



Debunking myths about Disinfectants



Bruce A. Donato, CSP, CHMM, CECD

**Technical Presentation starts approximately
30 minutes into the recording**

Let's figure out what real and what's not.



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AHMP Cyber Chapter Board Members

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President:	Malcolm Smith
Past President	Amanda Perlman
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Treasurer	Polly McCarty
Secretary	Matt Fischer
Webmaster	Bruce Donato
Councillors	Joany Jackman Kirsten Traum Elizabeth Bramhall Marisa Newcomer



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ChABSA Calendar

- ▶ September 21, 2021
- ▶ **October 14, 2021 (international)**
- ▶ November 16, 2021
- ▶ January 13, 2022
- ▶ March 15, 2022
- ▶ May 12, 2022



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“Biosafety for containment and handling of arthropods: training program using a virtual reality (VR) tool.” – Eva Veronesi, Zurich, Switzerland



The design and setup of laboratories intended for the use of pathogens affecting animal and human health and handling of infected live arthropods (e.g. mosquitoes), requires various biocontainment precautions to protect the workers from infection, the environment from pathogen escape, and the quality of our data from cross-contamination as well as data standardization and reproducibility.

Working under biocontainment environment, handling pathogens and infected animals is very demanding and requires certified trainings and deep knowledge on associated risks.

Courses on biocontainment design, waste management, risk assessment, accident response, handling of infected animals including flying insects, is very demanded also due to the lack of qualified trained people able to run these type of courses.



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Cyber Chapter Upcoming Events



NFPA 70E (Arc Flash) Update – Joint meeting with ASSP NOVA Chapter

09/23/2021 – 1:30pm – 3:00pm

Converting from In-person Labs to Virtual and back again

09/29/2021 – 3:00pm – 4:30pm

Chapter Officer Training

10/04/2021 – 5:00pm – 6:30pm

Eastern Tennessee Chapter EHMM

Oct. 12 – 15, 2021 8:30am – 4:30pm

“Biosafety for containment and handling of arthropods: training program using a virtual reality (VR) tool.”

10/14/2021 – 9:00am – 10:30am

Fleet Safety (WMACSA)

11/10/2021 – 5:00pm – 6:30pm

Crisis Management – (ASSP NOVA Chapter)

11/18/2021 – 12:00pm – 1:30pm

Use of Drones on Job Sites (WMACSA and ASSP NOVA)

12/08/2021 – 5:00pm – 6:30pm



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Continuing Education



- ▶ The Cyber Chapter offers a free service to anyone who registers on the website to track attendance at events and allows participants to download a transcript.
- ▶ Transcripts are updated at least quarterly.



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Slide Deck & Recording



- ▶ Go to www.ahmpcyber.org
- ▶ Click the “Library Tab”, pick ChABSA and then choose what media type you are looking for.

The screenshot shows the AHMP CyberChapter website. The top navigation bar includes links for Home, Join, About Us, Events, and Library. The Library tab is selected, and a dropdown menu is open showing various meeting categories: WMACSA meetings, Member's Only Library, AHMP Chapter Meetings, ASSP Chapter Meetings, COVID-19 Seminars, and ChABSA Meetings. The ChABSA Meetings option is circled in red. Below the dropdown, the ChABSA Meetings page is displayed, featuring a list of slide decks and recordings. A second dropdown menu is also visible, with ChABSA Meetings selected and circled in red. The page footer includes a note about using the dropdown menu to access members only library items.



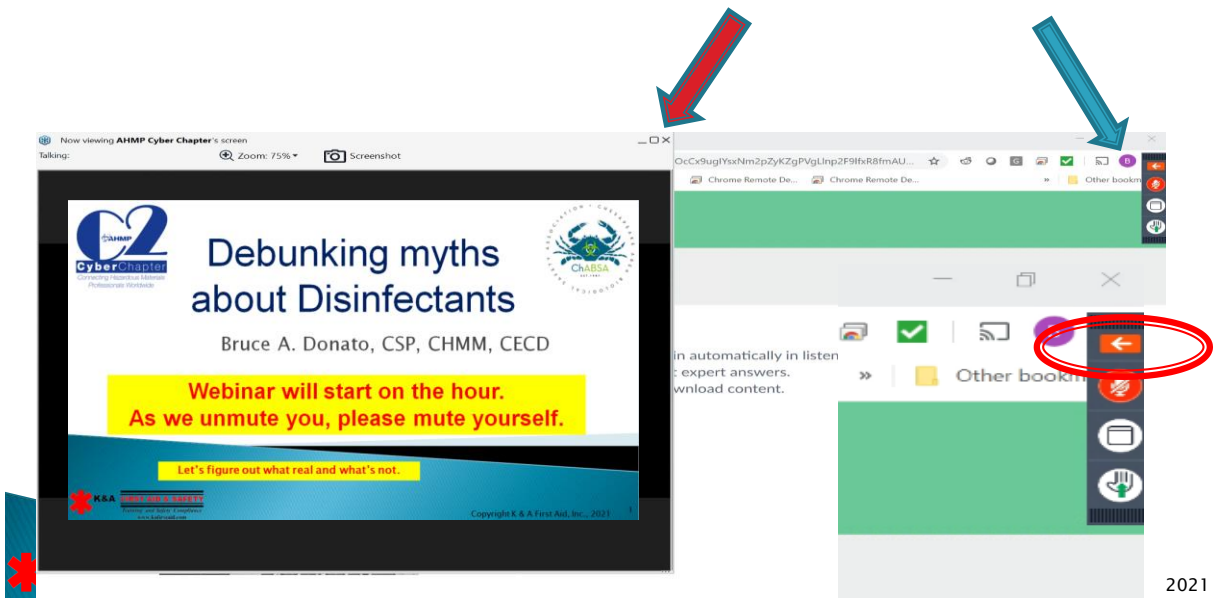
Ground Rules/ Webinar Directions

- ▶ All attendees will be unmuted. During the presentation please stay muted. Unmute when you have a question to ask.
- ▶ Questions can also be posed using the “question/chat” function in your dashboard and questions will be answered as appropriate.
- ▶ The following slides will provide more details on how to use the system.



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How to use dashboard



2021

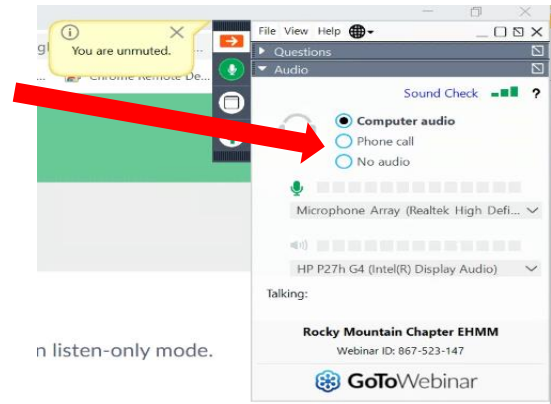
Troubleshooting Audio

If your speaker is not working it may be that your system picked the wrong device. This may reset it.

1. Click on “phone call”
2. Click back on “computer audio”
3. If that does not work use the drop down menu to pick the correct speaker.

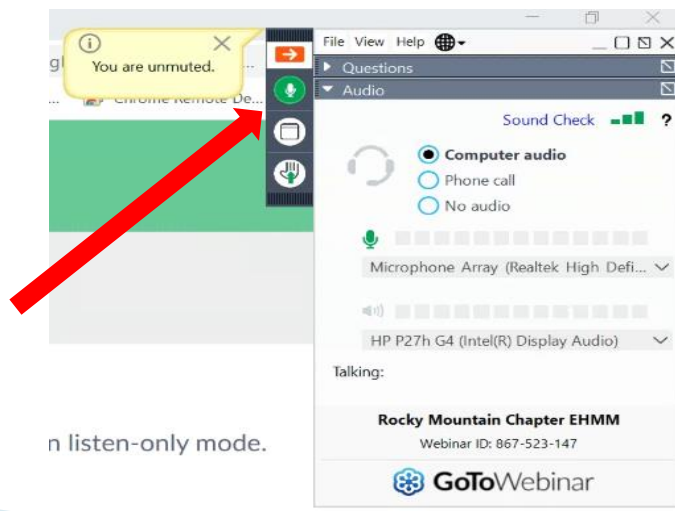
If your microphone you can do the same thing. This may reset it.

1. Click on “phone call”
2. Click back on “computer audio”
3. If that does not work use the drop down menu to pick the correct microphone.
4. You also can choose “phone call” and call in.



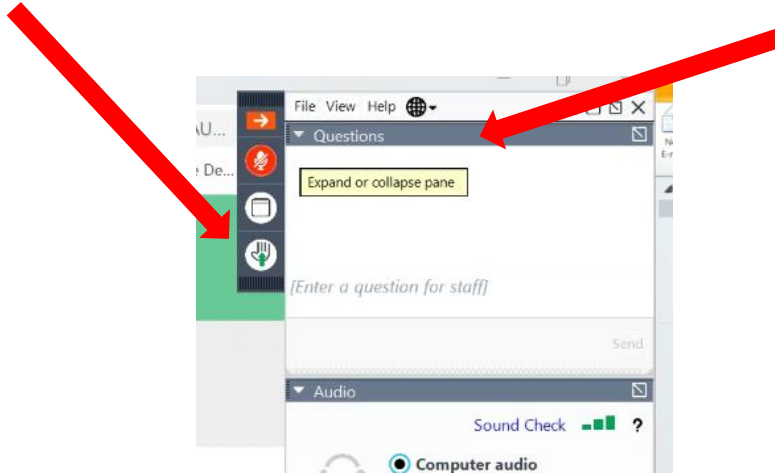
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How to self-mute



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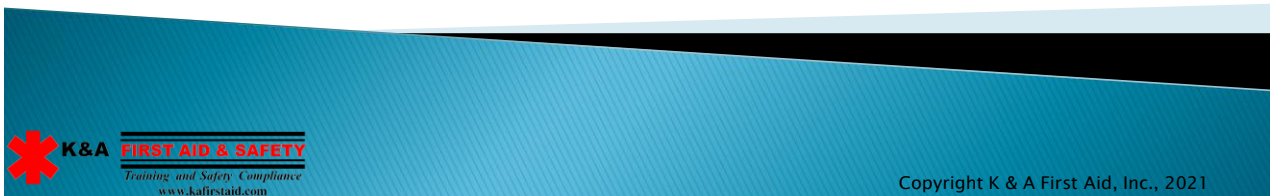
How to ask questions



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ChABSA Awards

Biosafety Professional of the Year
Lifetime Achievement Award



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Feature Presentation



Debunking myths about Disinfectants



Bruce A. Donato, CSP, CHMM, CECD

Let's figure out what real and what's not.



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TRAINING DISCLAIMER

These materials were developed by K & A First Aid, Inc., and are intended to assist employers, workers, and others as they strive to improve workplace health and safety. While we attempt to thoroughly address specific topics, it is not possible to include discussion of everything necessary to ensure a healthy and safe working environment in a presentation of this nature. Thus, this information must be understood as a tool for addressing workplace hazards, rather than an exhaustive statement of an employer's legal obligations, which are defined by statute, regulations, and standards. Likewise, to the extent that this information references practices or procedures that may enhance health or safety, but which are not required by a statute, regulation, or standard, it cannot, and does not, create additional legal obligations. Finally, over time, regulators may modify rules and interpretations in light of new technology, information, or circumstances; to keep apprised of such developments, or to review information on a wide range of occupational safety and health topics, you can visit regulatory web sites such as the Department of Transportation at www.dot.gov or OSHA's website at www.osha.gov.



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Agenda

- ▶ Bruce's Background
- ▶ Baseline Surveys
- ▶ Topics to be covered
 - Disinfect vs. Clean vs. Sterilize vs. Sanitize
 - Can you kill a virus
 - Is a disinfectant a fungicide, pesticide, rodenticide
 - EPA List N
 - Fogging/Misting
 - SDS requirements
 - Extended Protection



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Who's Bruce? What does he know?

- ▶ Chemical Engineer with biology background
- ▶ Worked in:
 - The chemical industry
 - R&D (textiles)
 - Biotechnology industry
 - Construction industry
 - USACE
 - Ran a Hazardous Waste Disposal
 - Cleaning Industry
 - Safety/Biosafety



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Polling Question – Baseline Knowledge

Does proper sanitization inactivate bacteria?

Choose one.

- A. Yes
- B. No



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Polling Question – Baseline Knowledge

Does proper sanitization inactivate viruses?

Choose one.

- A. Yes
- B. No



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Polling Question – Baseline Knowledge

Does proper disinfection inactivate bacteria?

Choose one.

- A. Yes
- B. No



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Polling Question – Baseline Knowledge

Does proper disinfection inactivate viruses?

Choose one.

- A. Yes
- B. No



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Polling Question – Baseline Knowledge

Can you kill a virus?

Choose one.

- A. Yes
- B. No



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Polling Question – Baseline Knowledge

The disinfectants on the EPA List N means that they are validated to make SARS-CoV-2 non-infectious?

Choose one.

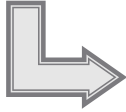
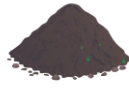
- A. Yes
- B. No



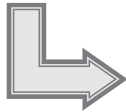
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Levels of Decontamination

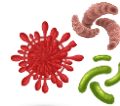
Clean – process of physically removing bioburden



Sanitized – killing 99.9% of **bacteria**, does not effect viruses or fungi



Disinfected – killing 99.9999% of all organisms including **viruses and fungi**



Sterilized – total destruction of all microorganisms



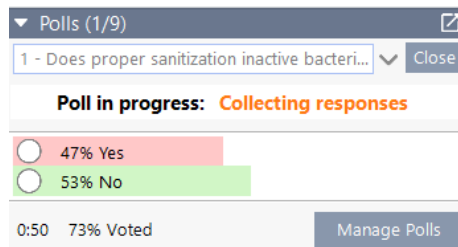
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Polling Question – Baseline Knowledge

Does proper sanitization inactive bacteria?

Choose one.

- A. Yes
- B. No



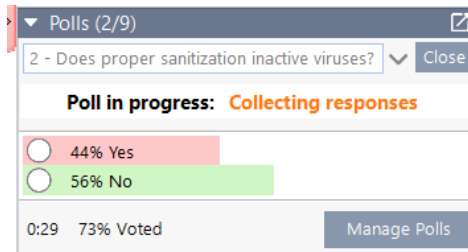
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Polling Question – Baseline Knowledge

Does proper sanitization inactive viruses?

Choose one.

- A. Yes
- B. No



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Polling Question – Baseline Knowledge

Does proper disinfection inactive bacteria?

Choose one.

- A. Yes
- B. No



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Polling Question – Baseline Knowledge

Does proper disinfection inactivate viruses?

Choose one.

- A. Yes
- B. No



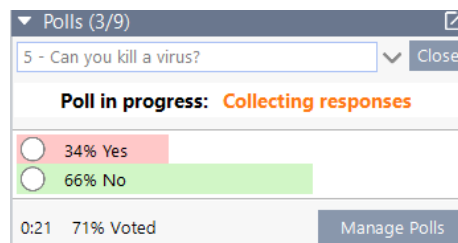
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Polling Question – Baseline Knowledge

Can you kill a virus?

Choose one.

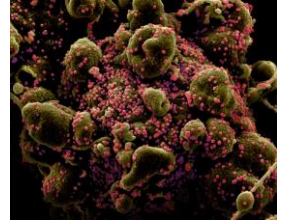
- A. Yes
- B. No



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Can a virus be killed?

1. A virus is not alive
2. How do you kill something if it was never living?
3. Destroy/inactivate etc. – yes

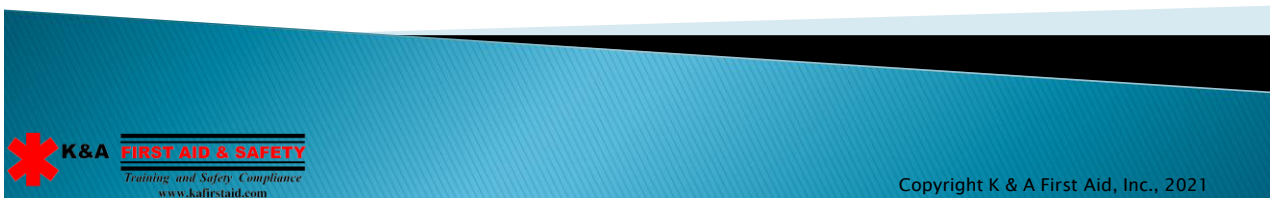


For today's talk we will assume all “kill” terminology indicates that the virus is no longer infectious.



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Pesticide or Disinfectant



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Some EPA basics

- ▶ Claims that a product kills/inactivates, etc. a pest requires EPA registration
- ▶ The label is approved by the EPA
- ▶ SDS's *may* accompany the pesticide and if so is part of the label. The SDS must not conflict with the label.
- ▶ Pesticides bearing an EPA-approved FIFRA label are not subject to the OSHA label requirements, though the HCS data sheet and training requirements may still apply.



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Pesticide or Disinfectant?

“Disinfectants” and “Sanitizers” are listed as pesticides. “Pesticide” does not only refer only to insecticides, but it actually applies to all the substances used to control pests . . .

Disinfectants and sanitizers kill bacteria, viruses, and fungi (also insects, weeds, snails, and slugs) which are considered pests Therefore, disinfectants and sanitizers are pesticides.”



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EPA List N

Use of EPA List N search engine

<https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2>

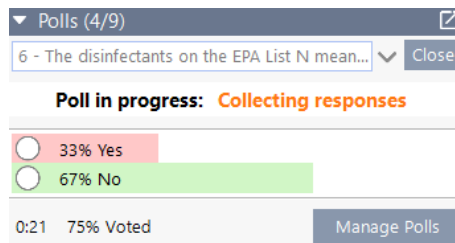
- ▶ Review by active disinfectant, time etc.

Polling Question – Baseline Knowledge

The disinfectants on the EPA List N means that they are validated to make SARS-CoV-2 non-infectious?

Choose one.

- A. Yes
- B. No



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EPA List N – Validation?

- ▶ Most disinfectants on list N have not been tested on SARS-CoV-2
- ▶ July 2020, Lysol® Disinfectant Max Cover Mist (777-127) first tested effective against SARS-CoV-2
- ▶ 9/15/21 – 13 total disinfectants tested effective



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Fogging/Misting



Polling Question – Baseline Knowledge

List N disinfectants cannot be used by spraying to disinfect non-porous surfaces?

Choose one.

- A. Yes
- B. No



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Polling Question – Baseline Knowledge

List N disinfectants cannot be used by spraying to disinfect porous surfaces?

Choose one.

- A. Yes
- B. No



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Polling Question – Baseline Knowledge

List N disinfectants cannot be used by sprayers?

Choose one.

- A. Yes on Non-Porous surfaces
- B. Yes
- C. No
- D. Sometimes



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Polling Question – Baseline Knowledge

List N disinfectants cannot be used by spraying to disinfect non-porous surfaces?

Choose one.

- A. Yes
- B. No

A screenshot of a poll interface. At the top, it says "Polls (5/9)" with a dropdown arrow and a link icon. Below that is a search bar with the text "7 - List N disinfectants cannot be used by s..." and a "Close" button. The main section is titled "Poll in progress: Collecting responses". It shows two radio button options: "38% Yes, they cannot be used" (with a red bar) and "63% No - they CAN be used" (with a green bar). At the bottom, it shows "0:39 76% Voted" and a "Manage Polls" button.

Option	Percentage
Yes, they cannot be used	38%
No - they CAN be used	63%



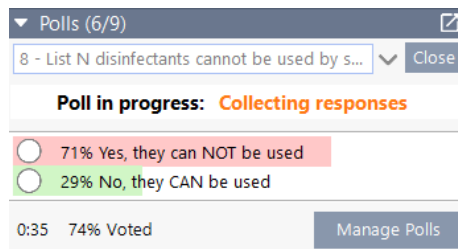
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Polling Question – Baseline Knowledge

List N disinfectants cannot be used by spraying to disinfect porous surfaces?

Choose one.

- A. Yes
- B. No



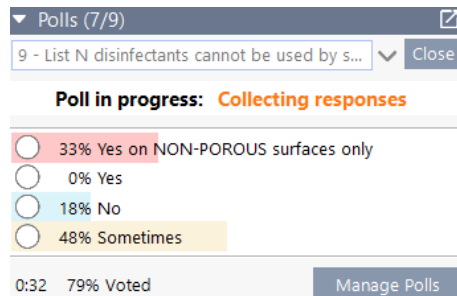
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Polling Question – Baseline Knowledge

List N disinfectants cannot be used by sprayers?

Choose one.

- A. Yes on Non-Porous surfaces
- B. Yes
- C. No
- D. Sometimes



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2 Big Questions

1. Fogging/Misting



2. Porous Surfaces



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Non-Porous Surface Disinfecting

Certain disinfectants can be used by spraying or fogging for sanitization or disinfection. Read the product literature.

EXAMPLE (EPA Reg. No. 10324-58).

- ▶ *“This product {(when used as directed) (can be used) (is formulated to ((disinfect) (clean) (sanitize) (deodorized)) (is formulated for use)] on (washable) hard, non-porous surfaces such as:....”*
- ▶ *“is an economical concentrate that can be used with a mop and bucket, trigger sprayers, sponge or by soaking. can be applied through foaming apparatus, low- pressure sprayers and fogging (wet misting) systems. Follow manufacturers' instructions when using this equipment.”*

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

August 16, 2017

Lisa Amadio
Registration Manager
Mason Chemical Company
2744 E Kemper Road
Cincinnati, OH 45241

Subject: PRIA Label and CSF Amendment – Addition of new organisms, correction or pre-existing organism language (ATCC numbers), updated CSFs and other minor label modifications
Product Name: Maquat 128-NHQ
EPA Registration Number: 10324-155
Application Date: April 3, 2017
Decision Number: 528027

Dear Ms. Amadio:

The amended label and CSF(s) referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, are acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

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MASON CHEMICAL COMPANY "The Quaternary Specialists"
2744 E. Kemper Road | Cincinnati, OH 45241 | 513-326-5900 or 1-800-70-FILOIT
EPA Reg. No. 10324-155
EPA Est. No.
MAQUAT® 128-NHQ

(Note to Reviewer: Marketing claims may be used on the front panel.)

ACCEPTED
08/16/2017

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under
EPA Reg. No. 10324-155

Cleaner • Disinfectant • (Non-Food Contact) Sanitizer
• Deodorizer • Fungicide • Mildewstat • Virucide*

ACTIVE INGREDIENTS:	
Didecyl Dimethyl Ammonium Chloride	5.07%
Alky (50% C ₁₂ -40% C ₁₆ 10% C ₁₈)	3.36%
Dimethyl Benzyl Ammonium Chloride	81.55%
OTHER INGREDIENTS:	
TOTAL:	100.00%

**KEEP OUT OF REACH OF CHILDREN
DANGER (PELIGRO)**

(See [left] (back) [side] [right] (insert) [panel] (of label) [bottom] for (additional) (unavoidable) statements)(and)(or)(FRL and)

(Note to Reviewer: First Aid may only appear on different area of the container label if the Front Panel is less than 12 square inches in total.)

FIRST AID

In case of emergency, call a poison control center or doctor for treatment advice. 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 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.

IF ON SKIN: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes.

IF SWALLOWED: Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person. Call a poison control center or doctor immediately for treatment advice.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

(For [chemical] (and)(or)[medical](and)(or)[environmental] emergencies, call (insert name and/or number of emergency contact) (hours of operation)(24 hours a day)(7 days a week).)



(See (additional) (sheet) (insert) (inside) (outer container) for (other) (directions for use) (information) (claims) (organisms))

Net Contents:
([Batch] (Lot) (No) (Manufacturing Date):
(Product of USA) (Made in the USA)

*Maquat 128-NHQ, EPA Reg. No. 10324-155
Page 1 of 25
8-15-17

(Note to Reviewer: Test N [] is optional. Brackets [] indicate that at least one option with the brackets must be used in the final label text. Parentheses () are meant to appear on final label. This product can be substituted with actual product name in the marketing and directions for use.)

www.kafirstaid.com

MAQUAT® 128-NHQ

ORGANISM LIST

(Note to Reviewer: The list of organisms can be formatted into paragraph form using a comma to separate organisms.)

DISINFECTION PERFORMANCE: This product kills the following bacteria in 10 minutes at 1 cc. per gal. of 400 ppm hard water (800 ppm active) and 5% soil on hard, non-porous surfaces:

Acinetobacter baumannii (ATCC 10033)
Acinetobacter baumannii (ATCC 10033)
Acinetobacter baumannii (ATCC 10033)
Bordetella bronchiseptica (ATCC 10552)
Campylobacter jejuni (VR-125)
Citrobacter freundii (ATCC 8060)
Clostridium botulinum (ATCC 27155)
Enterobacter aerogenes (ATCC 10040)
Enterobacter cloacae (ATCC 13047)
Escherichia coli (ATCC 11229)
Escherichia coli O157:H7 (ATCC 35150)
Escherichia coli (Carbapenem Resistant) (CCDC 81271)
Escherichia coli (Extended Spectrum β -Lactamase) (ESBL) (ATCC BAA-106)
Escherichia coli (Tetracycline Resistant) (ATCC 47041)
Enterococcus faecalis (ATCC 14433)
Enterococcus faecalis (Vancomycin Resistant) (VRE) (ATCC 51298)
Enterococcus hirae (ATCC 10541)
Fusobacterium necrophorum (ATCC 27462)
Klebsiella oxytoca (ATCC 13152)
Klebsiella pneumoniae (ATCC 13883)
Klebsiella pneumoniae (Carbapenem-Resistant) (NCM-1) (ATCC BAA-2140)
Listeria monocytogenes (ATCC 19117)
Micrococcus luteus (ATCC 14420)
Moraxella morganii (ATCC 4968)
Pseudomonas aeruginosa (ATCC 15442)
Proteus vulgaris (ATCC 9020)
Proteus vulgaris (ATCC 13131)
Pseudomonas aeruginosa (ATCC 15442)
Pseudomonas aeruginosa (Tetracycline Resistant) (ATCC 27853)
Salmonella enterica (ATCC 25410)
Salmonella enterica (ATCC 10708)
Salmonella enteritidis (ATCC 49011)
Salmonella enteritidis (ATCC 10708)
Salmonella typhimurium (ATCC 25544)
Serratia marcescens (ATCC 9139)
Serratia marcescens (ATCC 47568)
Shigella flexneri (ATCC 8300)
Shigella flexneri (ATCC 12022)
Shigella sonnei (ATCC 25931)
Staphylococcus aureus (ATCC 6530)
Staphylococcus aureus (ATCC 25923)
Staphylococcus aureus (ATCC 33596)
Staphylococcus aureus (ATCC 14154)
Staphylococcus aureus (Community Associated Methicillin Resistant) (CA-MRSA) (Genotype USA 300)
Staphylococcus aureus (Community Associated Methicillin Resistant) (CA-MRSA) (Genotype USA 400)
Staphylococcus aureus (Methicillin Resistant) (MRSA) (ATCC 33592)
Staphylococcus epidermidis (ATCC 12228)
Staphylococcus epidermidis (Ampicillin, Cefazolin, Oxacillin, Penicillin Resistant) (ATCC 12228)
Streptococcus agalactiae (ATCC 13051)
Streptococcus faecalis (ATCC 29523)
Streptococcus pneumoniae (Methicillin Resistant) (ATCC 6305)
Streptococcus pyogenes (ATCC 19615)
Streptococcus pyogenes (ATCC 28171)
Streptococcus pyogenes (Vancomycin Intermediate Resistant) (VISA) (HSP 5638)
Vibrio cholerae (ATCC 11023)
Yersinia enterocolitica (ATCC 22151)

VRUCIDAL PERFORMANCE: This product kills the following viruses in 10 minutes at 1 cc. per gal. of 400 ppm hard water (800 ppm active) and 5% soil on hard, non-porous surfaces:

Adenovirus (ATCC 10033)
Adenovirus (ATCC 10033)
Adenovirus (ATCC 10033)
Cytomegalovirus (RAD-160)
Coronavirus (SARS-associated) (CCDC 200300502)
Hantavirus (PHV)
Hepatitis B Virus (HBV) (Duck Hepatitis B Virus)
Hepatitis C Virus (HCV) (Duck Hepatitis B Virus)
Herpes Simplex Virus Type 1 (VR-133)
Herpes Simplex Virus Type 2 (VR-734)
Human Coronavirus (VR-740)
Human Immunodeficiency Virus Type 1 (HIV 1) (AIDS Virus)
Influenza A Virus (H1N1) (Strain APP/05/04)
Influenza A Virus (H2N2) (Hong Kong Strain) (VR-544)
Respiratory Syncytial Virus (VR-299)
Vaccinia Virus (VR-110)

ANIMAL PREMISE VRUCIDAL PERFORMANCE: This product kills the following viruses in 10 minutes at 1 cc. per gal. of 400 ppm hard water (800 ppm active) and 5% soil on hard, non-porous surfaces:

Adenovirus (ATCC 10033)
Adenovirus (ATCC 10033)
Adenovirus (ATCC 10033)
Cytomegalovirus (RAD-160)
Coronavirus (SARS-associated) (CCDC 200300502)
Hantavirus (PHV)
Hepatitis B Virus (HBV) (Duck Hepatitis B Virus)
Hepatitis C Virus (HCV) (Duck Hepatitis B Virus)
Herpes Simplex Virus Type 1 (VR-133)
Herpes Simplex Virus Type 2 (VR-734)
Human Coronavirus (VR-740)
Human Immunodeficiency Virus Type 1 (HIV 1) (AIDS Virus)
Influenza A Virus (H1N1) (Strain APP/05/04)
Influenza A Virus (H2N2) (Hong Kong Strain) (VR-544)
Respiratory Syncytial Virus (VR-299)
Vaccinia Virus (VR-110)

This product kills the following viruses in 10 minutes at 4.5 cc. per gal. of 400 ppm hard water (200 ppm active) and 5% soil on hard, non-porous surfaces:

Adenovirus (ATCC 10033)
Adenovirus (ATCC 10033)
Adenovirus (ATCC 10033)
Cytomegalovirus (RAD-160)
Coronavirus (SARS-associated) (CCDC 200300502)
Hantavirus (PHV)
Hepatitis B Virus (HBV) (Duck Hepatitis B Virus)
Hepatitis C Virus (HCV) (Duck Hepatitis B Virus)
Herpes Simplex Virus Type 1 (VR-133)
Herpes Simplex Virus Type 2 (VR-734)
Human Coronavirus (VR-740)
Human Immunodeficiency Virus Type 1 (HIV 1) (AIDS Virus)
Influenza A Virus (H1N1) (Strain APP/05/04)
Influenza A Virus (H2N2) (Hong Kong Strain) (VR-544)
Respiratory Syncytial Virus (VR-299)
Vaccinia Virus (VR-110)

NON-FOOD CONTACT SANITIZING PERFORMANCE: This product is an effective one-step sanitizer in 3 minutes at 1 cc. per gal. of 400 ppm hard water (800 ppm active) and 5% soil on hard, non-porous surfaces:

Adenovirus (ATCC 10033)
Adenovirus (ATCC 10033)
Adenovirus (ATCC 10033)
Cytomegalovirus (RAD-160)
Coronavirus (SARS-associated) (CCDC 200300502)
Hantavirus (PHV)
Hepatitis B Virus (HBV) (Duck Hepatitis B Virus)
Hepatitis C Virus (HCV) (Duck Hepatitis B Virus)
Herpes Simplex Virus Type 1 (VR-133)
Herpes Simplex Virus Type 2 (VR-734)
Human Coronavirus (VR-740)
Human Immunodeficiency Virus Type 1 (HIV 1) (AIDS Virus)
Influenza A Virus (H1N1) (Strain APP/05/04)
Influenza A Virus (H2N2) (Hong Kong Strain) (VR-544)
Respiratory Syncytial Virus (VR-299)
Vaccinia Virus (VR-110)

FUNGICIDAL PERFORMANCE: This product kills the following fungi in 10 minutes at 1 cc. per gal. of 400 ppm hard water (800 ppm active) and 5% soil on hard, non-porous surfaces:

Aspergillus niger (ATCC 16404)
Aspergillus niger (ATCC 16404)
Aspergillus niger (ATCC 16404)
Candida albicans (ATCC 10211)
Trichophyton mentagrophytes (ATCC 6533) (Athlete's foot fungus) (as cause of Ringworm)

MILDWEDESTATIC PERFORMANCE: This product controls the following mold at 1 cc. per gal. of 400 ppm hard water (800 ppm active) and 5% soil on hard, non-porous surfaces for up to 7 days:

Aspergillus niger (ATCC 16404)
Aspergillus niger (ATCC 16404)
Aspergillus niger (ATCC 16404)
Candida albicans (ATCC 10211)
Trichophyton mentagrophytes (ATCC 6533) (Athlete's foot fungus) (as cause of Ringworm)

*Maquat 128-NHQ, EPA Reg. No. 10324-155
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(Note to Reviewer: Test N [] is optional. Brackets [] indicate that at least one option with the brackets must be used in the final label text. Parentheses () are meant to appear on final label. This product can be substituted with actual product name in the marketing and directions for use.)

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(Note to Reviewer: The Table of Contents will not be on any label. This is for our customer's reference only.)

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FOGGING

{FOGGING IN FOOD PREMISES}

ALL SURFACES MUST BE CLEANED AND DISINFECTED IN ACCORDANCE WITH LABEL DIRECTIONS PRIOR TO FOGGING.

DIRECTIONS FOR FOGGING IN DAIRIES, BEVERAGE AND FOOD PROCESSING PLANTS: Prior to fogging, food products and packaging material must be removed from the room or carefully protected. After disinfecting, fog desired areas using 1 quart per 1,000 cubic feet of room area with a solution containing 4 oz. of product per gal. of water {(1,200 ppm active)} {(or equivalent use dilution)}. Wear a dust mist respirator when mixing the use solution and pouring it into the fogging apparatus. Vacate the area of all personnel during fogging and for a minimum of 2 hours after fogging and a minimum of 4 air exchanges (ACH) per hour in the facility. All food contact surfaces must be sanitized with an EPA approved food contact sanitizer solution prior to use. All food contact surfaces must be thoroughly rinsed with potable water prior to sanitizing.

Note: The fog generated is irritating to the eyes, skin and mucous membranes. Under no circumstances must a room or building be entered by anyone within two hours of the actual fogging and a minimum of 4 air exchanges (ACH) per hour in the facility. If the building must be entered, then the individuals entering the building must wear a self-contained respirator approved by NIOSH, goggles, long sleeves, gloves and long pants.



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Porous Surfaces

- ▶ Harder to disinfect
- ▶ Need to look at the label
- ▶ Pay attention to sanitize vs. disinfect vs. deodorize



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WATER AND SMOKE DAMAGE RESTORATION

SEWER BACKUP & RIVER FLOODING: To use as a deodorizer, dilute 1-2 oz. of this product per gal. of water allowing for the diluting effect of absorbed water within saturated materials. Remove gross filth or heavy soil along with non-salvageable materials. Saturate all affected areas with a mechanical spray device, {coarse pump or trigger spray device} before and after cleaning and extraction. For spray applications, spray 6-8 inches from surface. Do not breathe spray. Use proper ventilation; open windows. (Not for use in CA.)

CARPETS, CARPET CUSHIONS, UPHOLSTERY, DRAPES AND OTHER POROUS MATERIALS, SUB-FLOORS, DRYWALL, TRIM AND FRAME LUMBER, TACKLES, STRIP AND PANELING: To use as a deodorizer against water damage, extract the excess water. Test hidden area for colorfastness. Dilute 1-2 oz. of this product per gal. of water, allowing for the diluting effect of absorbed water within saturated materials. Remove gross filth or heavy soil. Apply directly with a mechanical spray device {coarse pump or trigger spray device} to fully saturate affected materials. For spray applications, spray 6-8 inches from surface. Do not breathe spray. Roll, brush or agitate into materials. Follow with a thorough extraction. Dry rapidly and thoroughly. (Not for use in CA.)

[WATER] AND [SMOKE] DAMAGE RESTORATION: Effective against odor caused by [smoke] and [water] damage for home, institutional, industrial and hospital use. This product is particularly suitable for use in water damage restoration. Dilute 1-2 oz. of this product per gal. of water, allowing for the diluting effect of absorbed water within saturated materials. Saturate affected materials with enough product to remain wet for at least 10 minutes. Use proper ventilation. (Not for use in CA.)

Sanitize ≠ Disinfect ≠ Deodorize



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Extended Protection

- ▶ SurfaceWise2 approval removed
 - August 2020 public health exemption approved (TX, AR)
 - July 2021 Stop Sale, Use or Removal Order
- ▶ 2 Emergency Exemptions approved
 - April 2021 BIAXAM (GA, MN, UT) – **Adhesive film**, 100 – 200 days
 - July 2021 Grignard Pure (MD, NV, PA) – Mist (generators or HVAC) using triethylene glycol by trained professionals, can cause irritation for continuous use



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