



## USE OF DISINFECTANTS IN HVAC SYSTEMS FACT SHEET

### Overview

Over the years questions have been raised such as what is a disinfectant and are there disinfectants for use in HVAC systems? Whether you are a ventilation system cleaning contractor, healthcare professional, industrial hygienist, property owner/manager, or homeowner we hope this Fact Sheet will assist in answering these questions.

### Definition

The following definition is based on information obtained from the Environmental Protection Agency.

Disinfectants: Disinfectants are pesticides registered by the EPA used on hard inanimate surfaces and objects to destroy or irreversibly inactivate microorganisms but not necessarily their spores.

### Can I disinfect an HVAC system?

At this time the EPA has not registered any products that can be applied to HVAC systems making disinfectant claims.

### Can I use a disinfectant to sanitize an HVAC system?

You may not use a registered disinfectant in an HVAC system if it is being used for the purpose of sanitizing. A product is not a sanitizer unless the label states that the product sanitizes. Sanitization claims are based on a different set of data than disinfectants. If a disinfectant product also has a claim as a sanitizer then it may be used to sanitize but it may only be used to sanitize HVAC systems if the label includes a claim to sanitize HVAC systems and includes specific directions for that use (refer to *Use of Sanitizers in HVAC Systems* Fact Sheet).

**I have respiratory problems. Should I have a sanitizer applied?**

Refer to the sanitizer's Material Safety Data Sheet (MSDS) and consult your physician.

**How is a sanitizer applied to be most effective?**

Verify the accuracy of the sanitizer's label by checking the Web site mentioned above, then follow the directions on the EPA approved label.

**Are sanitizers safe for pets?**

In all likelihood the sanitizer's label does not include any information regarding use around pets. If the label does not address use around pets, it is the choice of the consumer to consider that it may be safest to remove pets and other occupants from the premises during application.

**I don't want my air ducts cleaned, just sanitized. Should this be done?**

No, thorough HVAC system cleaning procedures must always be performed prior to the application of a sanitizer.

**Some of my air ducts are lined with insulation. Does this make a difference when applying a sanitizer?**

Yes, and you should only use a sanitizer registered by EPA with specific directions for use on HVAC surfaces lined with the same type of material found in your system.

**Where can I find more information or obtain a list of sanitizers that are registered and safe to be applied in HVAC systems?**

For more information on the application and use of antimicrobial products contact the EPA's Antimicrobial Information Hotline by phone (703) 308-0127 (Mon-Fri 8am - 5pm ET) or email [Info\\_Antimicrobial@epa.gov](mailto:Info_Antimicrobial@epa.gov). Or, visit the EPA's Office of Pesticide Programs' Web site at <http://www.epa.gov/pesticides>.



NATIONAL AIR DUCT CLEANERS ASSOCIATION

## USE OF SANITIZERS IN HVAC SYSTEMS FACT SHEET

### Overview

Over the years questions have been raised such as what is a sanitizer, when is application necessary, how should it be applied, etc.? Whether you are a ventilation system cleaning contractor, healthcare professional, industrial hygienist, property owner/manager, or homeowner we hope this Fact Sheet will assist in answering most of your questions.

### Definition

The following definition is based on information obtained from the Environmental Protection Agency's (EPA).

Sanitizer: Sanitizers are pesticides registered by the EPA used to reduce, but not necessarily eliminate, bacteria from the inanimate environment to levels considered acceptable as determined by public health codes or regulations. A sanitizer is only effective against bacteria. These same products may also be used to treat mold and mildew if this claim is included on the approved label. Pesticide products do not sanitize mold.

If the user has specific concerns about a sanitizer they should go to the following Web site <http://oaspub.epa.gov/pestlabl/ppls.home> to view images of EPA approved labels. The Antimicrobials Division website at [www.epa.gov/oppad001/](http://www.epa.gov/oppad001/) provides additional information on the use of antimicrobials in HVAC systems. Click on Hot Topics: HVAC.

### Should sanitizers be applied if there is no visible mold?

No. First, molds cannot be sanitized. Molds are fungi not bacteria. A sanitizer (see above definition) is used to reduce the number of bacteria present in an inanimate environment. Sanitizers used for mold control need to list mold as a specific pest the product will control. Second, only EPA registered sanitizers with specific directions for use as a mold controlling agent on HVAC surfaces may be applied to these surfaces. Third, if evidence of mold is identified by testing then thorough HVAC System cleaning must be performed prior to the application of any sanitizer. If the sanitizer does not specifically claim to control mold in HVAC systems, then the user is not to assume that mold is controlled on HVAC surfaces by the sanitizer.

**Who regulates sanitizers used in HVAC systems?**

The Environmental Protection Agency (EPA).

**Does the contractor or technician have to have any special license?**

In many states a pesticide license is required for the application of sanitizers. Contact your local state authority responsible for pesticides to determine if your state has such pesticide licensing requirements.

**Should I let a Company apply a sanitizer as a routine service or should there be some sort of inspection or cleaning done beforehand?**

Prior to having a sanitizer applied ensure the HVAC system has been properly cleaned and the contractor makes you aware of any health and safety concerns associated with the sanitizer's use and proper application. Only apply EPA registered sanitizers with specific directions for use as a sanitizer on HVAC surfaces and only if it's use is intended to control bacterial contamination which could not be remediated by cleaning alone. If mold control is also desired, then the product label must also state that mold will be controlled on these HVAC surfaces.

**What if the homeowner insists on sanitizing after HVAC system cleaning has been performed because of piece of mind, doctor told them to, just bought the house or family member has allergies, etc?**

The homeowner should be advised that the application of a sanitizer is meant to reduce bacterial contamination, and is not a means of remediation. If the homeowner opts to have sanitizing done he/she should be made aware of product being used and any health and safety concerns as described on the EPA approved label. In addition, the sanitizer must be registered by the EPA for use in HVAC systems.

**Is it proper to make the claim that air ducts can be disinfected using sanitizers?**

No, at this time the EPA has not registered any PRODUCTS which can be applied to HVAC systems as a disinfectant. Sanitizers do not disinfect (refer to *Use of Disinfectants in HVAC Systems* Fact Sheet).

**Can a contractor use an EPA-registered disinfectant and make the claim to sanitize a HVAC system?**

You may not use a registered disinfectant in an HVAC system if it is being used for the purpose of sanitizing. A product is not a sanitizer unless the label states that the product sanitizes. Sanitization claims are based on a different set of data than disinfectants. If a disinfectant product also has a claim as a sanitizer then it may be used to sanitize but it may only be used to sanitize HVAC systems if the label includes a claim to sanitize HVAC systems and includes specific directions for that use.

**Should I leave the house or building when sanitizers are applied? And if so, for how long?**  
Follow the directions on the EPA approved label.



## USE OF COATINGS IN HVAC SYSTEMS FACT SHEET

### Overview

Over the years questions have been raised such as what is a coating, when is application necessary, how should it be applied, etc.? Whether you are a ventilation system cleaning contractor, healthcare professional, industrial hygienist, property owner/manager, or homeowner we hope this Fact Sheet will assist in answering most of your questions.

### Definition

The following definition is based on information obtained from the Environmental Protection Agency (EPA).

Coating: Coatings are a paint, varnish, lacquer or other finish generally used to create a protective and/or decorative layer. Often used to refer to paints and coatings applied in an industrial setting as part of the original equipment manufacturer's process. This includes architectural coatings, generally referred to as paints; industrial coatings, applied to many manufactured goods as part of their production process; special purpose coatings including marine coatings, traffic-marking paints, auto refinish coatings and anti-corrosive coatings; as well as miscellaneous paint products. In general, these coatings are considered pesticides requiring registration by the EPA when the product makes claims beyond simply protection of the coating film.

If the user has specific concerns about a product they should go to the Antimicrobials Division website at [www.epa.gov/oppad001/](http://www.epa.gov/oppad001/) and click on Antimicrobial Chemical Indexes then scroll down to Pesticide Product Label System (PPLS) to view images of EPA approved labels.

### Who registers coatings used in HVAC systems?

Those coatings making claims beyond protection of the coating itself must be registered by EPA. Those registered coatings for use in HVAC systems include specific directions for HVAC systems on the EPA approved label. Coating products which make no pesticide claim do not require EPA registration.

### Do coatings that are applied in HVAC systems have to be EPA registered?

Yes and no. Yes, the coating needs to be EPA registered for use in HVAC systems if the coating makes pesticidal claims beyond the protection of the coating itself. No, the coating does not need to be EPA registered for use in HVAC systems if the coating makes claims only for the protection of the coating or makes no claims at all. But, in all cases the coating should be designed for use in HVAC systems.

**Are coatings and encapsulants the same type of product?**

No, coatings are much thicker (like paint) and have a lower viscosity. Encapsulants are thin (like water) and have a higher viscosity.

**Should a coating be applied prior to cleaning?**

No, HVAC system cleaning shall be performed prior to the application of a coating.

**Should I leave the house or building when coatings are applied? And if so, for how long?**

If product is not registered by the EPA: Follow label directions on the product or if the label does not include information on vacating the premises, refer to the manufacturers website for information contained on the Material Safety Data Sheet (MSDS) or contact the company directly. If the product is registered with the EPA, follow the EPA approved label.

**I have respiratory problems. Is it safe to have a coating applied?**

Refer to the coating's Material Safety Data Sheet (MSDS) and consult your physician.

**How is a coating applied to be most effective**

Follow manufacturer's directions or if registered by the EPA, follow the EPA approved label. For more information check the Web site mentioned above to view EPA approved labels.

**Are coatings safe for pets?**

In all likelihood the label does not include any information regarding use around pets. If the label does not address use around pets, it is the choice of the consumer to consider that it may be safest to remove pets and other occupants from the premises during application.

**I don't want my HVAC system cleaned, just coated. Should this be done?**

No, thorough HVAC system cleaning procedures must always be performed prior to the application of a coating.

**Where can I get health and safety information on coatings?**

If the coating is not EPA registered, refer to the label, product data sheet or Material Safety Data Sheet (MSDS). If the coating is registered by the EPA follow the directions on the EPA approved label.

**Some of my air ducts are lined with insulation. Does this make a difference when applying a coating?**

It may. If the coating is not registered by the EPA: Check with the contractor or manufacturer of the product being used to determine if the coating is designed for application to porous material, such as insulation.

If the product is registered by the EPA: Follow the directions on the EPA approved label as to whether or not the coating is approved for use on ductwork that is lined.

**Where can I find more information or obtain a list of coatings that are registered and safe to be applied to my ventilation system?**

For more information on the application and use of antimicrobial products contact the EPA's Antimicrobial Information Hotline by phone (703) 308-0127 (Mon-Fri 8am - 5pm ET) or email [Info\\_Antimicrobial@epa.gov](mailto:Info_Antimicrobial@epa.gov). Or, visit the EPA's Office of Pesticide Programs' Web site at <http://www.epa.gov/pesticides>.