chemicals, water exposure, staining and mold mitigation is desired.

SURFACE PREPARATION: Bare concrete must have aged at least <u>28 days</u> before coating and must be clean, dry and free from dirt, oil, grease, curing or release agents, laitance, efflorescence, adhesives, mildew or other contaminates that could negatively affect adhesion. If uniform color is important, paint, stain or dye concrete first.

- 1. Repair all crumbling concrete or cracks with a suitable patching material.
- 2. For general concrete cleaning, 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 surface with MicroKleen™ PLC-AN Cleaner/Neutralizer, per label instructions. (New concrete should always be treated with MicroKleen™ PLC-AN Cleaner/Neutralizer.) Pick up acid residues thoroughly with extraction equipment. Check surface pH again.

*Allow the floor to dry completely before product installation. Use a moisture meter to ensure moisture content is 40% or less.

*When MicroGuard® AD1000 is used as a finishing coat over an Adsil approved base coat, allow the base coat to dry according to product instructions before finish-coating with AD1000. No sanding of the base coat is required. Do not wipe with IPA.

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 <u>15 minutes</u>. You will notice an exothermic heat reaction during mixing. This is normal. Keep the bucket covered with a cut 'V' notched lid during mixing.
- 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 <u>15 minutes</u>. You will notice an exothermic heat reaction during mixing. This is normal.
- 2. Pour the Component **C** into the admixture of Components **A** & **B**. Loosely cover the container and blend for <u>15</u> 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: MicroGuard® AD1000 is <u>best</u> applied on concrete by spray application. Small areas or perimeter edges can be rolled or brushed. Add MicroKleen™ AD1-103 Retarder Solvent as needed to promote better flow and leveling properties.

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 prewetted 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. (continued)





APPLICATION (continued):

- Spraying & Back-Padding (continued) 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).

PRODUCT YIELD:

• For polished, densified or sealed concrete, MicroGuard® AD1000 yields approximately 800+ ft² per gallon.

For exterior concrete or paver bricks, yield is approximately 300 +/- 50 ft² per gallon. Use as a 'wet-look' impregnating sealer only. Best application is a back-pack pump sprayer and then back roll.

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.

CURING INFORMATION:

MicroGuard® AD1000 cures by a cross-linking chemical reaction. This protective clear treatment dries to the touch in about 2 hours, but <u>a full cure is not realized for 5 days</u>. 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 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:

- If a second coat of MicroGuard® AD1000 is desired, allow the first coat to dry/cure for at least 24 hours. Sand between
 coats with fine sandpaper or screen (150 to 200) to dull surface gloss and create a suitable anchor pattern. For mechanical
 scarifying methods, use a 150 or 200 sanding screen and swing machine.
- · 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 (average of 3 test samplings)
 - Leather 0.63; Standard Neolite 1.15
- ASTM D 2485 High Temperature, Method B
- NFSI Certified High Traction

Adsil Cares:

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

Adsil

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