

**EXTREME PERFORMANCE PRODUCT
FOR PROFESSIONAL USE ONLY**

Adsil, Inc.

TECHNICAL DATA SHEET TS-16

MicroGuard® HVAC/R Coil & Fin Clear Protective Treatment AD35

TYPE	DRY FILM THICKNESS	APPLICATION METHOD	THINNER	CLEAN UP	DRY TIME		
					TACK	USE	CURED
Inorganic Siloxane	6 – 8 microns	Conventional Spray	Do Not Thin	MicroKleen™ AD1-919	1 hour (average)	2 hours (re-power unit)	5 to 7 days (full cure)
DESCRIPTION:		<p>MicroGuard® AD35 is designed for application onto air handling equipment in order to resist the destructive effects of corrosive environments, such as salt laden coastal air, industrial acid rain and high alkalinity contaminants commonly associated with arid desert environments. Its low solids formula penetrates deeply into coils and fins, thus, ensuring complete protection. Extensive field and laboratory testing, under extreme exposures has demonstrated that MicroGuard® AD35 significantly inhibits mold and mildew growth, which promotes better indoor air quality and also reduces corrosive degradation of HVAC/R equipment. Plus, its micro-thin film does not act as an insulating barrier to heat exchange efficiencies, rather, air-flow efficiencies are maintained and energy costs are reduced over the life of the HVAC/R Unit asset.</p>					
WHERE TO USE:		<p>Evaporator Coils Condenser Coils Non-Ferrous Metal Weathered Cabinets</p> <div style="border: 1px solid black; padding: 5px; display: inline-block;"> <p>Aluminum & Copper – Provides long-term corrosion protection over bare aluminum or copper HVAC/R coils, fins, fans & support structures. Suitable for weathered factory painted cabinets.</p> </div>					
SURFACE PREPARATION:		<p>Eliminate power to the HVAC/R Unit at the circuit box. Remove access doors and fan screens, in accordance with professional industry standards. Mask, remove or protect all non-hermetically sealed electronic parts, such as relays. Gently broom clean or vacuum the fin and tube areas free from dust, dirt, cobwebs, leaves and/or other debris. If necessary, carefully straighten bent or folded fins with a fin comb.</p> <p>Using an Adsil Pump and Wand System, flood the coils, fins, fans and cabinet with Adsil MicroKleen™ Industrial Cleaner & Degreaser PLC-1 reduced 1:1 with clean, hot water. Apply the diluted PLC-1 from all sides of the coils. Allow the cleaner to soak on the surface for 5 minutes. Do not allow the cleaner to dry. If spot drying occurs, lightly refresh with more PLC-1. After 5 minutes, rinse away the cleaner with clean tap water. Repeat the cleaning and rinsing process. Rinse well beyond the “suds” removal phase. Capture and reclaim all rinse material. Dispose of properly.</p> <p>After cleaning and tap water rinsing has been accomplished, thoroughly remove all traces of cleaner residue from the pump spray device by flushing with liberal quantities of clean water. Next, using the now clean pump spray device, flush the surface with MicroKleen™ Final Rinse AD72-930. Methodically work from the top, proceeding down and thoroughly rinse both sides of the coils. Allow the unit to dry completely. Use an electrically powered leaf blower to accelerate drying.</p>					
MIXING & CATALYZING:		<p>MicroGuard® AD35 is a three-component material and must be properly mixed before use. This product is packaged, in kit form, with separate containers for the A, B & C components. Wear respirator and eye protection devices. To mix:</p> <ul style="list-style-type: none"> • Pour the A component liquid into a clean, white or clear HDPE plastic bucket, only. Then, pour the B component liquid into the A component. • Using an Adsil Product Mixer or a variable speed drill and mixing paddle, blend the two components at low speed for <u>15</u> minutes. Take care to keep the mixing paddle from striking the side of the bucket while the paddle is rotating. You will notice a moderate exothermic heat reaction as the components are blended together. This is a normal product reaction. • Next, pour the C component into the admixture of the A & B components. Blend for <u>15</u> additional minutes at low speed. • Once the blending is completed, cover the bucket with a lid and set the mixed material aside for <u>30</u> minutes to chemically induct (“sweat in”). The usable pot life of mixed material is 4 to 6 hours. 					

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APPLICATION:	<p>Coils & Fins - MicroGuard®AD35 is best applied using an Adsil dual regulated pressure pot and spray wand assembly. Set the fluid pressure gauge at 15 psi and the air pressure gauge at 15 psi (working pressure). Position the spray wand tip about 6 inches from the surface and trigger the wand. Work from the top and proceed down the coil. Spray from both sides of the coil. If you can see spray mist passing through the coil to the other side, the pressure gauge settings are sufficient. Increase or decrease the pressure settings of both gauges by 5 psi increments until total penetration of the AD35 is realized through the coil and fin area. Remember, the surface <u>must be completely dry</u> before application begins.</p> <p>Cabinet Enclosure – Using the above mentioned spray equipment, set the fluid gauge at 10 psi and the air pressure gauge at 15 psi. Spray MicroGuard® AD35 onto the cleaned cabinet in a thin film deposit free from runs and sags. When coating new, gloss painted cabinets, it will be necessary to rub the wet coating into the paint and remove excess coating with a cotton cloth. Re-assemble the HVAC/R Unit and after 2 - 4 hours, re-power at the circuit box.</p>
CLEAN UP:	<p>Thorough cleaning of the spray system is essential to ensure continued operational efficiency. Purge all remaining AD35 from the pressure pot and fluid hose. Pour at least 1 quart of MicroKleen™ Spray & Equipment Cleaner (IPA) AD1-919 into the pressure pot. Make sure that all interior surfaces of the pot reservoir have been cleaned free from AD35 residue. Next, pressurize the pot and spray the AD1-919 through the wand and nozzle, until the entire quart of AD1-919 has been evacuated into a collecting bucket. Finally, spray one more quart of MicroKleen™ AD1-919 through the wand and nozzle. This will remove all lingering AD35 residue from the equipment fluid hose. Remove the nozzle/tip from the wand and thoroughly clean with AD1-919. Reassemble the tip onto the wand and store the equipment.</p> <p>Note: Dispose of collected cleaning material according to current local standards.</p> <p>Remove debris from the job site area and after 2 - 4 hours, power up the Unit.</p>
PRODUCT YIELD:	<p>Residential HVAC/R (5 tons or less) – 1 quart of MicroGuard® AD35 will treat approx. 4 tons. Commercial HVAC/R (6-25 tons) – 1 quart of MicroGuard® AD35 will treat approx. 6 tons. (26-100 tons) – 1 quart of MicroGuard® AD35 will treat approx. 7-8 tons.</p>
ASTM LAB TESTING:	<p>ASTM B 117 Salt Chamber – 6,000 hours (aluminum) ASTM D 4060 Tabor Abrasion (CS-10 Wheel @ 1000 Cycles) – 12.5 mg loss ASTM G 21 Fungal Growth – Zero (0) Growth</p>
POST MAINTENANCE:	<p>Periodic post cleaning of the coil and fin assemblies will help improve the general operating efficiencies of the HVAC/R Unit. For proper post cleaning, use MicroKleen™ PLC-1 Industrial Cleaner & Degreaser, diluted 1 part cleaner to 20 parts hot water. Using an Adsil Pump & Wand System, flood the surface and allow the cleaner to “work” for 2 to 3 minutes. Then, rinse liberally with clean tap water.</p> <p>Limited Warranty - In order to maintain peak operating efficiency of the HVAC/R Unit and also maintain any limited warranty, cleaning maintenance must occur at least every 180 days.</p> <p>Never use harsh commercial coil cleaners for post cleaning maintenance.</p>
CURING INFORMATION:	<p>MicroGuard® AD35 cures by a cross-linking reaction. Whereas this protective clear dries to touch in about 1 hour, full cure is not realized for 5 to 7 days. Avoid premature cleaning of the coils & fins or exposure to harsh chemicals for at least 5 days following application. Avoid contact with water for 2 – 4 hours after installation. Do not apply when air, product, or surface temperatures are, or will be below 60° F.</p> <p>Curing of the film does not occur at ambient or surface temperatures below 50° F.</p>
Microsil™ Technology:	<p>Adsil, 1 Hargrove Grade, Suite 1-K, Palm Coast, Florida 32137 USA PHONE: 386-445-8239 FAX: 386-445-0471 WEB: www.adsil.com</p>

(Revision Date 01/05)

Advanced Siloxane Technology – Preserve, Prolong, Protect

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