



TECHNICAL SERVICES BULLETIN

Nisus DSV and Coronavirus at a Glance

ALWAYS READ AND UNDERSTAND LABEL DIRECTIONS COMPLETELY BEFORE ANY APPLICATION

(7/26/2021 – Previous Versions Obsolete – See recently added questions at the end.)

The Virus

Q. What is COVID-19?

A. COVID-19 is the disease caused by SARS-CoV-2.

Q. What is SARS-CoV-2?

A. The virus has been named "Severe Acute Respiratory Syndrome Coronavirus 2" or "SARS-CoV-2" and was identified in late 2019. It is a type of enveloped human coronavirus.

Q. What is the source of SARS-CoV-2?

A. This virus likely originated in bats prior to transmission to humans via direct contact with bats or via contact with animals infected by bats in Asia.

Q. Is the virus food-borne?

A. At this time, the virus is believed to be transmitted only via person to person contact by touch or by inhalation near an infected person or by contact with surfaces which harbor the virus.

Q. Do all infected people show symptoms?

A. No. Some people show symptoms, and some show no symptoms (asymptomatic). Those who show no symptoms are particularly a concern in that they can spread the virus without knowing. The incubation period is typically several days or longer.

Q. Do we expect the virus to die off with warm weather?

A. Nobody knows at this point. Experts are hopeful that the virus will run the traditional cycle of dying off in warm weather, but there is no information to support this currently. If there is a decline, some are concerned that it may resurge late this year.

Q. How can we stop the spread of COVID-19?

A. Follow guidelines of the Centers for Disease Control and Prevention (CDC) at <https://www.cdc.gov/coronavirus/2019-nCoV/index.html>.

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Q. Can the virus survive on surfaces?

A. At this time, virologists believe that the virus can survive in droplets transmitted by sneezing or coughing for three hours, on cardboard for a day, and on plastic or stainless steel for three days.

Applying Nisus DSV

Q. What exactly is Nisus DSV?

A. Nisus DSV is a disinfectant, sanitizer and virucide. It is a concentrate of four active ingredients (quaternary ammonias) and is diluted before use. Nisus DSV concentrate contains the following active ingredients:

Octyl Decyl Dimethyl Ammonium Chloride .. 1.65%
Didecyl Dimethyl Ammonium Chloride..... 0.825%
Dioctyl Dimethyl Ammonium Chloride 0.825%
Alkyl Dimethyl Benzyl Ammonium Chloride 2.200%

Q. “Human coronavirus” is on the label as a target organism. Since SARS-CoV-2 is a type of human coronavirus, can we claim efficacy against SARS-CoV-2 virus, the cause of COVID-19?

A. Because this virus is so new, only two categories of products may claim efficacy: those products which are part of the emerging pathogens program and those products which EPA has deemed effective based on having proven efficacy against human coronavirus. Both categories are found on **List N: Products with Emerging Viral Pathogens AND Human Coronavirus claims for use against SARS-CoV-2**, published by EPA. The chemical base for Nisus DSV, 10324-80, was added to EPA’s List N on 3/13/20, meaning that **EPA has determined that Nisus DSV qualifies for List N against SARS-CoV-2, the cause of COVID-19. See information related to List N at www.epa.gov.**

For Nisus DSV, the label rate is 3 oz. Nisus DSV per gallon of hard water with a minimum of a 10-minute contact time.

Q. Where can Nisus DSV be found on EPA’s List N?

A. Because products registered may have multiple brand names, EPA also lists the registration number, which is the best way to confirm that a product is on the list. To confirm that Nisus DSV is on the list, simply search for 10324-80. That is DSV’s base, and it is also found on the Nisus DSV product label on each container. The registration number of Nisus DSV is 10324-80-64405 (64405 is the Nisus EPA company number).

Q. What is the Center for Biocide Chemistries list?

Weeks before EPA posted List N, the Center for Biocide Chemistries (CBC) of the American Chemistry Council prepared their own list. This list has trade names and is broken into two tiers. The first tier is products with an emerging pathogens claim. The second tier is products with human coronavirus claims. Nisus DSV is on the CBC list as well as the EPA list. Note too that Nisus is a member of CBC, meaning that Nisus has committed funds to support credible scientific and public affairs activities not only during this crisis but permanently.

Q. Is any product labeled specifically for the control of SARS-CoV-2?

A. No. As of March 2020, no product is labeled specifically for SARS-CoV-2. The virus was only identified in late December 2019, so no labels have that strain listed.

Q. Can diluted Nisus DSV be applied to hands to replace a hand sanitizer?

A. No. Nisus DSV is for surfaces only and is not for use on people or animals.

Q. What is the label rate other than for human coronavirus?

A. For most applications, the label rate is currently 1 to 2 fluid ounces per gallon of water with varying contact times. Some applications require differing rates, so as always, read and follow the label.

Q. Nisus DSV has a DANGER signal word. Why is that?

A. If you look at the Precautionary Statements, note that this product, as with most concentrated quats, can be harmful if splashed into the eyes. Once diluted, while care should be taken, the danger is dramatically reduced.

Q. Is Nisus DSV a restricted use pesticide?

A. No. Nisus DSV is a general use pesticide.

Q. Do I need eye protection and gloves?

A. Read the label for instructions on personal protective equipment.

Q. Does Nisus DSV leave residual protection and when may it be reapplied?

A. Once the product dries, no residual should be expected. This is true of any "quat" product on hard non-porous surfaces. There are no restrictions as to time interval to reapply.

Q. What is the difference between sanitizing and disinfection?

A. Sanitizing means to reduce the number of organisms to a level of no health concern. Disinfection is killing 100% of organisms on a surface.

Q. If asked to provide disinfection services in a location where people with communicable diseases are present or have been quarantined, what special precautions should the applicator take?

A. Guidance about communicable disease exposure and precautions are determined by the medical care facility. If the service location is not a managed medical facility, the local health department should be contacted for guidance.

Q. Can I use a concentration stronger than the label rate?

A. It is a violation of federal and state law to use a concentration stronger than the label permits for that use.

Q. Can I use less than the label rate?

A. For an antimicrobial, you should always use the label rate and not less.

Q. Does Nisus provide an end-use dilution label that can be applied to a sprayer?

A. Nisus DSV as provided by Nisus Corporation is a concentrate and is appropriately labeled. Sprayers using diluted Nisus DSV should be identified by the applicator with material, concentration, and any other information that a state regulatory agency may require.

Q. Can I fog the interior of a customer's building with Nisus DSV?

A. The label permits fogging in certain situations, but the product will be more effective if liquid is applied directly to surfaces. **Note that "fogging" on the label is a wet mist and not a thermal or other traditional "fogging" application.** The disadvantage of "fogging" is that the droplets will settle on horizontal surfaces by gravity and not reach under surfaces such as beneath handrails. Remember that disinfection requires that a surface remains wet for the 10 minutes.

Q. Will Nisus DSV work on soft surfaces such as pillows?

A. Nisus DSV is formulated for hard non-porous surfaces. Some surfaces such as carpets are on the label but application to a porous surface will not be as effective, which is why cloth, textiles, clothing, etc., are not on the label as a site.

Q. How is Nisus DSV applied?

A. It can be applied via mop and bucket, sprayers, sponge, soaking, and in limited uses, by fogging (defined as wet misting). See the label for full details.

Q. Can hard surface toys be treated?

A. Hard surface toys can be disinfected (allow DSV to remain on their surfaces for at least 10 minutes), but should be rinsed afterwards.

Q. Must surfaces be cleaned before application of Nisus DSV?

A. Yes. Nisus DSV is effective on hard, non-porous surfaces. Cleaning to remove residual food or other material to reach the non-porous hard surface prior to application of Nisus DSV will allow proper disinfection.

Q. Is surfacing rinsing required after application?

A. Rinsing is required after treating food contact surfaces for sanitizing for 30 seconds or disinfecting for 10 minutes. Some other uses require rinsing, so check the label.

Q. After treating, how long should a customer remain out of the area?

A. Unless a specific use on the label states otherwise, customers do not need to be out of the area for any given time while Nisus DSV is being applied. Some states require customers (commonly in schools) to remain out of the area for a certain period. This will vary by state. Customers should not touch surfaces until dry.

Q. Is a special state license required for using Nisus DSV by professionals?

A. Nisus DSV does list flies as a target pest on the label so for those applications, the general pest control certification will be adequate for that purpose. For sanitizing and disinfection, most states permit use under the general pest control category. Some states have a special category, usually in the same category as mold control. Always check state requirements for company certification. Certification usually does not apply to use by those who are not commercial applicators.

Q. Does this mean that technicians must be certified?

A. Usually not. This is the category for at least one employee to hold. State requirements may vary so always check state regulations.

Q. Does my insurance cover sanitizing and disinfection?

A. Insurance policies vary and the coverage that the company has chosen will vary dramatically. For any questions about coverage, contact your insurer.

Q. Can Nisus DSV be applied to soil?

A. Nisus DSV is for hard non-porous surfaces and very specific soft surfaces per the label. Nisus DSV should not be applied to soil.

Q. Does Nisus DSV have a chemical odor?

A. Nisus DSV has a pleasant fresh citrus fragrance with no chemical odor.

Q. What is the shelf life of Nisus DSV?

A. The concentrate should be stored in cool and dry place. The product is stable for over a year. Diluted Nisus DSV is also stable but it is always best to mix only what is needed for an application in order to avoid having to label and store a diluted product.

Added 4/7/2020

Q. Can I use a rag and wipe surfaces with DSV?

A. Yes, you can. This is the best procedure for electrical equipment. Surfaces still need to be wet for 10 minutes to disinfect. Less amount of time will sanitize.

Q. What about electrical equipment?

A. Be careful with electrical equipment. Wiping equipment is the best procedure.

Q. How do I price a disinfectant treatment?

A. To not step into antitrust laws, price the service as you would a bed bug treatment. As always, labor is the most expensive part.

Q. Can I use DSV on steering wheels?

A. Yes, you can.

Q. What about carpets?

A. Carpets can be treated for odor elimination.

Added 4/14/2020

Q. The master label on file at EPA is not the same as the label on the container. Which do I use?

A. When the master label is updated and approved by EPA, the container (market) label must be redrafted and then approved by each state. Some states take months to approve the new label. Only then can the revised product label be printed and applied to product containers when manufactured. After that, it can be months before the user obtains product with the new label. Always use the label which accompanies the product.

Q. Is DSV registered in my state?

A. DSV is registered in all states, the District of Columbia, and Puerto Rico.

Added 7/6/2020

Q. Over 200 scientists from over 30 countries have urged the World Health Organization to further evaluate airborne transmission of SARS-CoV-2. Signatories contend that the virus via aerosolization – respiratory droplets that people transmit through talking, coughing, etc. – is the primary transmission process. Does this mean that we should look at fogging as a remedy for the aerosolized contaminated air droplets?

A. Fogging has not been proven to kill the virus in infected aerosol droplets and should not be used as a replacement for surface disinfection. Treating surfaces is still the primary application method. Also, at this time, EPA has not modified their position discouraging fogging as an acceptable method for control of SARS-CoV-2.

Added 8/21/2020

Q. I am hearing that some disinfectant products offer long-term residual. Is this true and does DSV offer long-term residual?

A. Nisus DSV does not offer long-term residual. EPA has taken a hard-line position on residual protection and below is the language directly from EPA:

“Products that offer ongoing disinfection capability of surfaces for extended durations after product application may help to reduce potential exposure to viruses on frequently touched surfaces. However, EPA has not evaluated the efficacy of any products claiming long-lasting efficacy against viruses. Therefore, there are currently no EPA-registered products eligible to make claims that they are effective against viruses, including SARS-CoV-2, over the course of hours to months (i.e., “residual” or “long lasting” efficacy claims).”

Added 8/25/2020: EPA Emergency Exemption for American Airlines

Q. What about the August 24, 2020, EPA issued an emergency exemption to the state of Texas? What is this about?

A. Section 18 of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) authorizes EPA to exempt state and federal agencies from certain provisions of FIFRA and allow unregistered uses of pesticides to address emergency conditions. There are no publicly available, EPA-registered products that are registered for use as residual antiviral surface coatings at this time. There are EPA-registered products with residual efficacy claims against bacteria. The current emergency exemption is only for use at 27 American Airlines aircraft and airport facilities in Texas. For further reading for EPA official statements click/insert the following link. <https://www.epa.gov/pesticide-registration/section-18-emergency-exemption-requests-and-coronavirus-covid-19>

Added 5/7/2021

Q: What about electrostatic sprayers? Can they be used to disinfect?

A: Yes they can. EPA has drafted new guidelines for disinfecting, but those guidelines in particular do not affect the way DSV can be applied using equipment.

Added 7/26/2021

EPA has changed a number of label rates for disinfection and sanitization products. As a result, **for Nisus DSV, the label rate has been changed from 2 oz. to 3 oz. of Nisus DSV per gallon of hard water with a minimum of a 10-minute contact time.** (This has been changed in the copy on p. 2 above as well.)

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