



# *Introducing the Next Generation HVAC Coating*

**MICROGUARD1™ 3500**





Stop using coatings that **ONLY** protect against corrosion!

Stop applying thick coatings that impede heat transfer and make your equipment work harder!

Stop using organic coatings that feed mold and degrade your indoor air quality!

### There IS a Better Way

Introducing Adsil's next generation HVAC/R coating - MicroGuard1-3500. MG1-3500 is among the most advanced protective coating available. Proven to positively arrest corrosion, protect against chemical and environmental assault, extend the life of equipment, save energy and mitigate microbial growth providing sustainable results with a verifiable ROI.

### Know Your Coating Chemistry

Chemistry is the key to a coating's performance. MG1-3500 has a proprietary inorganic, siloxane-based formula. Many times stronger and thinner than traditional organic coatings, it provides superior protection from the harshest environment, has no impact on heat transfer, can coat microchannels and retains a long-lasting barrier that protects HVAC coils against corrosion for an extended period of time (typically 5 years or more). Unlike its organic counterparts, MG1-3500 coating cannot be degraded by heat, light or oxygen (photo-oxidation) or feed mold because of its chemical make-up.

COATING COMPARISON	MicroGuard1-3500 HVAC/R Coating	Traditional HVAC Coatings
Coating Chemistry	In-Organic	Organic
Bond Strength	193.5 (33% Stronger)	145
Degraded by Heat, Light or Oxygen	No	Yes
Mold/Fungal Food Source	No	Yes
Dry Film Thickness (Microns)	6-8	25-75
Impedes Air Flow, Heat Transfer	No	Yes
Pencil Hardness	9H	HB -5H
ASTM G21 Rating	Rated 0 – No Growth	Pass* or Not Tested
Flexibility	180 Degree	1/8" or Less

\*ASTM G21 does not outline pass/fail criteria

### Preserve

MicroGuard1-3500 is an inorganic cross link cured, glass-like film that chemically bonds to non-ferrous metal ensuring maximum adhesion and protection in the harshest environments. At 6-8 microns thick, the coating preserves your HVAC/R system's original performance without affecting heat transfer or laminar air flow.

### Prolong

MG1-3500 can prolong your HVAC/R system beyond its normal engineered life expectancy, extending the replacement cycle and capital budget outlay. Deferred capital expenses and provided energy savings drop directly to the bottom line.

### Protect

MG1-3500 offers superior corrosion protection, but it doesn't stop there! MG1-3500's advanced formula protects against pollution and chemical assault other coatings can't, cannot oxidize, will not support mold growth improving indoor air quality. Its hydrophobic properties repel debris, reduce maintenance and save energy protecting your assets and your bottom line.

**ASK FOR MICROGUARD1 3500** – the inorganic HVAC coating that protects against corrosion, mold growth, chemicals, heat, UV light, pollution and more... extending the life of your HVAC equipment, improving indoor air quality and saving energy, translating directly to a ROI.



### FEATURES & BENEFITS

**LOW VOC Product**  
Environmentally friendly formula with “0” Global Warming Potential value after cure

**Extreme Corrosion Protection**  
ISO 16773 EIS tested to be significantly more resistant to ion migration than previous formula to positively arrest corrosion

**Unmatched Chemical, UV and Pollution Protection**  
Proven to withstand the harshest environments

**9H Pencil Hardness for Superior Durability**

**Mitigates Fungal and Microbial Growth**  
Inorganic formula cannot feed microbes resulting in reduced maintenance costs and better indoor air quality

**Covalently Bonds with 5-B Adhesion**  
Strongest adhesion available to aluminum, copper and stainless; and will not delaminate, peel or crack

**Microscopically Thin**  
No air flow reduction or heat transfer degradation after coating for better efficiency and energy savings; protects both round tube and microchannel coil designs

**UV Stable**  
Will not photo-oxidize, yellow or flake

**Hydrophobic**  
Coils are easier to clean, stay cleaner longer and green cleaners can be effectively used

**Sustainable with Verifiable ROI**  
Lowers maintenance costs, lowers life-cycle costs and extends service life of equipment

**Coats Compressors, Evaporator Coils and Painted Surfaces**

**REACH Exempt and RoHS Compliant**  
Complies with EU regulations

**LEED Points Available**  
Building certification rewards sustainable and environmentally friendly decisions and can qualify to obtain state and local government incentives

**Installation in the Field or at a Coating Center**  
Professional installation with fast turnaround time

## *Interrupt the Expensive Replacement Cycle of Your HVAC Equipment!*

### FULLY TESTED AND PROVEN

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Rigorous in house and independent testing includes:

- ASTM G-21 Anti-Fungal and Anti-Microbial (*Rated "0" Growth*)
- ISO 16773 EIS Barrier Corrosion/Chemical Resistance (*Significantly More Resistant to Ion Migration Than AD35*)
- ASTM D4060 Taber Abrasion
- ASTM D3363 Pencil Hardness (*9H*)
- ASTM D3359 Cross Hatch Adhesion to Metals (*5B on Aluminum, 5B on Copper, 5B on Stainless*)
- ASTM B117 Salt Spray Barrier (*10,000 hours*)
- UV Chamber

*Preserve, prolong and protect your most valuable assets, and your bottom line, with MicroGuard1!*

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*MicroGuard1™ 3500 (MG1-3500) is designed for application onto air handling equipment to resist the destructive effects of corrosive environments, such as salt-laden coastal air, or industrial environments. Its inorganic, low viscosity formula penetrates deeply into the coil fin-pack and molecularly bonds to it, ensuring maximum protection. Extensive field and laboratory testing have demonstrated that MG1-3500 significantly inhibits mold growth, which promotes better indoor air quality. 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 may be reduced over the life of the HVAC/R Unit asset. Ideal for field or shop installations.*

Visit [www.adsil.com](http://www.adsil.com)  
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