MICROGUARD® Anti-Graffiti

TECHNICAL DATA SHEET TS-52

AD00 Anti-Graffiti Clear Gloss Surface Treatment

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 12 microns	Spray, T-Bar & Pad, Short Nap Roller	MicroKleen™ AD1-103 AD1-919	MicroKleen™ AD1-919	2 Hours (average)	5 Days (graffiti removal)	5 Days (75^0 F, 50% RH)

DESCRIPTION: MicroGuard® AD00 is designed to create an impenetrable clear, gloss surface veneer, which acts as an effective barrier for the removal of most common forms of graffiti. The AD00 film forms a layer of micro glass-like crystals that graffiti does not readily penetrate or adhere to the hydrophobic film. The subsequent removal of graffiti is accomplished with much less effort and significantly less shadowing**.** MicroGuard® AD00 is a non-sacrificial anti-graffiti coating and is highly resistant to graffiti tagging, such as aerosol paint, permanent marker or ink. Effective with most commercially available graffiti removers.

- **Dense or Sealed Concrete**
- **Certain Painted Surfaces**
- **Hard Tile & Grout**
- **Fiberglass & Gel Coat**
- **Stainless Steel & NF Metals**

WHERE TO USE: MicroGuard® AD00 may be used on many painted surfaces, bathroom walls & stalls, elevator walls & doors, city or park benches, subway walls, powder coated metal siding, highway sound barriers, bridges or overpasses, tight CMU, tilt-up concrete walls, brick, stone, etc;

SURFACE PREPARATION: The surface to be coated must be clean, dry and free from dirt, oily grime, mildew, oxidation and graffiti. Pressure washing, steam cleaning and/or the use of MicroKleen™ Industrial Cleaner & Degreaser PLC-1, per label instructions, are common methods for most contaminate removal. Allow surfaces to fully dry.

In many instances, because of the presence of existing graffiti, it may be advantageous to re-paint the surface with specific generic types of conventional paints and/or coatings, which are recommended for the specific substrate and compatible with MicroGuard® AD00. Contact Adsil Technical Service for paint selection advice. In these cases, allow the paint of choice to fully cure, then, treat the newly painted surface with AD00 Clear Treatment. Glossy paints or surfaces will need to be scarified with 220 grit sandpaper.

Graffiti Removal - Common graffiti can be lifted from the coated surface with most commercially available graffiti removers or by pressure washing; 3 GPM, 1,200 PSI or a combination of both. Allow AD00 to cure for 5 days before attempting graffiti removal.

MIXING INSTRUCTIONS: MicroGuard® AD00 is a three-component material and must be properly mixed for curing to occur. This product is packaged, in gallon & quart kit form, with separate short-filled containers for the **A**, **B** & **C** components.

MS5-1 Product Mixer Instructions:

1 . Pour the Component **A** liquid into a clean, white or clear HDPE plastic bucket, only. Then, pour the Component **B** liquid into the Component **A**.
2 . Using the MS5 -1 Adsil Product Mixer, blend the two components for 15 minutes. You will notice a moderate exothermic reaction during blending. This is normal. Keep bucket covered with a notched lid during mixing.
3 . Next, pour the Component **C** liquid into the admixture of Components **A** & **B**. Blend for 15 additional minutes.
4. Remove and clean the mixer blade/shaft & lid. Cover the bucket with a full lid and set aside away from sunlight or heat sources for 12 hours to chemically induct ("sweat in"). After a minimum of 12 hours induction time, apply as directed. The usable pot life of mixed material is up to 72 hours, depending on ambient conditions. NOTE: For best results, it is desirable to mix this product the night before actual application begins.

Magnetic Stirrer Instructions:

1. Using a standard lab magnetic mixer, pour the Component **B** liquid into the Component **A** plastic container. Drop in the magnetic stirrer, place the cap loosely back on the container and mix for 15 minutes.
2. Pour the Component **C** liquid into the admixture of Components **A** & **B**. Place the cap back on the container and blend for 15 additional minutes.
3. Remove the mixing stirrer, re-cap & 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, at normal ambient conditions of 75^0 F & 50% RH.

CURING INFORMATION: MicroGuard® AD00 cures by a cross -linking chemical reaction. Whereas the product will dry to touch in about 2 hours, full cure of the film is not realized for 5 days. **Do Not** attempt graffiti removal with harsh chemicals or solvents for at least 5 days following product installation.

Curing of the film does not occur at ambient or surface temperatures below 50^0 F.

Do Not Apply when ambient or surface temperatures are, or will be, below 55^0 F throughout the 5 day curing cycle.

Powered by: Adsil CORPORATION

APPLICATION: MicroGuard® AD00 is best applied using spray techniques. When applying onto bare masonry surfaces, it is best to first seal the surface with MicroGuard® AD702 base coat. Refer to Technical Sheet TS-34.

Airless Spray – Mount a glycerin (liquid filled) pressure gauge between the pump and fluid hose so that pump pressure can be monitored. Seat a 513/613 reverse -clean tip into the gun/nozzle housing. Run the lowest pump pressure possible, while still maintaining a good fan pattern, free from "tailing". Typically, this is between 600 - 650 psi. Spray in a cross -hatch pattern in order to avoid skips and holidays. Overlap each spray pass by 50%. Always apply in a thin and even film deposit and never exceed 2.0 mils wet film thickness. Always mask, cover and/or protect adjacent surfaces not to be coated. Move automobiles and vehicles away from the spray area. Check wind conditions during application to determine direction of over spray drift.

Conventional Spray – Select an air compressor that can deliver a minimum of 3 CFM @ 90 PSI. Use a dual regulated pressure pot with a good production gun (Binks, Kremlin, Devilbiss) Set the fluid (pot) gauge at 10 to 12 PSI and the air pressure gauge at 15 to 20 PSI (working pressure). Close down the fluid needle adjustment screw, on the back of the gun, to its tightest position, then, turn the adjustment screw 2 turns counter clockwise to allow for controlled material feed to the tip. Check the spray pattern and make minor adjustments to the fluid & air needles, as needed.

Roller – Flat surfaces may be coated using quality mohair or lambs' wool roller covers. Always use the shortest nap cover possible for the surface texture being coated. Avoid over rolling this product. Finish stroke in one direction. Spray and back rolling is a common and often recommended installation process.

Brush – Small surface areas can be coated using a natural hair bristle or nylon brush. Apply AD00 by using a series of one directional brush strokes. Flow the product onto the surface in an ultra-thin film deposit. Do not over brush.

Caution – Do not allow any water contact on freshly installed film, e.g. rain, dew, fog, sprinklers, etc; for a minimum of 4 hours following product installation; 6 to 8 hours when air or surface temperatures are cooler than 60^0 F. For exterior work, check area Doppler forecasts and hygrometer readings to calculate dew point.

CLEAN UP: Application tools and spray equipment should be cleaned using MicroKleen™ Spray & Equipment Cleaner (IPA) AD1-919. Flush tools, pump, hose, pressure pot, etc; thoroughly until the AD00 residue has been cleaned from the equipment.

Clean up drips or over spray using a cloth saturated with MicroKleen™ AD1-919 before the AD00 dries to touch. Dispose of alcohol saturated cloths in a safe manner.

PRODUCT YIELD: MicroGuard® AD00 yields approximately 600 and up to 800 ft^2/gal over dense, non-porous or sealed surfaces and 350 and up to 550 ft^2/gal over more textured surfaces.

Actual field conditions, surface texture and method of application will dictate final product yield. Heavily textured or porous surfaces, such as cinder block, split -faced block or porous brick are extremely difficult to seal fully with MicroGuard® AD00 and graffiti shadowing may remain within the recess areas.

Bare Masonry Type Surfaces – such as CMU & mortar, tilt-up walls, poured in place walls, fired brick, concrete columns, concrete bridge overpass panels, concrete sound barrier walls or open, unglazed decorative stone will always need to be sealed with MicroGuard® AD702 base coat before proceeding to the installation of MicroGuard® AD00.

ASTM LAB TESTING:

ASTM D 4060 Tabor Abrasion (CS-17 Wheel @ 1000 Cycles) – 20.5 mg loss
ASTM G 21 Fungal Growth – Zero (0) Growth

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.

THINNING: It may be desirable to post add MicroKleen™ AD1 -103 Retarder Solvent into the product after its 12 hour induction ("sweat in") period and before installation. Add Retarder Solvent as needed to affect good flow and leveling properties.

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

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

PHONE: 386-274-1382 FAX: 386-274-1798 WEB: www.mymicroguard.com

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Advanced Siloxane Technology – Extreme Performance Product