

TECHNICAL DATA SHEET TS-22 AD703 Concrete Clear Gloss Treatment

TYPE	DRY FILM	APPLICATION	THINNER	CLEAN UP		DRY TIME	
	THICKNESS	METHOD			TACK	USE	FULL CURE
Clear	WFT =	Spray,	MicroKleen TM	MicroKleen TM	2 Hours	8 to 12 Hours	5 Days
Inorganic Reacted	1.5 to 2 mils DFT =	T-Bar & Pad, Short Nap Roller	AD1-103 AD1-919	AD1-919	(average)	(light use)	(75 ⁰ F, 50% RH)
Siloxane	10 to 15 microns						

DESCRIPTION: MicroGuard[®] AD703 is designed to impart exceptional chemical, abrasion & stain resistance properties when applied onto bare concrete or concrete terrazzo floors and brick-paver surfaces. Further, the inorganic film will not support the growth of mold and mildew. MicroGuard[®] AD703 is ideal for interior diamond honed & polished concrete or concrete terrazzo floor installations, when applied over MicroGuard [®] AD702 base coat, where maximum chemical and abrasion resistance is important. AD703 can also be applied as an impregnating, wet-look sealer onto exterior concrete or concrete pavers.

- Concrete Floors
- Concrete Terrazzo
- Brick Pavers
- Décor Stone

Interior honed & polished concrete or concrete terrazzo floors; 400 level minimum. Bare exterior concrete, open decorative stone or brick-pavers as an impregnating wet-look sealer, wherever resistance to chemicals, water exposure, topical staining, mold mitigation or abrasion resistance is desired.

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

For general concrete cleaning, use MicroKleenTM PLC-1 Industrial Cleaner & Degreaser. Pre-dampen the surface with water. 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 nylo grit brush attachment. Rinse with clean water & vacuum reclaim with extraction equipment. Make sure the floor is rinsed free from all residues. Check surface pH to ensure a range of 6 to 8 is achieved. Adjust accordingly.

New concrete should be treated with MicroKleenTM Phosphoric Acid Etch & Clean PLC Acid Cleaner/Neutralizer, per label instructions. Pick up spent acid residue with extraction equipment. Hone & polish to between a 400 and 800 level.

Check surface pH again to ensure a range of 6 to 8 is achieved. Adjust accordingly.

Allow the floor to dry completely before product installation. Use a probe moisture meter to verify moisture content is 20% or less.

MS5-1 Mixing Instructions: MicroGuard[®] AD703 is a three-component material and must be properly mixed before use. This product is packaged, in gallon or quart kit form, as short-filled **A**, **B** & **C** components. 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 MS5-1 Adsil Product Mixer blend the A & B components for 15 minutes. 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 <u>12</u> hours before use. Place a full lid on the bucket during induction. Usable pot life of mixed AD703 is up to 72 hours when stored between 60⁰ & 85⁰ F.

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 <u>15</u> minutes. An exothermic reaction will occur.
- Pour the Component **C** into the admixture of Components **A** & **B**. Cover the container and blend for <u>15</u> additional minutes.
- Remove the mixing stirrer, re-cap and seal the container and set aside for <u>12</u> 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 <u>72</u> hours.

APPLICATION: MicroGuard[®] AD703 is <u>best</u> applied by spray application. Small areas or perimeter edges can be rolled or brushed. Add MicroKleenTM AD1-103 Retarder Solvent as needed. Read all MSDS information carefully before product use.

CONVENTIONAL SPRAY – Use an air compressor that can deliver a minimum of 3 CFM @ 90 PSI. Use an Adsil AS1-1 dual regulated pressure pot with the Adsil spray wand/gun housing a #10 cone tip mounted in the 45⁰ connector. Pour the properly mixed, inducted and reduced AD703 through a cone strainer into the pressure pot. Set the fluid (pot) pressure gauge at 85 PSI. No air hose to the gun is needed, only fluid hose. With fluid (pot) pressure alone, spray by overlapping each pass by 50%. Always apply in an even film deposit. Maintain a working wet line.

ROLLER – Smaller surface areas can be coated with a short nap lambs' wool or mohair 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 MicroKleenTM AD1-103 Retarder Solvent to promote good film flow and leveling.



CLEAN UP:

Application tools and spray equipment should be cleaned using MicroKleen [™] AD1-919 Spray & Equipment Cleaner (IPA – Isopropyl Alcohol). Flush the pot, reservoir, hose, 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 MicroKleenTM 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 up to 800 ft² per gallon on polished, densified or sealed concrete.

For exterior concrete or paver bricks, the yield should be 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.

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 (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

When MicroGuard[®] AD703 is used as a finishing coat over MicroGuard[®] AD702 base coat, 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 (averaged)

Note: All MicroGuard[®] product performance testing has been accomplished by accredited, third party testing laboratories and in full compliance with each 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 MicroKleenTM PLC-20 MAINTAIN pH Neutral Cleaner. For best cleaning results, dilute the PLC-20 Cleaner 1 part cleaner to 10 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 MicroKleenTM PLC-20 cleaning solution. Then, extract or mop thoroughly with clean water.

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

THINNING:

Before applying MicroGuard[®] AD703 it may be desirable to post add MicroKleenTM AD1-103 Retarder Solvent into the product after its induction ("sweat in") period, but before product installation. Add Retarder Solvent as needed until good flow and leveling properties are achieved.

In cooler ambient or surface environments, thin using MicroKleenTM 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 days (normal ambient of 75⁰ F and 50% RH). Whereas light to moderate foot is possible after 8 to 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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