



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

JUN 2 7 2011

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

Ms. Allison Buchheit CONTEC, Inc. PO Box 350 Spartanburg, South Carolina 29304

Subject:

Sporicidin ® Pro AD

EPA Registration No.: 8383-11 Application Date: 06/16/2011 Receipt Date: 06/16/2011

Dear Ms. Allison Buchheit:

The following amendment submitted in connection with registration under FIFRA, as amended, is acceptable.

## **Proposed Amendment**

Proposed final label

## **General Comments**

A stamped accepted label is enclosed for your records. Submit the final printed label before selling or distributing the product bearing the revised label.

Should you have any questions or comments concerning this letter, you may contact me by telephone at (703) 308-6416 or by e-mail at <a href="mailto:campbell-mcfarlane.jacqueline@epa.gov">campbell-mcfarlane.jacqueline@epa.gov</a> or Jaclyn Carl by telephone at (703) 347-0213 or by e-mail at <a href="mailto:carl.jaclyn@epa.gov">carl.jaclyn@epa.gov</a>. When submitting information or data in response to this letter, a copy of this letter should accompany the submission to facilitate processing.

Sincerely

Jacqueline McFarlane

Product Manager (34)

Regulatory Management Branch II Antimicrobials Division (7510P)

## Sporicidin ® Pro AD

## Fungistat Mildewstat

Bacteriostat Deodorizer

Sporicidin® Pro AD is a biocide for use in air ducts. This proven technology is an effective bacteriostat, fungistat (mold & mildew), mildewstat & deodorizer. It controls & inhibits odor causing bacteria, fungi & other odor causing organisms in air duct surfaces.

DIRECTIONS FOR USE ON AIR DUCTS ARE CONTAINED IN THIS BOOKLET AND MUST BE READ COMPLETELY PRIOR TO USING THIS PRODUCT. FOR USE BY PROFESSIONAL, TRAINED APPLICATORS.

Proudly made in the USA (flag graphic)

Fresh Scent, Citrus Scent, Fresh Citrus Scent, Pine Scent, Bioclean Scent, Sparkle Scent,

**Active Ingredients:** 

Phenol ......7.8%

Sodium Phenate ......0.3%

Inert Ingredients: .....91.9%

Total.....100%

ACCEPTED
JUN 2 7 2011
Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 8383—11

## Keep Out of Reach of Children

CAUTION. See left/back panel/pamphlet for additional precautionary statements.

Contec, Inc. / Sporicidin Division

525 Locust Grove

Spartanburg, SC 29303 (864) 503-8333 www.Sporicidin.com

Net Contents: (XXXX) Example: 32 oz concentrate

EPA Reg. No. 8383-11 EPA Est. No. <u>081937-SC-001</u>, <u>034346-NB-001</u>, <u>71670-SC-001</u>, <u>71979-SC-001</u>. See lot number for actual est. No.

Part No: XXXXXX

Institutional --- Industrial--- Residential

Sporicidin® Pro AD Concentrate Cleaning and Deodorizing Solution

Cleans, Deodorizes

Continuous Residual Activity up to 6 Months\*

Active Deodorizer\*: Provides continuous residual bacteriostatic activity against odor-causing bacteria for up to 6 months, if not removed from surfaces including plastics, latex, vinyl, glass, treated wood, metal, glazed porcelain, glazed tile, and paint.

Non-flammable

Alcohol/o-phenol Free

Does not contain alcohol/o-phenylphenol (o-phenol)

Eliminates Odors\*

Neutralizes Odors

Prevents odors in HVAC systems.

Controls microbial growth and odors in HVAC systems. Prevents growth of odor and damage-causing bacteria, fungus, mildew, and algae.

Inhibits odor and damage-causing bacteria, fungus, mildew and algae.

#### General Claims

This product contains no phosphorous.

This product will leave behind an odor-fighting barrier

This product is used to protect treated surfaces from decay, mold, or mildew.

This product inhibits bacterial growth on moist surfaces and deodorizes by killing microorganisms that cause offensive odors.

This product inhibits the growth of mold and mildew and their odors when used as directed.

## HVAC Systems Claims

- Internal HVAC surfaces of air handling units (equipment)
- · HVAC Systems as described on this label
- · Air-conditioners, recirculating air handling systems
- · For use in unlined ductwork only
- Hard, non-porous ducts
- Coils and drain pans of air conditioning and refrigeration equipment

## **Deodorizing Claims**

This product maximizes (improves) labor results by effectively controlling odors. This product neutralizes musty odors and tough odors from smoke.

This product is specially formulated to effectively eliminate offensive odors cause(d) by mold and mildew.

Eliminates odors caused by bacteria.

#### For use in HVAC systems in areas where mold can or has been a problem:

- Hospitals, nursing homes.
- EMS & fire facilities.
- · Day care centers and nurseries.
- Life care retirement communities, home healthcare institutions.
- Restaurants, bars, cafeterias, institutional kitchens, fast food operations and food storage areas.
- Supermarkets, convenience stores, retail and wholesale establishments, and laundries.
- · Manufacturing facilities.
- Food establishments, coffee shops, donut shops, bagel stores, pizza parlors, liquor stores.
- Police stations, courthouses, correctional facilities, jails, prisons, municipal government buildings.
- Institutional facilities, laboratories, factories, business and office buildings, hotels and motels.
- · Home, Hotel, motels, dormitories.
- Institutions, schools and colleges, churches, community colleges, universities, athletic facilities, gyms, gymnasiums, fitness and athletic facilities.
- · Health clubs and spas.
- Recreational facilities, sports arenas, sports complexes.
- Veterinary clinics, animal life science laboratories, kennels, dog/cat animal kennels, breeding and grooming establishments, zoos, and other animal care facilities.
- · Boats, ships, and barges, cruise lines.
- Commercial florist and flower shops.

**PRECAUTIONARY STATEMENTS: HAZARDS TO HUMANS AND DOMESTIC ANIMALS** Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove contaminated clothing before reuse.

## PERSONAL PROTECTION EQUIPMENT:

Applicators & other handlers must wear chemical-resistant gloves and eyewear (goggles/face shield), and chemical resistant coveralls.

## SPECIAL INSTRUCTIONS FOR APPLICATORS:

Applicators treating the inside of an air duct system with this product must wear chemical resistant coveralls, gloves, and goggles. In addition, the ductwork is ventilated with airflow of approximately 50 CFM per square foot of duct cross section as a safety precaution against pre-existing contaminants. If this is not possible, OSHA confined space regulations must be followed, and the requirements for a permit required space apply. These requirements include testing the atmospheric conditions (e.g. pre-existing hazardous or flammable contaminants, dust & oxygen levels etc.) and use of adequate respirator protection. If the level of contamination cannot be determined, then maximum respiratory protection (SCBA or airline with an escape bottle) must be used. If needed, the full-face respirator also be equipped with a spray mist pre-filter in addition to the charcoal filters.

#### PHYSICAL OR CHEMICAL HAZARDS

Do not mix with other chemicals. As with any chemical, precautions must be taken to minimize or prevent exposure to mists, lingering vapors, or residuals, which may cause discomfort or aggravate existing health conditions.

#### **First Aid**

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. IF IN EYES: Hold eye open and rinse slowly and gently with water for 5-10 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. If irritation persists, call a poison control center or doctor for treatment advice.

## STORAGE AND DISPOSAL:

Do not contaminate water, food or feed by storage and disposal.

Pesticide Storage: Store at room temperature in an area inaccessible to persons unfamiliar with its use

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Handling: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

## For Air Duct Applications:

ENGINEERING CONTROLS: During ULV, mist or spray application, the duct system interior must be maintained under slight negative pressure (0.015 to 0.025 In. WG) with an outdoor exhaust or using a negative air machine equipped with HEPA filter. Avoid higher pressure differentials that would be likely to disrupt the coverage pattern.

#### DIRECTIONS FOR USE FOR AIR DUCTS:

IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELING. THE PERSON APPLYING THIS PRODUCT IS RESPONSIBLE FOR FOLLOWING THESE DIRECTIONS UNDER BOTH STATE AND FEDERAL LAWS. FOR COMMERCIAL USE BY PROFESSIONAL, TRAINED APPLICATORS.

#### 1.0 General

Sporicidin® Pro AD is designed to be used as one component of a comprehensive HVAC & duct maintenance program. The purpose of such a program is to assure that the HVAC system & ducts function in the manner for which they were designed by remaining free from mold, microbial growth, and other contamination. This product must be used only in those cases where visible microbial growth has been detected in the system & then only after removing that growth, identifying & correcting the conditions that led to that growth. If you need help understanding any part of these instructions or have additional questions after reading these instructions, DO NOT APPLY THIS PRODUCT until you have received the answers for all of your questions.

## 2.0 Inspection

Prior to inspecting, cleaning, treating, repairing or otherwise working on a duct section, the HVAC system must be turned off or the section under repair physically isolated from sections in active use. Prior to any application of SPORICIDIN® PRO AD the system must be inspected for cleanliness & mechanical condition. When initiating any measures to repair, clean or treat ducts & associated HVAC system components, industry standards from the National Air Duct Cleaners Association (NADCA) & other organizations must be followed.

HVAC systems must be routinely inspected for cleanliness by visual means. The NADCA Standard, Assessment, Cleaning and Restoration of HVAC Systems (ACR 2002 or the latest revision), provides minimum inspection frequency schedules for ducts & other system components. More Information on NADCA standards can be obtained from the NADCA web site at www.nadca.com.

## 2.1 Cleanliness Inspection

According to NADCA Standards, HVAC system cleaning must be performed when any of the following conditions are found in the cleanliness inspection. If any of these deficiencies are found during inspection, cleaning in accordance with industry standards must be performed prior to the application of Sporicidin® Pro AD:

#### 2.1.1 Contamination

- \* HVAC systems must be operated in a clean condition. If significant accumulations of contaminants or debris are visually observed within the HVAC system, then cleaning is necessary. Likewise, if evidence of microbial growth is visually observed or confirmed by analytical methods, then cleaning is required.
- \* If the HVAC system discharges visible particulate into the occupied space, or a significant contribution of airborne particulates from the HVAC system into the indoor ambient air is confirmed, then cleaning is necessary.
- \*Heat exchange coils, cooling coils, air flow control devices, filtration devices, and air-handling equipment determined to have restrictions, blockages, or contamination deposits that may cause system performance inefficiencies, air flow degradation, or that may significantly affect the design of the HVAC system, require cleaning.
- \* Drain pans must be free from slime and sludge or other condition. Badly rusted or corroded drain pans must be repaired or replaced.
- \*Fans & fan housings must be free from accumulations of microbial growth & particulate matter.

If you need help in understanding existing industry standards, consult a qualified professional or contact Contec, Inc. / Sporicidin Division Customer Service at (864) 503-8333 for guidance and further direction or consult the information at www.epa.gov (search on "air ducts"). In addition, the following associations and society Internet sites can be consulted for information on standards and guidelines that have been developed:

ACCA - www.acca.org

ASHRAE - www.ashrae.org

NADCA - www.nadca.com

NAIMA - www.naima.org

SMACNA - www.smacna.org

## 2.2 Mechanical Inspection

SPORICIDIN® PRO AD must be used only on ducts & other HVAC system components in sound mechanical condition as defined in 2.2.1 and 2.2.2 (below). The HVAC system components must be designed and installed in conformance with industry standards and guidelines. Prior to using the product, inspect the ducts & assure that they are in sound mechanical condition. The following general guidelines, supplemented by industry standards from SMACNA, NAIMA, ASHRAE, ACCA and other organizations must be followed:

#### 2.2.1 Air Leaks and Mechanical Defects

The ducts must be free from air leaks and other mechanical defects. Air leaks will promote condensation of water that causes microbial growth and will lead to failure of SPORICIDIN® PRO AD to protect the system adequately.

## 2.2.2 Design and Installation

ASHRAE, SMACNA, NAIMA and other industry organizations have established guidelines and standards for the design and installation of HVAC and duct systems. Determine if the duct system you wish to treat conforms to industry practice. If you are not knowledgeable of industry guidelines and standards, consult a qualified professional or contact Contec, Inc. / Sporicidin Division at (864) 503-8333 for assistance.

In some situations, the inspection may reveal that the duct system or other component is badly damaged or in such poor operating condition that it cannot be corrected through cleaning and/or minor repair. In these situations, the system must be replaced or rebuilt in conformity to the applicable industry standards prior to using Sporicidin® Pro AD. Some (but not all) of the conditions that would indicate the need for major repairs or replacement of the system include:

- \* Improper size of ducts Ducts must be sized to achieve correct airflow. When air-handling equipment is changed or new inlet or outlets added, the size of all components in the system must be recalculated and replacements made as needed.
- \* Physical damage Crushed or deformed air ducts will restrict airflow and may leak (especially at joint areas). Damaged sections should be replaced or if there is extensive damage, the entire system must be replaced.
- \* Badly corroded metal components including duct sections, housings & cabinets, coil assemblies, drain pans, fans & their housings and heat exchange surfaces.
- \* Loose, damaged, friable or missing insulation Insulation is important in preventing moisture condensation and subsequent growth of mold & other organisms. If insulation (either interior or exterior) is damaged, missing or not properly fastened it must be repaired or replaced or the associated duct sections replaced. Air handling, mixer & VAV box housings are also normally insulated & this insulation must be checked for damage in a like manner.

Components that are contaminated with mold & other microbial growth may spread contamination while being removed from the building. To prevent this, place smaller items in plastic bags that should then be sealed before being removed. Treat larger items that cannot be safely packaged before being moved through occupied spaces. Care must be used during treatment to assure that fumes from the agent being used are not released into occupied spaces. Products used must be used according to their label directions.

Please contact Contec, Inc. / Sporicidin Division Customer Service at (864) 503-8333 for guidance on the appropriate disinfectant to use for treatment.

3.0 General Directions for SPORICIDIN® PRO AD Usage

SPORICIDIN® PRO AD effectively controls by inhibiting growth of odor causing bacteria, fungi, and other odor, stain or damage causing organisms in air ducts in residential, commercial, institutional, and industrial buildings. SPORICIDIN® PRO AD also eliminates odors associated with bacteria, mold, mildew, smoke, animals, cooking, spoilage, musty and other odors and removes odor-causing organisms when used as part of such a comprehensive preventative maintenance program in air ducts and other HVAC system components.

SPORICIDIN® PRO AD is a Bacteriostat, Fungistat (mold & mildew), Mildewstat and deodorizer for use in residential, commercial and industrial settings. It will not harm or damage HVAC system components.

SPORICIDIN® PRO AD is formulated for use in all kinds of ducts and HVAC components including:

- \*Unlined sheet metal
- \* Air supply and return ducts and plenums fabricated with plywood, OSB or other wood like material
- \* Flexible air ducts fabricated of metal or plastic
- \* Air distribution components such as air handlers, mixing boxes, transfer boxes, transitions, turning vanes, dampers, fans and fan housings and associated components
- \* Condensate drain pans

Follow the directions below for the specific type of duct or component being treated. It is vital that the following directions be carefully read and understood prior to using the product. If you have any questions, need further information, require clarification, or do not understand any of the directions, call Contec, Inc. / Sporicidin Division at (864) 503-8333 prior to use.

## 3.1 Application Instructions

Add 1 qt (32 oz) of SPORICIDIN PRO AD to one gallon of water. Shake well & wet the surfaces with the spray, giving special attention to cracks and crevices (SPORICIDIN® PRO AD should not stain any materials not stained by water but testing for compatibility on surface of concern first is recommended). Application rates must not be more than 4 oz per 2000 square feet of structural living/work space. Allow ten minutes for drying. No rinsing or wiping is required. Following the elapsed drying time, it is best practice to purge the system, by increasing the negative pressure through the outdoor exhaust or negative air machine or by turning on the vacuum used to pre-clean the HVAC system, while removing the duct opening seals. This will minimize the release of scent into the spaces served by the system.

# 9/3

## Fungistat Mildewstat

## 3.2 Application Equipment and Devices

Refer to the precautionary statements for the Personal Protective Clothing and other special instructions that must be followed.

## 3.2.1 Brush, Mop or Wipe Application

Brush, Mop or Wipe Application may be specified by some facility maintenance or remediation plans. These techniques are generally more labor intensive than other methods and are normally used only when specifications require. These methods are suitable only for smooth uniform surfaces. Do not use on porous or non-uniform surfaces. If in doubt about a given surface, contact Contec, Inc. / Sporicidin Division at (864) 503-8333 before proceeding. When using brush or mop application, tools and materials must be reserved only for application of SPORICIDIN PRO AD, kept clean and protected between users and replaced when worn or visibly soiled. Natural fiber brushes are preferred although any quality brush is acceptable. Mop types must be those that leave minimal lint behind. Micro-fiber or other non-linting cloths are preferable. Where other types of cloths are used, they must be soft enough that they absorb a sufficient quantity of liquid to perform uniform application. See www.Conteclnc.com. for mopping and wiping products.

During Brush, Mop or Wipe Application, the applicator must have access to the surface being treated. Usually this will require entering the ducts. The applicator will then work from that point back to the entry point covering a 3 foot length of duct at a time. Apply to the top of the duct first, followed by the sides then the floor of the duct. Overlap applications to ensure complete coverage. Cover completely while avoiding runs or pooling.

## 3.2.2 Spray Applicators

Spray application is preferred on large surfaces that are easily accessible (such as in long runs of large diameter ducts, coil assemblies and the interior of cabinets and housings with removable access panels). The spray equipment chosen must provide a consistent fine (1-300 micron) particle size and uniform spray pattern. Powered medium pressure sprayers are preferred. However, airless sprayers are suitable.

Where airless sprayers are use, the most satisfactory spray pattern will be achieved using a 0.011" spray tip.

Pump up garden type sprayers can be used but care must be taken to maintain maximum pressure by pumping frequently and the spray nozzle must be adjusted for the finest spray pattern possible. During application achieve complete uniform coverage. Avoid excessive wetting and do not allow the spray to run or pool.

#### 3.2.3 ULV or Mist Generating Sprayers

ULV or mist or other wet small particle application is preferable where surfaces are irregular or less accessible. Equipment capable of generating particles in the 15 to 60 micron range is most satisfactory.

Avoid use of thermal type fog generators. Contact Contec, Inc. / Sporicidin Division at (864) 503-8333 for information on other devices.

Generally a fog will carry and provide adequate coverage up to 8 feet from the point of application so adequate penetrations must be cut in the ducts to assure complete coverage without over wetting. SMACNA, NADCA and NAIMA have established standards and guidelines for making and sealing openings in ducts. Operators must be trained on proper application techniques as well as correct duct penetration and sealing procedures using these standards and guidelines. Operators must also carefully read and follow directions for the brand of equipment used. Duct penetrations must be properly closed following application, in accordance with industry standards.

## 3.2.4 Automated Atomizing or Spray System

There are a number of automated spray systems on the market including those that are carried by a "robot" through air ducts. These may provide an excellent option for application of SPORICIDIN® PRO AD in parts of air ducts that are difficult to access if they produce the correct spray pattern and application quantity. These devices must be visually monitored using video or other means while applying spray so proper application rate will be maintained.

## 3.3 Application Techniques

SPORICIDIN® PRO AD must be applied evenly throughout duct system and over other surfaces that are being treated. Even and uniform application is essential for satisfactory results. The procedures, equipment and techniques described below have been tested and provide the desired results. Other procedures, equipment or techniques may also achieve satisfactory results but must not be used without discussing the specific situation and equipment with a Contec, Inc. / Sporicidin Division Representative who can be reached toll free at (864) 503-8333.

## 3.3.1 Application from Exterior of the HVAC System

SPORICIDIN® PRO AD may be sprayed into openings at intervals throughout the duct system or on components that are accessible through removable panels or access doors. Spray into openings every 8 feet at a minimum. Existing supply openings can be used where they provide a clear view of the surfaces being sprayed so that uniform application can be achieved. However, make additional penetrations as needed, so enough openings will be available to achieve total and uniform coverage.

Spray application is not an acceptable technique where openings are greater than 8 feet apart, additional openings cannot be made and properly sealed, and/or the duct geometry does not allow for uniform coverage. In such cases, application from within the HVAC system is necessary (see 3.3.2 below).

## 3.3.2 Application from Within the HVAC System

When SPORICIDIN® PRO AD cannot be sprayed into openings at intervals throughout the duct system, you must gain entry into the system and spray the product onto interior duct and other surfaces until they are thoroughly and uniformly covered using hand or powered spray equipment. This is the most frequently used technique and is the technique of choice for air handlers, other components with access panels or doors and large diameter (generally 20" x 20" minimum) ducts where direct access can be gained to surfaces being treated. Please refer to Special Instructions for Applicators above for additional instructions.

## 3.4.1 Rate of Application to Bare Metal and Flexible Ducts

Apply until surface is evenly wet. Application rates must not be more than 4 oz per 2000 square feet. If application rate results in surface runoff or liquid pooling on the bottom of the duct, lower the application rate until the surface is thoroughly and evenly wet without runoff or pooling. The exception to this is when treating coil assemblies. In this case, the spray must be applied generously until there is runoff into the drain pan so as to penetrate the coil assembly to the greatest possible depth.

## 3.5 Frequency of Application

Normally, infrequent application (6 months to every two years) will provide effective control. Some critical applications such as duct systems serving critical health care spaces or clean rooms where it is essential to minimize the generation of particulate matter that may be released as a by-product or microbial growth may require more frequent treatment. Do not apply more often than monthly and then only if there is evidence of re-growth. This product must only be used in those cases where visible growth has been detected in the system and then only after removing that growth and identifying and correcting the conditions that led to that growth. Prior to reapplication in such cases, investigate to determine the cause of re-growth and correct that problem prior to re-application. Before embarking on a program of frequent application (more frequently than every 6 months) contact Contec, Inc. / Sporicidin Division at (864) 503-8333 and discuss the specific application and situation. Also make sure the reoccurrence of microbial growth does not have another cause such as persistently high humidity, standing water or hidden leaks.

Prior to reapplication, the interior of the ducts and other surfaces must be inspected and found to be free of accumulated soil. If soil or growth is found, the cause must be determined and corrected and then the ducts cleaned in accordance with accepted industry practice.

If microbial growth persists following application re-inspect for duct leaks, carryover of water form cooling coils or humidifiers and other sources of moisture promoting growth. Eliminate such sources of moisture before retreating.

## 3.6 Returning the System to Operation following Application

Fans and blowers in the section of duct being treated must be turned off during application of SPORICIDIN® PRO AD. If the system cannot be shut down, the section of duct being treated must be isolated until treatment is complete. This will prevent the spray of fog from being blown away from the surface that is being treated.

Do not attempt to use the system fan or blower to carry SPORICIDIN® PRO AD to the surfaces in the duct system. Such a practice will not result in uniform application of the product to the surfaces being treated and will lead to ineffective control. This should never be attempted.

The system can be returned to full operation as soon as treatment is completed or at any time following completion of treatment. Affected areas of the building are not to be occupied during treatment. Commercial spaces may be reentered immediately after completion of treatment. For residential spaces, do not reenter until 3 hours after treatment.

SPORICIDIN® PRO AD will dry within 10-15 minutes following application. Extended drying time does not have an impact on effectiveness of treatment. SPORICIDIN® PRO AD should not be rinsed off following application so it will continue to inhibit the growth of microorganisms on treated surfaces.

When the above directions are followed properly, there will not be significant concentrations of SPORICIDIN® PRO AD released to the spaces served by a system being treated.

	APPLICATION SUMMARY
Personal Protective Equipment	<ul> <li>Splash goggles or face shield</li> <li>Chemical-resistant gloves</li> <li>Chemical-resistant coveralls</li> </ul>
Occupant Safety	Evacuate occupants & pets prior to treatment
	Residential Application – may re-occupy 3 hours after treatment
	Commercial Application – may re-occupy immediately after treatment
Engineering Controls	Confined Space Applications (physical entry into ductwork)
	<ul> <li>Follow OSHA regulations for confined spaces</li> <li>Maintain 50 CFM/FT² duct cross section ventilation</li> <li>Use SCBA or air-supplied respirator when adequate ventilation requirements cannot be met</li> </ul>
	Spray, Mist or ULV Fog Applications
	<ul> <li>Maintain slight negative interior duct pressure (0.015 – 0.025 In. WG) using either:         <ul> <li>Outdoor exhaust system, or</li> <li>Negative air machine w/HEPA filtration</li> </ul> </li> <li>Avoid pressure differential to prevent coverage pattern disruption</li> </ul>
HVAC System Inspection	<ul> <li>Cleanliness - Visually inspect air ducts &amp; HVAC components for cleanliness and contamination in accordance with NADCA/Industry guidelines</li> <li>Mechanical - Visually inspect HVAC system and repair</li> </ul>

## mechanical defects or leaks

## **Fungistat Mildewstat**

Preparing HVAC	<ul> <li>Turn off HVAC system</li> <li>Seal all registers/vents in accordance with industry guidelines</li> </ul>
Preparing Sporicidin Pro AD	<ul> <li>Add 32 oz. (1 qt) concentrate with 128 oz. (1 gal) tap water</li> <li>Mix well</li> </ul>
Application Rate	Apply 4 oz. diluted solution per 2000 Ft <sup>2</sup> of structural living/work space
Applying Sporicidin Pro AD	<ul> <li>Wet surfaces using Spray, Mist, ULV Fog or brush/mop/wipe application method</li> <li>Allow 10-minute drying time</li> <li>Remove vent and register covers/seals</li> <li>Increase negative pressure to purge HVAC system of remaining vapors/mists</li> </ul>
Returning HVAC System to Operation	<ul> <li>The HVAC System can be returned to full operation immediately after treatment</li> <li>Refer to Occupant Safety section above for re-occupying premises after treatment</li> </ul>