

Document Type / Category Information For Use (IFU) / Antimicrobial Surface Treatment of Walls, Floors and Surrounds within HVAC&R systems.

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Document Title Antimicrobial Surface Treatment of Walls, Floor and Surrounds within HVAC&R Systems

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1. PURPOSE

This Antimicrobial Surface Treatment Procedure outlines the process to effectively apply Surface Treatment to walls, floors and surrounds within the HVAC&R system. This helps the end use customer maintain compliance with

- AS3666
- BA19

This IFU covers the steps and actions that need to be taken in the use of AerisGuard Surface Treatment products. The IFU meets the requirements of AS/NZS ISO 9001: 2008 standards.

All Aeris Environmental personnel, sub-contractors and certified applicators are expected to take an active role in establishing, implementing and maintaining this Procedure in line with this IFU according to their role and responsibility.

The purpose of acting in accordance with this IFU is to have an uninterrupted, smooth process that ensures that correct process and use of the products are followed. This IFU shall also be part of Aeris's continuous improvement initiative.

2. PROCEDURE DESCRIPTION AND PROCESS FLOW

The Surface Treatment of walls, floor and surrounds within HVAC&R systems should be conducted by a Certified AerisGuard Applicator in accordance with Aeris Environmental Recommendations, this IFU, your work order and / or the job specification. This process should be completed in conjunction with the application of AerisGuard Antimicrobial Surface Cleaner and Sanitiser as outlined in **IFU 003 AerisGuard Surface Cleaner Sanitiser of walls, floor and surrounds in HVAC&R Systems.**

The steps in this procedure are as follows:

1. Preparation
 - a. Product Handling & Packaging
 - b. Apparatus & Equipment Required
 - c. Product Dilution and Application Rates
 - d. PPE & OHS Requirements
2. Setup
3. Application Process
4. Cleanup Process
5. End of IFU

3. PROCEDURE

1. Preparation

a. Product Handling & Packaging

Applicators should consult the product Safety Data Sheet (SDS) prior to use and handling.

AerisGuard Surface Treatment is supplied in a ready to use 5L bulk container and a 400gm Aerosol can.

Always store the product out of direct sunlight and not exposed to hot environments for extended periods of time.

b. Apparatus & Equipment Required

Tarpaulin/Plastic Sheeting

Application cloths / sponge

Occy-straps

Mop & Bucket

Spray gun with fine mist ----- or →
(used to apply bulk product)

Extendable pole for applying

Ladder

Clamps/Tape

Power leads

Empty spray

bottle

(For application of bulk product)

c. Product Dilution and Application Rates

- The AerisGuard Surface Treatment is supplied in READY TO USE form and is available in 400gm Aerosol cans & 5L bulk containers.
- The Aerosol cans are designed for quick and simple application to surfaces as required.
- For larger areas or bigger jobs we recommend utilizing the 5L bulk product.

The application rate of Surface Treatment is 60ml/m² for both the Aerosol and bulk application processes.

d. PPE & OHS Requirements

- Gloves (*hi density rubber are recommended*)
- full or half face masks with filters rated for pesticides and solvents,
- safety goggles (*Wraparound Clear are recommended*)
- full body waterproof suit with hood (*Disposable suit is recommended to keep clean*)
- type 1 heavy duty safety boots should always be worn.

Note* Other safety equipment may be required. OH&S requirements can vary geographically or by project nature.

2. Setup

- a. Ensure that the unit is “off line / isolated from operation” prior to and during the entire Application process. This must be done by an appropriately certified person and may require arrangement with the engineering staff at the site if necessary.
- b. Ensure equipment being used is in good working order.
- c. Remove filtration media to protect the air filters from any deposits of dislodged contaminants, cleaning solution, treatment solution or water. A tarpaulin or plastic sheeting may be used to cover these if required.
- d. Other parts of the system may need to be covered as well, e.g. fan motor and sensors located near the area to be treated.
- e. All traces of dirt must be removed before leaving site.
- f. If the product is being used in commercial kitchens or cold food storage ensure that all food stuff are packed away and sealed from exposure to the treatment before cleaning and treatment commences.

3. **Antimicrobial Surface treatment**

a. Application of AerisGuard Surface Treatment

1. ensure the unit is isolated
2. **ENSURE ALL Surfaces to be treated have firstly been cleaned and sanitised as per Aeris IFU 003 AerisGuard Surface Clean Sanitise - floors, walls and surrounds of HVAC&R Systems.**
3. Apply Surface Treatment
 - To apply the bulk treatment,
 - Decant required product into tank / chamber of airless gun or pump pack spray bottle
 - Set nozzle on gun to the finest mist / spray setting possible
 - ENSURE area is WELL ventilated
 - Spray treatment on to surface area passing over top to bottom and left to right then bottom to top right to left – This can also be achieved by spreading product with a rag by extendable pole.
 - Ensuring a light coverage of 60ml per m².
 - To apply the 400gm Aerosol Treatment
 - ENSURE area is WELL ventilated
 - Hold the can 20cm from the Surface
 - Spray treatment on to surface area passing over the surface top to bottom and left to right then bottom to top right to left
 - Ensuring a light coverage of 60ml per m² of surface
 - Leave AerisGuard Surface Treatment to cure for the required time prior to returning the machine to active operation.
 - Bulk application
 - i.) requires minimum of 30mins curing time, ensure at the surrounding area is well ventilated and no overly noticeable odour is present prior to turning the machines back on.
 - Aerosol Application
 - ii.) requires 10-15mins curing time, ensure that the surrounding area is well ventilated and no overly noticeable odour is present prior to the unit being turned back on

4. Clean Up

- Ensure that all equipment is cleaned as per the manufacturers recommendation, packed up and removed from the area.
- Leave the worksite as you found it
- Remove and dispose of all empty product containers
- Remove all rubbish you have taken on site
- Return the machine to correct operational function

Warranty Reporting

- The 12 Month Antimicrobial warranty can only be activated by a Certified AerisGuard Applicator
 - To activate the warranty, the applicator MUST
 - Complete and attach the certification sticker to the asset treated
 - Scan the QR code on the sticker and register and submit the asset and job details.
 - a. Site name
 - b. Unit ID number
 - c. Treatment applied
 - d. Applicator contact details
 - e. Pre application Picture
 - f. Post application Picture
 - g. Picture of the certification sticker
- A certificate of certification can be requested for the client for an asset of whole building if required.
- Once the warranty is activated the applicator whom submitted the original warranty form will be notified in 11 calendar months that the asset requires reapplication to maintain the warranty. This process must be completed every 12 months. After the initial cleaning process, the subsequent clean will be less labour and time intensive.

Recommended additional process

It is highly recommended that all surfaces are Cleaned and Santised prior to this - IFU 003 AerisGuard Surface Cleaner & Sanitiser. The Cleaning & Treatment of Heating / Cooling coils servicing this area should also be carried out to assist in maintaining the highest standards of indoor air quality. Also use Aeris condensate drain pan tablets if appropriate. This will provide long term benefits:

- Prevention from recontamination (microbial growth)
- Sustained and long-term coil efficiency
- Improved machine operational performance
- Superior indoor air quality
- Compliance with AS366
- 12-month Antimicrobial Warranty
- Annual reminder to maintain warranty & AS3666 compliance.
- Residual Antimicrobial protection