

**EXTREME PERFORMANCE PRODUCT
FOR PROFESSIONAL USE ONLY**

Adsil, Inc.

TECHNICAL SHEET TS-22

MicroGuard® Concrete Clear Gloss Treatment AD703

TYPE	DRY FILM THICKNESS	APPLICATION METHOD	THINNER	CLEAN UP	DRY TIME		
					TACK	USE	CURED
Clear Inorganic Reacted Siloxane	WFT – 1 to 1.5 mils DFT – 8 to 12 microns	Spray is Preferred Method	MicroKleen™ AD1-103 AD1-919	MicroKleen™ AD1-919	2 hours (average)	12 hours (light traffic)	5 to 7 days (full cure)

DESCRIPTION: MicroGuard® AD703 is designed to impart exceptional chemical, abrasion & stain resistance properties when applied onto bare concrete, concrete terrazzo or brick-paver surfaces. Further, the inorganic film will not support the growth of mold and mildew. MicroGuard® AD703 is ideal for interior concrete floor installations when applied over MicroGuard® AD702 Concrete Clear Sealer as part of a faster recoat concrete sealer/finish coating system where maximum chemical and abrasion resistance is important. AD703 can also be applied as an impregnating sealer on exterior concrete.

- Interior Concrete Floors
- Exterior Concrete
- Concrete Terrazzo
- Brick Pavers
- Decorative Stone

Interior concrete slab or concrete terrazzo floors, bare exterior concrete, decorative stone or brick-pavers as an impregnating wet-look sealer, wherever resistance to chemicals, water exposure, topical staining or abrasion resistance is desired.

SURFACE PREPARATION: Bare concrete must have aged at least 28 days before coating and must be clean, dry and free from oil, grease, dirt, laitance, efflorescence, adhesives, mildew or other contaminants that could negatively affect adhesion. Repair all crumbling concrete or cracks with a suitable patching material.

- For general concrete cleaning, use MicroKleen™ PLC-1 Industrial Cleaner & Degreaser. Apply PLC-1 to the surface after diluting the cleaner, 1 part PLC-1 to 1 part clean (hot) water. Use mechanical agitation with a commercial black pad or clean grit brush attachment. Rinse with clean water & vacuum reclaim. Make sure the floor is rinsed free from all residues.
- New concrete should be treated with MicroKleen™ Phosphoric Acid Etch & Clean PLC-35, per label instructions. Rinse thoroughly with clean water.
- Check surface pH to ensure a range of 6 to 8 is achieved.
- Allow the floor to dry completely before product installation. Use a probe moisture meter to verify moisture content is 15% or less.

Large industrial flooring can be efficiently prepared by using a dry preparation method, such as Blast Track™ – Wheelabrator recycling blast equipment. Use the least aggressive blast media.

MIXING INSTRUCTIONS: MicroGuard® AD703 is a three-component material and must be properly mixed before use. This product is packaged, in kit form, with separate containers for Components **A**, **B** & **C**. To mix:

- Pour the Component **A** liquid into a clean, white or clear HDPE 5 gallon plastic bucket, then, pour the Component **B** liquid into the Component **A**.
- Using the **Adsil** Product Mixer blend the **A** & **B** components for 15 minutes. Avoid allowing the blade to strike the side of the pail during mixing. Always cover bucket with a ‘V’ cut notched lid during mixing.
- Next, add the Component **C** into the admixture of the **A** & **B** components. Blend for 15 additional minutes.
- Allow the mixed material to induct (“sweat in”) a minimum of 12 hours before use. Place a full lid on the bucket during induction. Pot life of mixed AD703 is up to 72 hours.

APPLICATION: MicroGuard® AD703 is best applied by spray application. Small areas or perimeter edges can be rolled or brushed. Read all MSDS information carefully before product use.

ADSIL CONVENTIONAL SPRAY SYSTEM – Use an air compressor that can deliver a minimum of 3 CFM @ 90 PSI. Use an Adsil dual regulated pressure pot with a special Adsil spray wand/gun housing a #5 or #10 cone tip in a 45° connector. Set the fluid (pot) pressure gauge at 80 to 85 PSI and the air pressure gauge at 0 PSI. No air hose to the gun is needed, only fluid hose. With fluid (pot) pressure alone, spray by overlapping each spray pass by 50%. Keep the tip perpendicular to surface. Always apply in an even film deposit. Maintain a working wet line.

AIRLESS – Mount a liquid filled glycerin pressure gauge between the pump and the fluid hose to monitor pressure settings. Attach a 12” or 18” extension wand onto the airless gun. Place a 311 to 613 tip into a reverse-clean housing and attach to the end of the wand extension. Set the pump pressure at 500 to 650 PSI. Check the spray delivery. The proper pressure setting is the lowest setting that gives a good fan delivery free from tailing, yet, minimizes over spray. Spray by over lapping each pass by 50%.

ROLLER – Smaller surface areas can be coated with a short nap roller cover. Fill cover with product and apply in slow passes. Finish by using one directional roller strokes. Avoid over-rolling and always maintain a working wet line. Always post add sufficient MicroKleen™ AD1-103 Retarder Solvent to promote good film flow and leveling.

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CLEAN UP:

Application tools and spray equipment should be cleaned using MicroKleen™ AD1-919 Spray & Equipment Cleaner (IPA). Flush the pump, hose, pot and gun thoroughly until all AD703 residue has been cleaned from the spray system. Remove the tip and nozzle housing and clean thoroughly before replacing onto the gun.

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® AD703 will yield 300 +/- 50 ft² per gallon on porous, pitted, brushed or unsealed concrete and up to 650 ft² per gallon on smooth trowel, polished, densified or sealed concrete; surface condition and application method will dictate the final yield.

Recoat Information - If a second coat of MicroGuard® AD703 is desired, allow the first coat to dry/cure for at least 24 hours. Sand between coats with fine sandpaper or screen (200 grit) to dull surface gloss. For mechanical scarifying methods, use a 150 or 200 sanding screen. Remove sanding dust.

When MicroGuard® AD703 is used as a finishing coat over MicroGuard® AD702 Sealer, allow a minimum of 4 hours dry time of the sealer before finish coating with AD703. No sanding of the MicroGuard® AD702 is required.

ASTM LAB TESTING:

ASTM D 4060 Taber Abrasion (CS-17 Wheel @ 1000 Cycles) – 20.5 mg loss

ASTM G 21 Fungal Growth – Zero (0) Growth

ASTM D 2047 Coefficient of Friction; Dry – 0.41 Leather; 0.96 Commercial Neolite

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

POST CLEANING:

For general post cleaning maintenance requirements and in order to ensure the best cleaning results without damaging the AD703 film, use MicroKleen™ PLC-1 Industrial Cleaner. For best cleaning results, dilute the PLC-1 Cleaner 1 part cleaner to 20 parts clean (hot) water. For difficult dirt and grime removal, incorporate the use of a soft bristle scrub brush mounted onto an extension handle. Liberally wet-mop the surface with diluted MicroKleen™ PLC-1 cleaning solution. Then, rinse away or mop thoroughly with clean water.

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

THINNING:

If you are applying MicroGuard® AD703 when ambient conditions are hotter than 85⁰ F, when relative humidity is less than 50% or during windy conditions, it may be desirable to post add MicroKleen™ AD1-103 Retarder Solvent into the product after its induction ("sweat in") period. Add as needed.

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

CURING INFORMATION:

MicroGuard® AD703 Concrete Clear Gloss Treatment cures by a cross-linking mechanism. Full cure is achieved after 5 to 7 days (normal ambient). Whereas light to moderate foot is possible after 12 hours, its maximum chemical and abrasion resistance will not be realized until full cure has occurred.

MicroGuard® AD703 **does not cure** when air or surface temperatures are **below 50⁰ F**.

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Advanced Siloxane Technology – Preserve, Prolong, Protect

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