

KOMUNIKAT nr 2**Zasady postępowania z instalacjami ogrzewania, wentylacji i klimatyzacji (HVAC)
w pomieszczeniach podczas zagrożenia koronawirusem typu SARS-CoV-2**

W przypadku zagrożenia wirusami, w tym koronawirusem typu SARS-CoV-2, w zależności od miejsca występowania zalecane jest stosowanie odpowiednich organizacyjnych i technicznych środków ochronnych.

1. Organizacja stanowisk pracy w pomieszczeniach wewnątrz budynków:

- a) Pracownicy powinni zachować wystarczającą odległość (co najmniej 2 metry) od innych osób. W tym celu należy:
- wykorzystać wolne przestrzenie w pomieszczeniach,
 - zapewnić dodatkową przestrzeń pomiędzy pracownikami, np. co najmniej jedno puste biurko po obu stronach,
 - zorganizować pracę tak, aby uniknąć obecności większej liczby osób w tym samym pomieszczeniu.

Uwaga: W przypadku użytkowania mechanicznej instalacji HVAC pozwala to na unikanie zwiększonego zapotrzebowania energetycznego w celu osiągnięcia wymaganej ilości powietrza zewnętrznego na 1 użytkownika pomieszczenia.

- b) W celu oddzielenia stanowisk pracy, na których w inny sposób nie można zapewnić bezpiecznej odległości, należy zamontować nieprzepuszczalną barierę pomiędzy pracownikami, zwłaszcza jeśli nie są oni w stanie utrzymać 2-metrowej odległości od siebie. Możliwe jest improwizowanie barier, na przykład z folii, ścianek działowych, ruchomych szafek, regałów.

Uwaga: Należy unikać przedmiotów, które nie są solidne lub mają przerwy, takich jak rośliny doniczkowe lub wózki, oraz uważać, aby nie stwarzać nowego ryzyka, na przykład potknięcia się lub upadku przedmiotów.

2. Wymiana powietrza w pomieszczeniach bez mechanicznej instalacji wentylacyjnej:

W budynkach bez mechanicznej instalacji wentylacyjnej, pomieszczenia powinny być regularnie wietrzone:

- okresowo w ciągu dnia pracy, np. 15 minut wietrzenia co 1 godzinę
Uwaga: może to powodować dyskomfort termiczny pracowników.
- w sposób ciągły w godzinach nocnych, minimum 2 godziny przed i po zakończeniu użytkowania pomieszczenia.
Uwaga: dotyczy to również obecności osób sprzątających i konserwujących wyposażenie pomieszczeń.

3. Instalacje ogrzewania, wentylacji i klimatyzacji (HVAC) w pomieszczeniach wewnątrz budynków:

- a) Dezynfekcja powierzchni elementów wyposażenia pomieszczeń oraz instalacji HVAC chemicznymi preparatami dezynfekującymi zalecanymi w liście N przez The Environmental Protection Agency (EPA).

Rodzaj i czas stosowania preparatu przedstawiono w załączniku 1 „Środki dezynfekcyjne przeciwko SARS-CoV-2”.

Uwaga: Zaleca się stosowanie środków dezynfekcyjnych dopuszczonych do obrotu na terenie kraju przez Urząd Rejestracji Produktów Leczniczych, Wyrobów Medycznych i Produktów Biobójczych.

<http://bip.urpl.gov.pl/pl/biuletyny-i-wyказы/produkty-biob%C3%B3jczce>

- b) Dezynfekcja całych pomieszczeń promieniowaniem UVC. Ogólne zasady dezynfekcji promieniowaniem UVC to:

- czas trwania dezynfekcji co najmniej 30 minut,
- podczas dezynfekcji w pomieszczeniu nie mogą znajdować się ludzie
- po zakończeniu dezynfekcji należy odczekać z użytkowaniem pomieszczeń dodatkowo 30 minut.

Uwaga: Promieniowanie UVC nie może być stosowane do dezynfekcji rąk i innych części ciała człowieka.

Szczegóły dezynfekcji promieniowaniem UVC podano w załączniku 2.

- c) Dezynfekcja wewnątrz instalacji HVAC oraz powierzchni filtrów powietrza promieniowaniem UVC (opcjonalnie).

Uwaga: Dezynfekcja promieniowaniem UVC jest mało skuteczna dla filtrów wysokoskutecznych typu EPA, HEPA i ULPA, z powodu ich głębokości i gęstości upakowania materiału filtracyjnego.

- d) Instalacja HVAC powinna zapewniać zadany układ ciśnień w pomieszczeniach bezwzględnie podczas każdego etapu pracy instalacji, bez względu na zanieczyszczenie filtrów powietrza, tryb pracy (pełna lub ograniczona wydajność) oraz inne zakłócenia pracy instalacji.
- e) Zalecane są dłuższe czasy pracy instalacji HVAC. Najlepszym rozwiązaniem jest utrzymanie działania instalacji w roboczym trybie ciągłym 7 dni/24h.
- f) Kluczowym elementem w działaniu instalacji HVAC jest dostarczenie jak największej ilości powietrza zewnętrznego. W okresie użytkowania pomieszczeń, w których występuje zagrożenie koronawirusem typu SARS-CoV-2 proponuje się co najmniej dwukrotne zwiększenie krotności wymian powietrza lub przestawienie instalacji HVAC w tryb pracy ze stałą, maksymalną wydajnością.
- g) Podczas zagrożenia koronawirusem typu SARS-CoV-2 zaleca się unikanie centralnej i miejscowej recyrkulacji powietrza. W tym celu konieczne jest zamknięcie przepustnic recyrkulacyjnych (za pomocą systemu sterowania budynkiem lub ręcznie). W przypadku wyposażenia centrali wentylacyjnych i sekcji recyrkulacyjnych w wysokoskuteczne filtry powietrza powrotnego dopuszczalne jest stosowanie recyrkulacji powietrza.

Uwaga: W instalacjach HVAC filtry wysokoskuteczne typu EPA, HEPA, ULPA powinny być poprzedzone wstępnymi filtrami wspomagającymi typu ISO Coarse, ISO PM₁₀, ISO PM_{2.5} lub ISO PM₁.

- h) Filtry powietrza i materiały filtracyjne powinny być oznaczone i sklasyfikowane zgodnie z normami serii PN-EN ISO 16890, PN-EN ISO 29463, PN-EN 1822-1 i PN-EN ISO 21083-1.
- i) CIOP-PIB posiada kompetencje do klasyfikowania i badania parametrów użytkowych filtrów powietrza i materiałów filtracyjnych stosowanych w instalacjach HVAC budynków.

Badania filtrów powietrza prowadzone są zgodnie z serią norm PN-EN ISO 16890. Filtry powietrza są klasyfikowane jako:

- wstępne (Coarse Air Filter),
- ePM₁₀ w stosunku do cząstek o wymiarach od 0,3 do 10 µm,
- ePM_{2,5} w stosunku do cząstek o wymiarach od 0,3 do 2,5 µm,
- ePM₁ w stosunku do cząstek o wymiarach od 0,3 do 1 µm

<https://www.ciop.pl/CIOPPortalWAR/file/86839/Filtry-ISO16890-CIOP-PIB-2018-materialy-informacyjne.pdf>

Badania materiałów filtracyjnych prowadzone są zgodnie z PN-EN ISO 21083-1. Określenie frakcyjnej skuteczności filtracji wobec cząstek z zakresu 20-500 nm, daje możliwość oceny w jakim stopniu materiał filtracyjny zatrzymuje cząstki o wielkości koronawirusa typu SARS-CoV-2 (czyli z zakresu 20-200 nm).

<https://www.ciop.pl/CIOPPortalWAR/file/86858/Materialy-Informacyjne-3-G-03.pdf>

- j) Zalecana częstość kontroli czystości poszczególnych elementów instalacji HVAC powinna być zgodna z dokumentacją projektem i wynosić odpowiednio dla:
- central wentylacyjnych, klimatyzacyjnych i jednostek uzdatniających powietrza – 12 miesięcy,
 - filtrów powietrza – 6 miesięcy lub osiągnięcie końcowego oporu przepływu powietrza lub zgodnie z zaleceniami producenta,
 - przewodów wentylacyjnych – 12 miesięcy,
 - elementów/urządzeń końcowych typu anemostaty, kratki – 12 miesięcy.
- k) Zużyte filtry powietrza stosowane w instalacjach HVAC powinny być usuwane jako „Odpady niebezpieczne” – kod 15 02 02*.

4. Instalacje wentylacji i klimatyzacji powietrza w indywidualnych i zbiorowych środkach transportu:

- a) Okresowa dezynfekcja powierzchni elementów doprowadzających powietrza do wnętrza chemicznymi preparatami dezynfekującymi zalecanymi w liście N przez EPA (Załącznik 1).
- b) W przypadku stwierdzenia, że środkiem transportu poruszał się użytkownik u którego potwierdzono koronawirusa SARS-CoV-2, lub pasażerowie mieli kontakt z osobą zakażoną, wewnętrzne powierzchnie oraz instalacja wentylacji i klimatyzacji powinny zostać oczyszczona przy użyciu chemicznego preparatu dezynfekcyjnego zalecanego w liście N przez EPA (Załącznik 1).
- c) Dezynfekcja całego wnętrza promieniowaniem UVC. Szczegóły dezynfekcji promieniowaniem UVC podano w załączniku 2.
- d) Zalecana częstość kontroli czystości i wymiany kabinowych filtrów powietrza wynosi 6 miesięcy lub zgodnie z zaleceniami producenta.
- e) Zużyte filtry powietrza stosowane w instalacjach wentylacji i klimatyzacji powietrza w środkach transportu powinny być usuwane jako „Odpady niebezpieczne” – kod 15 02 02*.

Opracowali:

dr Małgorzata Gołofit-Szymczak (Pracownia Zagrożeń Biologicznych)
dr inż. Tomasz Jankowski (Pracownia Aerozoli, Filtracji i Wentylacji)
dr inż. Szymon Jakubiak (Pracownia Aerozoli, Filtracji i Wentylacji)
dr Przemysław Oberbek (Pracownia Aerozoli, Filtracji i Wentylacji)

Zakład Zagrożeń Chemicznych, Pyłowych i Biologicznych
Kierownik: dr Małgorzata Pośniak

Załącznik 1: Lista N - Products with Emerging Viral Pathogens AND Human Coronavirus claims for use against SARS-CoV-2 (The Environmental Protection Agency).

Załącznik 2: Koronawirus a promieniowanie UVC.

List N: Products with Emerging Viral Pathogens AND Human Coronavirus claims for use against SARS-CoV-2
Date Accessed: 05/13/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
1043-129	Quaternary ammonium; Isopropanol	Vesta-Syde SQ64 Ready-to-Use Disinfectant	Steris Corporation	Feline calicivirus	10	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Institutional	Yes	05/07/2020
71654-5	Glycolic acid	Glyclean Hard Surface Cleaner	The Chemours Company FC LLC	Rhinovirus	10	RTU	Hard Nonporous (HN)	Residential	Yes	05/07/2020
70271-34	Quaternary ammonium	KIK Antibacterial Multipurpose Cleaner I	KIK International LLC	Rhinovirus	10	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	05/07/2020
71355-2	Hydrogen peroxide; Peroxyacetic acid	Kickstart	CID Lines NV	Avian reovirus	10	Dilutable	Hard Nonporous (HN)	Institutional	Yes	05/07/2020
4822-530	Quaternary ammonium	Fantastik® All-Purpose Cleaner	S.C. Johnson & Son Inc	Rhinovirus	3	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Institutional; Residential	Yes	05/07/2020
67619-42	Hypochlorous acid	Galaxy	Clorox Professional	Canine parvovirus;	5	RTU; Electrostatic	Hard Nonporous	Healthcare; Institutional;	Yes	05/07/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
			Products Company	Rhinovirus		spray (Clorox® Total 360® system)	(HN)	Residential		
6836-245	Quaternary ammonium	CSP-46	Lonza LLC	Feline calicivirus; Norovirus	10	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	05/07/2020
6836-379	Quaternary ammonium	Nugen NR Disinfectant Wipes	Lonza LLC	Norovirus	5	Towelette	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	05/07/2020
6836-372	Quaternary ammonium	Nugen 2m Disinfectant Wipes	Lonza LLC	Rotavirus	1.5 (90 seconds)	Wipe	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	05/07/2020
8383-12	Hydrogen peroxide; Peroxyacetic acid	Peridox	Contec Inc	Norovirus; Rhinovirus	2	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional	Yes	05/07/2020
1677-158	Hydrogen peroxide; Peroxyacetic acid; Octanoic acid	Vortexx	Ecolab Inc	Reovirus	10	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Institutional	Yes	05/07/2020
1677-209	Hydrogen peroxide; Peroxyoctanoic acid; Octanoic acid	Octave FS	Ecolab Inc	Feline calicivirus	10	Dilutable	Hard Nonporous (HN)	Institutional	Yes	05/07/2020
4822-613	Quaternary ammonium	Gertrude	S.C. Johnson & Son Inc	Rotavirus	5	RTU	Hard Nonporous (HN); Food	Residential	Yes	05/07/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
							Contact Post-Rinse Required (FCR)			
5813-93	Glycolic acid	Show	The Clorox Company	Rhinovirus	10	Impregnated materials	Hard Nonporous (HN)	Residential	Yes	05/07/2020
64240-44	Sodium hypochlorite	Soft Scrub with Bleach	Combat Insect Control Systems	Rhinovirus	3	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	05/07/2020
72977-3	Silver ion; Citric acid	Axen® 30	ETI H2O Inc	Adenovirus	3	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	05/07/2020
1043-127	Phenolic	LpH® IIIse Phenolic Disinfectant	Steris Corporation	Adenovirus	10	Dilutable	Hard Nonporous (HN)	Healthcare	Yes	04/30/2020
92378-2	Quaternary ammonium	Atmosphere	Atmosphere Global LLC	Norovirus	10	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	04/30/2020
10897-108	Sodium hypochlorite	Hasa Bleach 6%	Hasa Inc	Rhinovirus	5	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Residential	Yes	04/30/2020
88049-2	Sodium hypochlorite	2.2% Sodium Hypochlorite Solution	Ameriplus Inc	Rhinovirus	30	RTU	Hard Nonporous (HN)	Institutional; Residential	Yes	04/30/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
92449-1	Hypochlorous acid	Annihilyte-1	Annihilare Medical Systems Inc	Rhinovirus	10	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	04/30/2020
95337-1	Citric acid	Volcano	CR Brands Inc	Rhinovirus	5	Wipe	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Institutional; Residential	Yes	04/30/2020
34810-25	Thymol	Ready to Use Thymol	Wexford Labs Inc	Feline calicivirus	10	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	04/30/2020
8383-3	Phenolic	Sporicidin (Brand) Disinfectant Solution (Spray)	Contec Inc	Norovirus	5	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	04/30/2020
87508-3	Sodium chlorite	Performacide	Odorstart LLC	Poliovirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional	Yes	04/30/2020
93672-2	Hydrogen peroxide	NeoSan Labs Part B	Neosan Labs Inc	Norovirus	10	Dilutable	Hard Nonporous	Healthcare; Institutional;	Yes	04/30/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
							(HN); Food Contact Post-Rinse Required (FCR)	Residential		
93672-1	Quaternary ammonium	NeoSan Labs Part A	Neosan Labs Inc	Norovirus	10	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	04/30/2020
1677-256	Quaternary ammonium	FSC 35K	Ecolab Inc	Feline calicivirus	5	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional	Yes	04/30/2020
1839-213	Quaternary ammonium	SC-AHD-128	Stepan Company	Norovirus	5	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	04/30/2020
1839-211	Quaternary ammonium	SC-AHD-64	Stepan Company	Feline calicivirus	5	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	04/23/2020
5185-505	Hydrogen chloride	The Works® Basic Disinfectant Toilet Bowl	Bio-Lab Inc	Rotavirus; Poliovirus	10	Dilutable	Hard Nonporous (HN)	Institutional; Residential	Yes	04/23/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
Cleaner										
74436-1	Quaternary ammonium	EasyDECON Part 1	EFT Holdings Inc	Hepatitis A virus; Rhinovirus; Feline calicivirus;	10	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	04/23/2020
74436-2	Hydrogen Peroxide	EasyDECON Part 2	EFT Holdings Inc	Hepatitis A virus; Rhinovirus; Feline calicivirus;	10	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	04/23/2020
66570-2	Sodium dichloro-S-triazinetrione	EfferSan™	Activon Inc	Feline calicivirus	5	Solid	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	04/23/2020
87492-1	Chlorine dioxide	Electro-Biocide	Strategic Resource Optimization Inc	Rhinovirus	10	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	04/23/2020
11525-30	Quaternary ammonium; Ethanol	Disinfectant Spray "G"	Aerosols Danville Inc	Rhinovirus	10	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	04/23/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
4822-614	Hydrochloric acid	Scrubbing Bubbles Power Stain Destroyer Non-Bleach Toilet Bowl Disinfectant	S.C. Johnson & Son Inc	Rotavirus	10	RTU	Hard Nonporous (HN)	Residential	Yes	04/23/2020
70627-79	Hydrogen peroxide	Oxivir HC Disinfectant Cleaner	Diversey Inc	Feline calicivirus; Rhinovirus; Adenovirus; Rotavirus; Poliovirus	1	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional	Yes	04/23/2020
70627-80	Hydrogen peroxide	Oxivir™ HC Wipes	Diversey Inc	Feline calicivirus; Rhinovirus; Adenovirus; Rotavirus; Poliovirus	1	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional	Yes	04/23/2020
4822-617	Sodium hypochlorite	Scrubbing Bubbles Bubbly Bleach Gel Toilet Bowl Disinfectant	S.C. Johnson & Son Inc	Rotavirus	10	RTU	Hard Nonporous (HN)	Residential	Yes	04/23/2020
6836-385	Hydrogen peroxide	DS-6640	Lonza LLC	Feline calicivirus	3	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	04/23/2020
6836-388	Hydrogen peroxide	DS6809	Lonza LLC	Feline calicivirus	3	Wipe	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	04/23/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
91452-1	Citric acid	LEXX™ Liquid Sanitizer and Cleaner Concentrate	ProNatural Brands LLC	Feline calicivirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	04/23/2020
1043-128	Phenolic	Vesphene Illse Phenolic Disinfectant	Steris Corporation	Adenovirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional	Yes	04/23/2020
88897-1	Quaternary ammonium; Ethanol; Isopropanol	Panther Disinfectant Towelette	Maxill Inc	Poliovirus	3	Wipe	Hard Nonporous (HN)	Healthcare; Institutional	Yes	04/23/2020
1677-255	Sodium dichloroisocyanurate	XHC-S	Ecolab Inc	Poliovirus	5	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional	Yes	04/23/2020
68660-11	Hydrogen peroxide; Peroxyacetic acid	Proxitane® AHC	Solvay Chemicals LLC	Rhinovirus	10	Dilutable	Hard Nonporous (HN)	Institutional	Yes	04/23/2020
34810-31	Phenolic	Wex-cide 128	Wexford Labs Inc	Feline calicivirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	04/23/2020
1839-155	Quaternary ammonium	BTC 2125M 20% Solution	Stepan Company	Adenovirus	10	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	04/23/2020
1839-245	Quaternary ammonium	SC-5:256HN	Stepan Company	Norovirus	5	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	04/23/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
65402-3	Peroxyacetic acid; Hydrogen peroxide	VigorOx SP-15 Antimicrobial Agent	PeroxyChem LLC	Norovirus	5	Dilutable	Hard Nonporous (HN)	Institutional	Yes	04/23/2020
70271-15	Sodium hypochlorite	2% Sodium Hypochlorite Spray	KIK International, Inc.	Rhinovirus	1	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	04/23/2020
73232-1	Isopropanol; Quaternary ammonium	Alpet D2	Best Sanitizers Inc	Norovirus	5	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	04/23/2020
34810-36	Citric acid	CleanCide Wipes	Wexford Labs Inc	Rhinovirus; Feline calicivirus	5	Towelette	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	04/23/2020
1839-96	Quaternary ammonium	NP 9.0 (D & F) Detergent/ disinfectant	Stepan Company	Feline calicivirus	10	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	04/23/2020
87518-1	Hypochlorous acid	Hsp20	HSP USA LLC	Norovirus	1	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	04/23/2020
72372-1	Hydrogen peroxide	B-Cap™ 35 Antimicrobial Agent	PeroxyChem LLC	Use this product for sterilization as	Consult user manual	Vapor (use in conjunction with VHP)	Hard Nonporous (HN);	Institutional	Yes	04/16/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
				instructed in the Bioquell Hydrogen Peroxide Vapor (HPV) User's Equipment Manual		generator)	Porous (P)			
777-126	Hydrogen peroxide	Angel	Reckitt Benckiser LLC	Rotavirus; Rhinovirus	10	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	04/16/2020
4822-594	Quaternary ammonium	Scrubbing Bubbles® Bathroom Disinfectant Bathroom Grime Fighter	S.C. Johnson & Son Inc	Rotavirus	5	RTU	Hard Nonporous (HN)	Institutional; Residential	Yes	04/16/2020
89833-4	Hydrogen peroxide	D7 Part 2	Decon7 Systems LLC	Norovirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	04/16/2020
1677-254	Sodium hypochlorite	XHC-E	Ecolab Inc	Poliovirus	5	RTU	Hard Nonporous (HN)	Healthcare; Institutional	Yes	04/16/2020
706-65	Quaternary ammonium	Claire Disinfectant Bathroom Cleaner	Claire Manufacturing Company	Adenovirus	10	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	04/16/2020
70144-5	Quaternary ammonium; Ethanol	Opti-cide Max	Micro-Scientific LLC	Rotavirus	1	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	04/16/2020
3573-77	Sodium hypochlorite	CSP-3002-3	The Proctor &	Norovirus;	1	Dilutable	Hard	Healthcare;	Yes	04/16/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
			Gamble Company	Poliovirus			Nonporous (HN)	Institutional; Residential		
3573-96	Quaternary ammonium	Malibu Concentrate	The Proctor & Gamble Company	Feline calicivirus; Norovirus	10	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	04/16/2020
1839-215	Quaternary ammonium	SC-NDC-128	Stepan Company	Rotavirus	5	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	04/16/2020
1839-233	Quaternary ammonium	SC-5:64N	Stepan Company	Simian rotavirus	5	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	04/16/2020
6836-233	Quaternary ammonium	BARDAC 205M-50	Lonza LLC	Norovirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	04/16/2020
70627-35	Quaternary ammonium	Envy Foaming Disinfectant Cleaner	Diversey Inc	Poliovirus	3	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional	Yes	04/16/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
1839-225	Quaternary ammonium	SC-RTU-TB	Stepan Company	Rhinovirus	3	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	04/16/2020
1839-212	Quaternary ammonium	SC-AHD-256	Stepan Company	Feline calicivirus; Norovirus	5	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	04/16/2020
5741-28	Sodium hypochlorite	Tulmult	Spartan Chemical Company Inc	Feline calicivirus; Norovirus	0.5 (30 seconds)	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	04/16/2020
70144-2	Quaternary ammonium; Isopropanol	Opti-Cide 3® Wipes	Micro-Scientific LLC	Rotavirus; Rhinovirus	3	Wipe	Hard Nonporous (HN)	Healthcare; Institutional	Yes	04/09/2020
1677-259	Dodecylbenzenesulfonic acid; Lactic acid	CW32A-RTU	Ecolab Inc	Norovirus	0.5 (30 seconds)	RTU	Hard Nonporous (HN); Food Contact No Rinse (FCNR)	Healthcare; Institutional; Residential	Yes	04/09/2020
1677-260	Dodecylbenzenesulfonic acid; Lactic acid	S&S Sanitizer	Ecolab Inc	Norovirus	0.5 (30 seconds)	Dilutable	Hard Nonporous (HN); Food	Healthcare; Institutional; Residential	Yes	04/09/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
91899-2	Hydrogen peroxide	MDF-200 Part B	Span-World LLC	Feline calicivirus	10	Dilutable	Contact No Rinse (FCNR) Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional	Yes	04/09/2020
91899-1	Quaternary ammonium	MDF-200 Part A	Span-World LLC	Feline calicivirus	10	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional	Yes	04/09/2020
34810-35	Citric acid	Cleancide	Wexford Labs Inc	Feline calicivirus	5	RTU	Hard Nonporous (HN)	Healthcare; Institutional	Yes	04/09/2020
9804-1	Chlorine dioxide	Oxine	Bio-Cide International Inc	Canine parvovirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional	Yes	04/09/2020
58779-4	Hydrogen peroxide	Vaprox Hydrogen Peroxide Sterilant	Steris Corporation	Use this product for sterilization as instructed in the Vaporized Hydrogen Peroxide (VHP®) User's Equipment Manual	Consult user manual	Vapor (use in conjunction with VHP generator)	Hard Nonporous (HN); Porous (P); Food Contact No Rinse (FCNR)	Institutional	Yes	04/09/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
58232-2	Sodium hypochlorite	Sodium Hypochlorite 8.25%	Hasa Inc	Rhinovirus	5	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	04/09/2020
4822-593	L-Lactic Acid	Windex Disinfectant Cleaner	S.C. Johnson & Son Inc	Rhinovirus	5	RTU	Hard Nonporous (HN)	Institutional; Residential	Yes	04/09/2020
66251-2	Citric acid; Thymol	SBT 2 to 1 Concentrate	Melaleuca Inc	Rhinovirus, Poliovirus	10	Dilutable	Hard Nonporous (HN)	Residential	Yes	04/09/2020
71700-2	Chlorine dioxide; Quaternary ammonium	SNiPER	Global Environmental Restoration Inc	Canine parvovirus	10	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	04/09/2020
9150-2	Chlorine dioxide	Anthium Dioxide	International Dioxide Inc	Canine parvovirus	15	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional	Yes	04/09/2020
66171-103	Peroxyacetic acid; Hydrogen peroxide	Peraside A Peroxyacetic Acid-Based Sanitizer/ Disinfectant	Preserve International	Murine norovirus	2	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional	Yes	04/09/2020
3573-54	Citric acid	Comet Disinfecting Bathroom Cleaner	The Proctor & Gamble Company	Feline calicivirus; Norovirus	10	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	04/09/2020
39967-138	Potassium peroxymonosulfate; Sodium choride	Rely+On Multipurpose Disinfectant Cleaner	Lanxess Corporation	Hepatitis A virus; Feline calicivirus	10	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	04/09/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
1839-246	Quaternary ammonium	SC-5:128HN	Stepan Company	Rotavirus; Feline calicivirus	5	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	04/09/2020
1839-86	Quaternary ammonium	BTC 2125 M 10% Solution	Stepan Company	Adenovirus	10	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	04/09/2020
1839-166	Quaternary ammonium	BTC 885 NDC-128	Stepan Company	Rotavirus	10	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	04/09/2020
8383-13	Hydrogen peroxide; Peroxyacetic acid	PeridoxRTU™	Contec Inc	Feline calicivirus	2	RTU	Hard Nonporous (HN)	Healthcare; Institutional	Yes	04/09/2020
84683-3	Thymol	Benefect Botanical Daily Cleaner Disinfectant Spray	Cleanwell LLC	Rhinovirus	10	RTU	Hard Nonporous (HN); Food Contact No Rinse (FCNR)	Healthcare; Institutional; Residential	Yes	04/02/2020
88897-2	Quaternary ammonium; Isopropanol; Ethanol	Panther Disinfectant	Maxill Inc	Adenovirus; Feline calicivirus	3	RTU	Hard Nonporous (HN)	Healthcare; Institutional	Yes	04/02/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
42048-4	L-Lactic Acid	Sani-Cide EX3 (10X) RTU	Celeste Industries Corp	Feline calicivirus	10	RTU	Hard Nonporous (HN)	Institutional	Yes	04/02/2020
66171-7	Quaternary ammonium; Glutaraldehyde	Synergize	Preserve International	Feline calicivirus	10	Dilutable	Hard Nonporous (HN)	Institutional	Yes	04/02/2020
85837-4	Hydrogen peroxide	Proxi Home General Disinfectant Cleaner Spray	Innovasource LLC	Rhinovirus	10	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	04/02/2020
498-179	Quaternary ammonium; Ethanol	Champion Sprayon Spray Disinfectant Formula 3	Chase Products Co	Rhinovirus	10	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	04/02/2020
1839-236	Quaternary ammonium	SC-5:128N	Stepan Company	Rotavirus	5	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	04/02/2020
70385-6	Quaternary ammonium	QGC	Prorestore Products	Feline calicivirus	10	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	04/02/2020
1043-87	Phenolic	Vesphene II se	Steris Corporation	Adenovirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional	Yes	03/26/2020
1043-91	Phenolic	LpH®	Steris Corporation	Adenovirus	10	Dilutable	Hard Nonporous	Institutional	Yes	03/26/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
							(HN); Food Contact Post-Rinse Required (FCR)			
1839-100	Quaternary ammonium	Veterinarian Type Disinfectant	Stapan Company	Feline calicivirus; Norovirus	10	Dilutable	Hard Nonporous (HN)	Residential	Yes	03/26/2020
1839-95	Quaternary ammonium	NP 4.5 (D & F) Detergent/ disinfectant	Stapan Company	Norovirus	10	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	03/26/2020
4091-20	Quaternary ammonium	Phoenix 2	W.M. Barr & Company Inc	Rotavirus; Feline calicivirus; Rhinovirus	5	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/26/2020
44446-67	Phenolic; Ethanol	Concept Hospital Disinfectant Deodorant	Quest Specialty Corp	Adenovirus; Canine hepatitis virus	10	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/26/2020
45745-11	Hydrogen peroxide	HP202	Midlab	Rotavirus; Norovirus; Rhinovirus	5	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional	Yes	03/26/2020
56392-8	Sodium hypochlorite	Dispatch	Clorox Professional Products	Adenovirus	1	Towelette	Hard Nonporous (HN); Food	Healthcare; Institutional; Residential	Yes	03/26/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
			Company				Contact Post-Rinse Required (FCR)			
65402-9	Peroxyacetic acid; Hydrogen peroxide	VigorOx 15/10 Antimicrobial Agent	PeroxyChem LLC	Feline calicivirus	5	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional	Yes	03/26/2020
67619-40	Sodium hypochlorite	TNT	Clorox Professional Products Company	Murine norovirus	1	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	03/26/2020
70060-19	Sodium chlorite; Sodium dichloroisocyanurate dihydrate	Aseptrol S10-Tab	BASF Corporation	Feline calicivirus	10	Solid	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional	Yes	03/26/2020
70144-4	Quaternary ammonium; Ethanol	Opti-cide Max Wipes	Micro-Scientific LLC	Rotavirus	1	Wipe	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	03/26/2020
70271-13	Sodium hypochlorite	Pure Bright Germicidal Ultra Bleach	KIK International LLC	Adenovirus; Rotavirus; Canine parvovirus;	5	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/26/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
				Feline panleukopenia virus; Hepatitis A virus; Norovirus; Poliovirus; Rhinovirus						
70271-31	Sodium hypochlorite	Nova	KIK International LLC	Rhinovirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/26/2020
777-131	Hypochlorous acid	Cousteau	Reckitt Benckiser	Rhinovirus	10	RTU	Hard Nonporous (HN); Food Contact No Rinse (FCNR)	Healthcare; Institutional; Residential	Yes	03/26/2020
82972-1	Chlorine dioxide; Quaternary ammonium	Vital Oxide	Vital Solutions LLC	Adenovirus; Canine parvovirus	10	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/26/2020
84198-1	Hydrogen peroxide	Peroxy HDOX	Earth Laboratories Inc	Norovirus	5	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional	Yes	03/26/2020
84683-4	Thymol	Benefect Botanical Daily Cleaner Disinfectant Towelette	Cleanwell LLC	Rhinovirus	10	Wipe	Hard Nonporous (HN); Food Contact No Rinse (FCNR)	Healthcare; Institutional; Residential	Yes	03/26/2020
89833-3	Quaternary ammonium	D7 Part 1	Decon7 Systems LLC	Norovirus	10	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse	Healthcare; Institutional; Residential	Yes	03/26/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
89900-2	Quaternary ammonium	Scrubbing Bubbles Disinfectant Restroom Cleaner II	S.C. Johnson Professional	Rotavirus	5	RTU	Required (FCR) Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Institutional; Residential	Yes	03/26/2020
89900-3	Quaternary ammonium	Fantastik Multi-Surface Disinfectant Degreaser	S.C. Johnson Professional	Rotavirus	5	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Institutional; Residential	Yes	03/26/2020
91399-2	Sodium chlorite	Biotab7	Advanced Biocide Technologies Inc	Feline calicivirus; Norovirus	1	Dilutable	Hard Nonporous (HN); Food Contact No Rinse (FCNR)	Healthcare; Institutional; Residential	Yes	03/26/2020
92108-1	Hypochlorous acid	Excelyte Vet	PCT LTD	Norovirus	10	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/26/2020
92987-1	Sodium chlorite; Citric acid	Tristel Duo for Surfaces	Tristel Solutions LTD	Adenovirus; Feline calicivirus; Poliovirus	0.5 (30 seconds)	RTU	Hard Nonporous (HN)	Healthcare; Institutional	Yes	03/26/2020
93040-1	Sodium chloride	Force of Nature Activator Capsule	HCI Cleaning Products LLC	Feline calicivirus	10	RTU	Hard Nonporous (HN); Food Contact	Healthcare; Institutional; Residential	Yes	03/26/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
							Post-Rinse Required (FCR)			
1130-15	Quaternary ammonium; Isopropanol	Weiman Germicidal Solution	Weiman Products LLC	Rotavirus	3	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	03/19/2020
1677-233	Quaternary ammonium	Multi-Purpose Disinfectant Cleaner	Ecolab Inc	Feline calicivirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/19/2020
5813-120	Sodium hypochlorite	CRB	The Clorox Company	Canine parvovirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/19/2020
675-55	Citric acid	Lysol Bathroom Cleaner	Reckitt Benckiser LLC	Poliovirus	5	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	03/19/2020
70144-1	Quaternary ammonium; Isopropanol	Opti-Cide 3	Micro-Scientific LLC	Rotavirus; Rhinovirus Type 14	2	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/19/2020
706-111	Quaternary ammonium	Claire Disinfectant Spray Q	Claire Manufacturing Company	Poliovirus	5	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	03/19/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
84526-6	Hydrogen peroxide; Silver	Halomist	Halosil International Inc	Feline calicivirus; Minute virus of men	10	RTU	Hard Nonporous (HN)	Healthcare; Institutional	Yes	03/19/2020
85134-1	Hypochlorous acid	Envirocleanse A	Envirocleanse LLC	Norovirus	10	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/19/2020
87518-6	Sodium hypochlorite	Sporex	HSP USA LLC	Norovirus; Canine parvovirus	1	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	03/19/2020
90150-2	Hydrogen peroxide	Binary Ionization Technology (BIT) Solution	Tomi Environmental Solutions Inc	Feline calicivirus	15	Fog; Mist	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	03/19/2020
91582-1	Hypochlorous acid	Danolyte	Danolyte Global Inc	Adenovirus; Rhinovirus	10	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	03/19/2020
9480-4	Quaternary ammonium; Isopropanol	Super Sani-Cloth Germicidal Disposable Wipe	Professional Disposables International Inc	Rhinovirus 39; Adenovirus	2	Wipe	Hard Nonporous (HN); Food Contact Post-Rinse	Healthcare; Institutional	Yes	03/19/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
9480-8	Sodium hypochlorite	Sani-Cloth Bleach Germicidal Disposable Wipe	Professional Disposables International Inc	Adenovirus; Rotavirus; Canine parvovirus; Hepatitis A virus; Poliovirus Type 1; Rhinovirus Type 37; Feline calicivirus	1	Wipe	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional	Yes	03/19/2020
9480-9	Quaternary ammonium	AF3 Germicidal Disposable Wipe	Professional Disposables International Inc	Rotavirus; Adenovirus	3	Wipe	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/19/2020
5813-58	Quaternary ammonium	Spruce-ups	The Clorox Company	Rotavirus	0.25 (15 seconds)	Wipe	Hard Nonporous (HN)	Institutional; Residential	Yes	03/13/2020
1677-250	Hydrogen peroxide; Peroxyoctanoic acid; Peroxyacetic acid	Synergex	Ecolab Inc	Reovirus	5	Dilutable	Hard Nonporous (HN)	Institutional	Yes	03/13/2020
37549-1	Sodium hypochlorite	Micro-kill Bleach Germicidal Bleach Wipes	Medline Industries Inc	Norovirus	0.5 (30 seconds)	Wipe	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/13/2020
37549-2	Sodium hypochlorite	Micro-kill Bleach Solution	Medline Industries Inc	Norovirus	0.5 (30 seconds)	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	03/13/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
44446-23	Quaternary ammonium	Germ Away	Quest Specialty Corp	Canine parvovirus	10	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/13/2020
46781-12	Quaternary ammonium; Ethanol; Isopropanol	Cavicide 1	Metrex Research	Adenovirus; Rotavirus; Feline Calicivirus	3	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/13/2020
46781-13	Quaternary ammonium; Ethanol; Isopropanol	Caviwipes 1	Metrex Research	Adenovirus	3	Wipe	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/13/2020
46781-14	Sodium hypochlorite	Caviwipes Bleach	Metrex Research	Feline calicivirus	3	Wipe	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	03/13/2020
46781-15	Sodium hypochlorite	Cavicide Bleach	Metrex Research	Poliovirus; Rhinovirus	3	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/13/2020
5813-100	Sodium hypochlorite	Puma	The Clorox Company	Canine parvovirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/13/2020
5813-102	Sodium hypochlorite	CGB1	The Clorox Company	Canine parvovirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/13/2020
5813-109	Quaternary ammonium	Say Q	The Clorox Company	Rotavirus	10	RTU	Hard Nonporous (HN)	Institutional; Residential	Yes	03/13/2020
5813-113	Quaternary ammonium	CDW	The Clorox Company	Rotavirus	4	Wipe	Hard Nonporous (HN)	Institutional; Residential	Yes	03/13/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
5813-118	Quaternary ammonium	Dash	The Clorox Company	Rotavirus	10	RTU	Hard Nonporous (HN)	Residential	Yes	03/13/2020
6659-3	Quaternary ammonium	Spray Nine	ITW Permatex Inc	Norovirus; Rhinovirus; Poliovirus	0.5 (30 seconds)	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	03/13/2020
74559-10	Hydrogen peroxide	Oxy-1 Wipes	Virox Technologies Inc	Poliovirus	0.5 (30 seconds)	Wipe	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/13/2020
67619-20	Quaternary ammonium	Rex	Clorox Professional Products Company	Hepatitis A virus	10	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	03/13/2020
67619-26	Sodium hypochlorite	Boris	Clorox Professional Products Company	Canine parvovirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/13/2020
67619-35	Peroxyacetic acid; Hydrogen peroxide	Blacksmith	Clorox Professional Products Company	Rhinovirus	1	RTU	Hard Nonporous (HN)	Healthcare; Institutional	Yes	03/13/2020
67619-41	Quaternary ammonium	PPD Dash	Clorox Professional Products Company	Rotavirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/13/2020
67619-9	Quaternary ammonium	PJW-622	Clorox	Rotavirus	3	Wipe	Hard	Healthcare;	Yes	03/13/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
			Professional Products Company				Nonporous (HN)	Institutional; Residential		
6836-136	Quaternary ammonium	Lonza Formulation S-18F	Lonza LLC	Feline calicivirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/13/2020
6836-139	Quaternary ammonium	Lonza Formulation R-82F	Lonza LLC	Feline calicivirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/13/2020
6836-277	Quaternary ammonium	BARDAC 205M-1.30	Lonza LLC	Norovirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/13/2020
6836-303	Quaternary ammonium	BARDAC 205M-5.2	Lonza LLC	Norovirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/13/2020
6836-346	Quaternary ammonium	Lonzagard RCS-256	Lonza LLC	Norovirus	5	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/13/2020
6836-347	Quaternary ammonium	Lonzagard RCS-128	Lonza LLC	Feline calicivirus; Enterovirus	5	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/13/2020
6836-348	Quaternary ammonium	Lonzagard RCS-128 PLUS	Lonza LLC	Feline calicivirus; Enterovirus	5	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/13/2020
6836-362	Quaternary ammonium	Nugen MB5A-128	Lonza LLC	Norovirus	5	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/13/2020
6836-363	Quaternary ammonium	Nugen MB5A-64	Lonza LLC	Norovirus	5	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/13/2020
6836-366	Quaternary ammonium	Nugen MB5N-64	Lonza LLC	Norovirus	5	Dilutable	Hard Nonporous	Healthcare; Institutional;	Yes	03/13/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
74559-1	Hydrogen peroxide	Accel TB	Virox Technologies Inc	Poliovirus; Feline Calicivirus	1	RTU	(HN) Hard Nonporous (HN)	Residential Healthcare; Institutional; Residential	Yes	03/13/2020
74559-9	Hydrogen peroxide	Oxy-1 RTU	Virox Technologies Inc	Poliovirus	0.5 (30 seconds)	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/13/2020
74559-3	Hydrogen peroxide	Accel TB Wipes	Virox Technologies Inc	Poliovirus	1	Wipe	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/13/2020
74559-4	Hydrogen peroxide	Accel (Concentrate) Disinfectant Cleaner	Virox Technologies Inc	Poliovirus	5	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/13/2020
777-114	Quaternary ammonium	Lysol® Disinfecting Wipes (All Scents)	Reckitt Benckiser	Rotavirus	10	Wipe	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	03/13/2020
83614-1	Quaternary ammonium	Byotrol 24	Byotrol Inc	Feline calicivirus	5	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/13/2020
84150-2	Ethanol	Mitersaw	GOJO Industries Inc	Feline calicivirus	5	Wipe	Hard Nonporous (HN)	Institutional; Residential	Yes	03/13/2020
87742-1	Thymol	Thymox Disinfectant Spray	Laboratoire M2	Norovirus	4	RTU	Hard Nonporous (HN); Food Contact No Rinse	Healthcare; Institutional; Residential	Yes	03/13/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
777-70	Quaternary ammonium	Lysol Brand Cling & Fresh Toilet Bowl Cleaner	Reckitt Benckiser LLC	Rotavirus	0.5 (30 seconds)	RTU	(FCNR) Hard Nonporous (HN)	Institutional; Residential	Yes	03/03/2020
1677-129	Hydrogen peroxide; Peroxyacetic acid	Oxonia Active	Ecolab Inc	Poliovirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional	Yes	03/03/2020
1677-226	Hydrogen peroxide; Octanoic acid; Peroxyacetic acid	Virasept	Ecolab Inc	Norovirus; Rhinovirus	4	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional	Yes	03/03/2020
1677-235	Sodium hypochlorite	Bleach Disinfectant Cleaner	Ecolab Inc	Murine Norovirus; Poliovirus; Rhinovirus	1	RTU	Hard Nonporous (HN)	Healthcare; Institutional	Yes	03/03/2020
1677-237	Hydrogen peroxide; Peroxyacetic acid	Oxycide Daily Disinfectant Cleaner	Ecolab Inc	Feline Calicivirus; Rhinovirus	3	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional	Yes	03/03/2020
1677-238	Hydrogen peroxide	Peroxide Multi Surface Cleaner and Disinfectant	Ecolab Inc	Norovirus	2	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional	Yes	03/03/2020
1677-249	Isopropanol	Klercide 70/30 IPA	Ecolab Inc	Rhinovirus	5	RTU	Hard Nonporous (HN)	Healthcare; Institutional	Yes	03/03/2020
777-83	Sodium hypochlorite	Lysol Brand Bleach Mold And Mildew	Reckitt Benckiser LLC	Rhinovirus; Norovirus	0.5 (30 seconds)	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/03/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
		Remover								
1839-220	Quaternary ammonium	SC-RTU Disinfectant Cleaner	Stepan Company	Poliovirus	5	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	03/03/2020
1839-248	Quaternary ammonium	Stepan Spray Disinfectant Concentrate	Stepan Company	Rhinovirus	5	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/03/2020
1839-83	Quaternary ammonium	Detergent Disinfectant Pump Spray	Stepan Company	Canine Parvovirus	10	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	03/03/2020
4091-21	Quaternary ammonium	Condor 2	W.M. Barr & Company Inc	Rotavirus	5	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/03/2020
4091-22	Quaternary ammonium; Citric acid	Raptor 5	W.M. Barr & Company Inc	Rhinovirus	5	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/03/2020
42182-9	Quaternary ammonium; Ethanol	Firebird F130	Microban Products Company	Poliovirus; Norovirus	5	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/03/2020
47371-129	Quaternary ammonium	Formulation HWS- 256	H&S Chemicals Division of Lonza LLC	Adenovirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/03/2020
47371-130	Quaternary ammonium	Formulation	H&S	Adenovirus	10	Dilutable	Hard	Healthcare;	Yes	03/03/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
		HWS-128	Chemicals Division of Lonza, LLC				Nonporous (HN)	Institutional; Residential		
47371-131	Quaternary ammonium	HWS-64	H&S Chemicals Division of Lonza LLC	Adenovirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/03/2020
47371-192	Quaternary ammonium	Formulation HWS-32	H&S Chemicals Division of Lonza LLC	Adenovirus	10	Dilutable	Hard Nonporous (HN)	Institutional; Residential	Yes	03/03/2020
56392-7	Sodium hypochlorite	Clorox Healthcare® Bleach Germicidal Cleaner Spray	Clorox Professional Products Company	Canine Parvovirus; Feline Panleukopenia Virus; Hepatitis A Virus; Norovirus; Poliovirus; Rhinovirus	1	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional	Yes	03/03/2020
5813-105	Sodium hypochlorite	Clorox Multi Surface Cleaner + Bleach	The Clorox Company	Rhinovirus; Canine Parvovirus; Feline Panleukopenia Virus; Norovirus; Poliovirus	1	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Residential	Yes	03/03/2020
5813-110	Hydrogen peroxide	Clorox Pet Solutions Advanced Formula Disinfecting	The Clorox Company	Enterovirus D68; Norovirus; Rhinovirus	5	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/03/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
		Stain & Odor Remover								
5813-111	Sodium hypochlorite	Clorox Disinfecting Bleach2	The Clorox Company	Canine Parvovirus; Feline Parvovirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/03/2020
5813-114	Sodium hypochlorite	Clorox Performance Bleach1	The Clorox Company	Canine Parvovirus; Feline Parvovirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/03/2020
5813-115	Quaternary ammonium	Clorox Scentiva Bathroom Disinfecting Foam Cleaner	The Clorox Company	Rotavirus	5	RTU	Hard Nonporous (HN)	Residential	Yes	03/03/2020
5813-21	Sodium hypochlorite	Clorox Clean Up Cleaner + Bleach	The Clorox Company	Norovirus; Poliovirus	1	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/03/2020
5813-40	Quaternary ammonium	Clorox Disinfecting Bathroom Cleaner	The Clorox Company	Rhinovirus	10	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/03/2020
5813-79	Quaternary ammonium	Clorox Disinfecting Wipes	The Clorox Company	Rotavirus	4	Wipe	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/03/2020
5813-89	Sodium hypochlorite	Clorox Toilet Bowl Cleaner with Bleach	The Clorox Company	Rhinovirus; Rotavirus	10	RTU	Hard Nonporous (HN)	Institutional; Residential	Yes	03/03/2020
63761-10	Quaternary ammonium; Sodium carbonate peroxyhydrate	Sterilex Ultra Step	Sterilex	Feline Calicivirus; Rotavirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional	Yes	03/03/2020
63761-8	Quaternary ammonium;	Sterilex Ultra	Sterilex	Feline	10	Dilutable	Hard	Healthcare;	Yes	03/03/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
	Hydrogen peroxide	Disinfectant Cleaner Solution 1		Calicivirus			Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Institutional; Residential		
675-54	Quaternary ammonium	Lysol Brand Heavy Duty Cleaner Disinfectant Concentrate	Reckitt Benckiser LLC	Rotavirus	5	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional	Yes	03/03/2020
67619-12	Sodium hypochlorite	Clorox Healthcare® Bleach Germicidal Wipes	Clorox Professional Products Company	Canine Parvovirus; Feline Parvovirus	3	Wipe	Hard Nonporous (HN)	Healthcare; Institutional	Yes	03/03/2020
67619-16	Sodium hypochlorite	Clorox Commercial Solutions® Toilet Bowl Cleaner with Bleach1	Clorox Professional Products Company	Rotavirus; Rhinovirus 39	10	RTU	Hard Nonporous (HN)	Institutional; Residential	Yes	03/03/2020
67619-17	Sodium hypochlorite	Clorox Commercial Solutions® Clorox® Clean-Up Disinfectant Cleaner with Bleach1	Clorox Professional Products Company	Norovirus	5	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	03/03/2020
67619-21	Quaternary ammonium;	Clorox	Clorox	Coxsackie	10	RTU	Hard	Healthcare;	Yes	03/03/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
	Ethanol	Commercial Solutions® Clorox® Disinfecting Spray	Professional Products Company	Virus; Echovirus; Feline Calicivirus; Hepatitis A Virus; Poliovirus			Nonporous (HN)	Institutional; Residential		
67619-24	Hydrogen peroxide	Clorox Commercial Solutions® Hydrogen Peroxide Cleaner Disinfectant	Clorox Professional Products Company	Norovirus; Rhinovirus; Rotavirus	1	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	03/03/2020
67619-25	Hydrogen peroxide	Clorox Commercial Solutions® Hydrogen Peroxide Cleaner Disinfectant Wipes	Clorox Professional Products Company	Norovirus	2	Wipe	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/03/2020
67619-29	Ethanol	Saginaw	Clorox Professional Products Company	Coxsackievirus; Hepatitis A Virus; Rhinovirus; Rotavirus	5	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	03/03/2020
67619-30	Sodium hypochlorite	GNR	Clorox Professional Products Company	Coxsackievirus; Feline Calicivirus; Feline Panleukopenia Virus; Minute	1	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/03/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
				virus of mice; Poliovirus; Rhinovirus Type 37						
67619-31	Quaternary ammonium	Clorox Commercial Solutions® Clorox® Disinfecting Wipes	Clorox Professional Products Company	Rotavirus	4	Wipe	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/03/2020
67619-32	Sodium hypochlorite	CloroxPro™ Clorox® Germicidal Bleach	Clorox Professional Products Company	Canine Parvovirus; Coxsackievirus B3 Virus; Enterovirus D68; Norovirus; Feline Parvovirus; Hepatitis A Virus; Murine Norovirus; Poliovirus; Rhinovirus	5	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/03/2020
67619-33	Hydrogen peroxide	Clorox Commercial Solutions® Clorox® Disinfecting Biostain & Odor Remover	Clorox Professional Products Company	Enterovirus, Norovirus; Rhinovirus Type 37	5	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/03/2020
67619-37	Quaternary ammonium	Clorox Healthcare® VersaSure® Wipes	Clorox Professional Products Company	Norovirus	5	Wipe	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/03/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
67619-38	Quaternary ammonium	CloroxPro™ Clorox Total 360® Disinfecting Cleaner1	Clorox Professional Products Company	Adenovirus	2	RTU; Electrostatic spray (Clorox® Total 360® system)	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	03/03/2020
6836-140	Quaternary ammonium	Lonza Formulation S- 21F	Lonza LLC	Norovirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/03/2020
6836-152	Quaternary ammonium	Lonza Formulation DC-103	Lonza LLC	Norovirus	10	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/03/2020
6836-266	Quaternary ammonium	BARDAC 205M-10	Lonza LLC	Norovirus	10	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	03/03/2020
6836-278	Quaternary ammonium	BARDAC 205M- 14.08	Lonza LLC	Norovirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/03/2020
6836-289	Quaternary ammonium	BARDAC 205M RTU	Lonza LLC	Norovirus	10	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	03/03/2020
6836-302	Quaternary ammonium	BARDAC 205M-2.6	Lonza LLC	Norovirus	10	Dilutable	Hard Nonporous (HN); Food	Healthcare; Institutional; Residential	Yes	03/03/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
6836-305	Quaternary ammonium	BARDAC 205M-23	Lonza LLC	Norovirus	10	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	03/03/2020
6836-313	Quaternary ammonium	Lonza Disinfectant Wipes	Lonza LLC	Rotavirus	10	Wipe	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/03/2020
6836-340	Quaternary ammonium	Lonza Disinfectant Wipes Plus 2	Lonza LLC	Norovirus	10	Wipe	Hard Nonporous (HN)	Healthcare; Institutional	Yes	03/03/2020
6836-349	Quaternary ammonium	Lonzagard RCS- 256 Plus	Lonza LLC	Enterovirus D68; Norovirus	5	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/03/2020
6836-361	Quaternary ammonium	Nugen MB5A-256	Lonza LLC	Norovirus	5	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/03/2020
6836-364	Quaternary ammonium	Nugen MB5N-256	Lonza LLC	Norovirus	5	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/03/2020
6836-365	Quaternary ammonium	Nugen MB5N-128	Lonza LLC	Norovirus	5	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/03/2020
6836-70	Quaternary ammonium	BARDAC 205M-7.5	Lonza LLC	Norovirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/03/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
6836-75	Quaternary ammonium	Lonza Formulation S-21	Lonza LLC	Norovirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/03/2020
6836-77	Quaternary ammonium	Lonza Formulation S-18	Lonza LLC	Norovirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/03/2020
6836-78	Quaternary ammonium	Lonza Formulation R-82	Lonza LLC	Norovirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/03/2020
70627-24	Quaternary ammonium	Virex™ II / 256	Diversey Inc	Adenovirus Type 2	10	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional	Yes	03/03/2020
70627-56	Hydrogen peroxide	Oxivir Tb	Diversey Inc	Norovirus; Rhinovirus; Poliovirus Type 1	1	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional	Yes	03/03/2020
70627-58	Hydrogen peroxide	Oxy-Team™ Disinfectant Cleaner	Diversey Inc	Canine Parvovirus; Feline Picornavirus	5	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional	Yes	03/03/2020
70627-60	Hydrogen peroxide	Oxivir™ Wipes	Diversey Inc	Norovirus; Poliovirus Type 1; Rhinovirus Type 14	1	Wipe	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/03/2020
70627-72	Sodium hypochlorite	Avert Sporicidal	Diversey Inc	Canine Parvovirus;	1	Dilutable	Hard Nonporous	Healthcare; Institutional	Yes	03/03/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
		Disinfectant Cleaner		Norovirus; Hepatitis A; Poliovirus Type 1			(HN)			
70627-74	Hydrogen peroxide	Oxivir 1	Diversey Inc	Canine Parvovirus; Enterovirus Type D68	1	RTU	Hard Nonporous (HN)	Healthcare; Institutional	Yes	03/03/2020
70627-77	Hydrogen peroxide	Oxivir 1 Wipes	Diversey Inc	Enterovirus Type D68	1	Wipe	Hard Nonporous (HN)	Healthcare; Institutional	Yes	03/03/2020
71847-6	Sodium dichloro-S-triazinetrione	Klorsept	Medentech LTD	Hepatitis A virus; Coxsackievirus B3	1	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/03/2020
71847-7	Sodium dichloro-S-triazinetrione	Klorkleen	Medentech LTD	Hepatitis A virus; Coxsackievirus B3	1	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/03/2020
777-127	Quaternary ammonium; Ethanol	Lysol® Disinfectant Max Cover Mist	Reckitt Benckiser LLC	Norovirus	10	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/03/2020
777-132	Hydrochloric acid	Lysol Brand Power Plus Toilet Bowl Cleaner	Reckitt Benckiser LLC	Poliovirus Type 1	10	RTU	Hard Nonporous (HN)	Healthcare; Residential	Yes	03/03/2020
1677-251	Hydrogen peroxide	Peroxide Disinfectant And Glass Cleaner Rtu	Ecolab Inc	Norovirus	0.75 (45 seconds)	RTU	Hard Nonporous (HN)	Healthcare; Institutional	Yes	03/03/2020
777-81	Hydrochloric acid	Lysol Brand	Reckitt	Poliovirus Type	10	RTU	Hard	Healthcare;	Yes	03/03/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
		Lime & Rust Toilet Bowl Cleaner	Benckiser LLC	1; Hepatitis A virus			Nonporous (HN)	Institutional; Residential		
777-89	Quaternary ammonium	Lysol Brand Clean & Fresh Multi-surface Cleaner	Reckitt Benckiser LLC	Rotavirus WA	3	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Institutional; Residential	Yes	03/03/2020
777-99	Quaternary ammonium; Ethanol	Lysol® Disinfectant Spray	Reckitt Benckiser LLC	Norovirus	10	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	Yes	03/03/2020
84150-1	Ethanol	PURELL Professional Surface Disinfectant Wipes	GOJO Industries Inc	Norovirus	5	Wipe	Hard Nonporous (HN); Food Contact No Rinse (FCNR)	Healthcare; Institutional; Residential	Yes	03/03/2020
84368-1	Ethanol	Urthpro	Urthtech LLC	Hepatitis A virus	1	RTU	Hard Nonporous (HN); Food Contact No Rinse (FCNR)	Healthcare; Institutional; Residential	Yes	03/03/2020
88494-3	Quaternary ammonium; Ethanol	Peak Disinfectant	North American Infection Control Ltd	Poliovirus Type 1; Rhinovirus	1	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/03/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
88494-4	Quaternary ammonium; Ethanol	Peak Disinfectant Wipes	North American Infection Control Ltd	Poliovirus Type 1; Rhinovirus	1	Wipe	Hard Nonporous (HN)	Healthcare; Institutional; Residential	Yes	03/03/2020
9480-10	Quaternary ammonium; Ethanol; Isopropanol	Sani-Prime Germicidal Spray	Professional Disposables International Inc	Feline Calicivirus	3	RTU	Hard Nonporous (HN)	Healthcare; Institutional	Yes	03/03/2020
9480-12	Quaternary ammonium; Ethanol; Isopropanol	Sani-Cloth Prime Germicidal Disposable Wipe	Professional Disposables International Inc	Feline Calicivirus	3	Wipe	Hard Nonporous (HN)	Healthcare; Institutional	Yes	03/03/2020
9480-14	Hydrogen Peroxide	Sani-HyPerCide Germicidal Spray	Professional Disposables International Inc	Norovirus	1	RTU	Hard Nonporous (HN)	Healthcare; Institutional	Yes	03/03/2020
1839-216	Quaternary ammonium	SC-NDC-64	Stepan Company	Human coronavirus	5	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	No	04/30/2020
777-139	Citric acid	T-bone	Reckitt Benckiser LLC	Human coronavirus	5	Wipe	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	No	04/30/2020
91176-2	1,2-Hexanediol	PELS 422	The Gilla Company LLC	Human coronavirus	10	RTU	Hard Nonporous	Healthcare; Institutional	No	04/23/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
1839-235	Quaternary ammonium	SC-5:256N	Stapan Company	Rotavirus	5	Dilutable	(HN) Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	No	04/23/2020
1839-244	Quaternary ammonium	SC -5:64HN	Stapan Company	Feline calicivirus	5	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	No	04/23/2020
39967-137	Potassium peroxymonosulfate; Sodium chloride	Virkon S	Lanxess Corporation	Feline calicivirus	10	Dilutable	Hard Nonporous (HN)	Institutional	No	04/02/2020
954-11	Quaternary ammonium	Barbicide	King Research Inc	Human coronavirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional	No	04/02/2020
11346-3	Sodium hypochlorite	Clorox HW	The Clorox Company	Feline calicivirus; Norovirus	1	Towelette	Hard Nonporous (HN)	Healthcare; Residential	No	03/26/2020
11346-6	Sodium hypochlorite	Clorox HS	The Clorox Company	Feline calicivirus; Norovirus	1	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Residential	No	03/26/2020
1677-21	Quaternary ammonium	Mikro-Quat	Ecolab Inc	Feline calicivirus;	10	Dilutable	Hard Nonporous	Healthcare	No	03/26/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
				Norovirus			(HN)			
1677-216	Sodium chlorite	Exspor Base Concentration	Ecolab Inc	Feline calicivirus; Norovirus	5	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional	No	03/26/2020
1839-174	Quaternary ammonium	Stepan Towelette	Stepan Company	Feline calicivirus; Norovirus	10	Towelette	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	No	03/26/2020
1839-80	Quaternary ammonium	NP 12.5 Detergent/ Disinfectant	Stepan Company	Adenovirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/26/2020
1839-97	Quaternary ammonium	NP 12.5 (D&F) Detergent/ Disinfectant	Stepan Company	Adenovirus	10	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	No	03/26/2020
34810-21	Phenolic	Ready To Use Wex-Cide	Wexford Labs Inc	Rhinovirus	10	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/26/2020
3862-179	Phenolic	Opti-Phene	ABC Compounding Co Inc	Human adenovirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/26/2020
3862-181	Quaternary ammonium	Foaming Disinfectant Cleaner	ABC Compounding Co Inc	Poliovirus	10	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required	Healthcare; Institutional; Residential	No	03/26/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
61178-2	Quaternary ammonium	Public Places	Microgen Inc	Feline calicivirus	10	RTU	(FCR) Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	No	03/26/2020
63761-5	Quaternary ammonium; Sodium carbonate peroxyhydrate	Sterilex Ultra Powder	Sterilex	Feline calicivirus; Norovirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/26/2020
64240-65	Lactic acid	WC Complete	Combat Insect Control Systems	Rhinovirus	0.5 (30 seconds)	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/26/2020
675-30	Quaternary ammonium	Roccal II 10%	Reckitt Benckiser	Adenovirus	10	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional	No	03/26/2020
6836-333	Quaternary ammonium	MMR-4U	Lonza LLC	Feline calicivirus; Norovirus	10	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	No	03/26/2020
70271-24	Sodium hypochlorite	Tecumseh B	KIK International LLC	Feline calicivirus; Norovirus	5	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/26/2020
70590-1	Sodium hypochlorite	Hype-Wipe	Current Technologies	Feline calicivirus;	1	Towelette	Hard Nonporous	Healthcare; Institutional	No	03/26/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
70627-33	Quaternary ammonium	Envy Liquid Disinfectant Cleaner	Inc Diversey, Inc.	Norovirus Canine parvovirus	5	RTU	(HN) Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional	No	03/26/2020
71847-2	Sodium dichloroisocyanurate	Klor-Kleen	Medentech LTD	Feline calicivirus; Norovirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional	No	03/26/2020
777-102	Sodium hypochlorite	Lysol Brand Toilet Bowl Cleaner with Bleach	Reckitt Benckiser LLC	Rhinovirus	5	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/26/2020
777-104	Hydrochloric acid	Vanity GP	Reckitt Benckiser LLC	Poliovirus	10	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/26/2020
777-71	Quaternary ammonium	Lysol Brand Foaming Disinfectant Basin Tub & Tile Cleaner II	Reckitt Benckiser LLC	Feline calicivirus; Norovirus	10	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/26/2020
84526-1	Hydrogen peroxide; Silver	HaloSpray	Halosil International Inc	Feline calicivirus; Norovirus	10	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/26/2020
88089-2	Hydrogen peroxide; Peroxyacetic acid	Peridox	BioMed Protect LLC	Feline calicivirus; Norovirus	2	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/26/2020
88089-4	Hydrogen peroxide; Peroxyacetic acid	PeridoxRTU	BioMed Protect LLC	Canine parvovirus	3	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/26/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
88494-2	Ethanol; Quaternary ammonium	Wedge Disinfectant Wipes	North American Infection Control Ltd	Poliovirus	1	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	No	03/26/2020
9480-11	Quaternary ammonium	BackSpray RTU	Professional Disposables International Inc	Feline calicivirus; Norovirus	5	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/26/2020
10324-59	Quaternary ammonium	Maquat 64	Mason Chemical Company	Human coronavirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/19/2020
777-128	Quaternary ammonium	Lysol® Laundry Sanitizer	Reckitt Benckiser	Human coronavirus	5	Dilutable (laundry pre-soak only)	Porous (P) (laundry presoak only)	Residential	No	03/19/2020
10324-105	Quaternary ammonium	Maquat 128 PD	Mason Chemical Company	Human coronavirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
10324-108	Quaternary ammonium	Maquat 256-MN	Mason Chemical Company	Human coronavirus	10	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	No	03/13/2020
10324-112	Quaternary ammonium	Maquat 128-MN	Mason Chemical Company	Human coronavirus	10	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse	Healthcare; Institutional; Residential	No	03/13/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
10324-113	Quaternary ammonium	Maquat 64-MN	Mason Chemical Company	Human coronavirus	10	Dilutable	Required (FCR) Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	No	03/13/2020
10324-114	Quaternary ammonium	Maquat 32-MN	Mason Chemical Company	Human coronavirus	10	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	No	03/13/2020
10324-115	Quaternary ammonium	Maquat 750-M	Mason Chemical Company	Human coronavirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
10324-117	Quaternary ammonium	Maquat 710-M	Mason Chemical Company	Human coronavirus	10	Dilutable	Hard Nonporous (HN); Porous (P) (laundry presoak only)	Healthcare; Institutional; Residential	No	03/13/2020
10324-140	Quaternary ammonium	Maquat MQ2525M-CPV	Mason Chemical Company	Human coronavirus	10	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	No	03/13/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
10324-141	Quaternary ammonium	Maquat 256-NHQ	Mason Chemical Company	Human coronavirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
10324-142	Quaternary ammonium	Maquat MQ2525M-14	Mason Chemical Company	Human coronavirus	10	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	No	03/13/2020
10324-154	Quaternary ammonium	Maquat 64-NHQ	Mason Chemical Company	Human coronavirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
10324-155	Quaternary ammonium	Maquat 128-NHQ	Mason Chemical Company	Human coronavirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
10324-156	Quaternary ammonium	Maquat 512-NHQ	Mason Chemical Company	Human coronavirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
10324-157	Quaternary ammonium	Maquat 32-NHQ	Mason Chemical Company	Human coronavirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
10324-164	Quaternary ammonium	Maquat 256 PD	Mason Chemical Company	Human coronavirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
10324-166	Quaternary ammonium	Maquat 32	Mason Chemical Company	Human coronavirus	10	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	No	03/13/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
10324-167	Quaternary ammonium	Maquat 32 PD	Mason Chemical Company	Human coronavirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
10324-177	Quaternary ammonium	Maquat 705-M	Mason Chemical Company	Human coronavirus	10	Dilutable	Hard Nonporous (HN); Porous (P) (laundry presoak only)	Healthcare; Institutional; Residential	No	03/13/2020
10324-194	Quaternary ammonium	Maquat 2420-10	Mason Chemical Company	Human coronavirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
10324-198	Quaternary ammonium	Maquat 702.5-M	Mason Chemical Company	Human coronavirus	10	Dilutable	Hard Nonporous (HN); Porous (P) (laundry presoak only)	Healthcare; Institutional; Residential	No	03/13/2020
10324-214	Hydrogen peroxide; Peroxyacetic acid	Maguard 5626	Mason Chemical Company	Human coronavirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
10324-230	Hydrogen peroxide; Peroxyacetic acid	Maguard 1522	Mason Chemical Company	Human coronavirus	1	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
10324-57	Quaternary ammonium	Maquat 42	Mason Chemical Company	Human coronavirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
10324-58	Quaternary ammonium	Maquat 128	Mason Chemical Company	Human coronavirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
10324-63	Quaternary ammonium	Maquat 10	Mason Chemical Company	Human coronavirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
10324-71	Quaternary ammonium	Maquat 280	Mason Chemical Company	Human coronavirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
10324-72	Quaternary ammonium	Maquat 615-HD	Mason Chemical Company	Human coronavirus	10	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	No	03/13/2020
10324-80	Quaternary ammonium	Maquat 5.5-M	Mason Chemical Company	Human coronavirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
10324-81	Quaternary ammonium	Maquat 7.5-M	Mason Chemical Company	Human coronavirus	10	Dilutable	Hard Nonporous (HN); Porous (P) (laundry presoak only)	Healthcare; Institutional; Residential	No	03/13/2020
10324-85	Quaternary ammonium	Maquat 86-M	Mason Chemical Company	Human coronavirus	10	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	No	03/13/2020
10324-93	Quaternary ammonium	Maquat 64-PD	Mason Chemical Company	Human coronavirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
10324-94	Quaternary ammonium	Maquat 20-M	Mason Chemical Company	Human coronavirus	10	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	No	03/13/2020
10324-96	Quaternary ammonium	Maquat 50-DS	Mason Chemical Company	Human coronavirus	10	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	No	03/13/2020
10324-99	Quaternary ammonium	Maquat 10-PD	Mason Chemical Company	Human coronavirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
10492-4	Quaternary ammonium; Isopropanol	Discide Ultra Disinfecting Towelettes	Palmero Healthcare LLC	Human coronavirus	0.5 (30 seconds)	Wipe	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
10492-5	Quaternary ammonium; Isopropanol	Discide Ultra Disinfecting Spray	Palmero Healthcare LLC	Human coronavirus	0.5 (30 seconds)	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
11346-4	Quaternary ammonium	Clorox QS	The Clorox Company	Human coronavirus	2	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Residential	No	03/13/2020
1672-65	Sodium hypochlorite	Austin A-1 Ultra Disinfecting	James Austin Company	Human coronavirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
Bleach										
1672-67	Sodium hypochlorite	Austin's A-1 Concentrated Bleach 8.25%	James Austin Company	Human coronavirus	5	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
1677-204	Octanoic acid	65 Disinfecting Heavy Duty Acid Bathroom Cleaner	Ecolab Inc	Human coronavirus	2	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional	No	03/13/2020
1677-241	Sodium hypochlorite	Hydris	Ecolab Inc	Human coronavirus	5	RTU	Hard Nonporous (HN)	Healthcare; Institutional	No	03/13/2020
1839-167	Quaternary ammonium	BTC 885 Neutral Disinfectant Cleaner-256	Stepan Company	Human coronavirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
1839-168	Quaternary ammonium	BTC 885 NDC-32	Stepan Company	Human coronavirus	10	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	No	03/13/2020
1839-169	Quaternary ammonium	BTC 885 Neutral Disinfectant Cleaner-64	Stepan Company	Human coronavirus	10	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	No	03/13/2020
1839-176	Quaternary ammonium	Liquid-pak Neutral	Stepan Company	Human coronavirus	10	Dilutable	Hard Nonporous	Healthcare; Institutional;	No	03/13/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
		Disinfectant Cleaner					(HN); Food Contact Post-Rinse Required (FCR)	Residential		
1839-190	Quaternary ammonium	Stepan Disinfectant Wipe	Stepan Company	Human coronavirus	10	Wipe	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
1839-214	Quaternary ammonium	SC-NDC-256	Stepan Company	Human coronavirus	5	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	No	03/13/2020
1839-78	Quaternary ammonium	NP 3.2 Detergent/ disinfectant	Stepan Company	Human coronavirus	10	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	No	03/13/2020
1839-79	Quaternary ammonium	NP 4.5 Detergent/ disinfectant	Stepan Company	Human coronavirus	10	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	No	03/13/2020
1839-81	Quaternary ammonium	NP 9.0 Detergent/ disinfectant	Stepan Company	Human coronavirus	10	Dilutable	Hard Nonporous (HN); Food Contact	Healthcare; Institutional; Residential	No	03/13/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
							Post-Rinse Required (FCR)			
1839-94	Quaternary ammonium	NP 3.2 (D & F) Detergent/ disinfectant	Stepan Company	Human coronavirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
3862-191	Quaternary ammonium	Assure	ABC Compounding Co Inc	Human coronavirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
4091-23	Sodium hypochlorite; Sodium carbonate	Mold Armor Formula 400	W.M. Barr & Company Inc	Human coronavirus	0.5 (30 seconds)	RTU	Hard Nonporous (HN)	Institutional; Residential	No	03/13/2020
42964-17	Quaternary ammonium; Ethanol	Asepticare	Airkem professional products	Human coronavirus	2	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
46781-6	Quaternary ammonium; Isopropanol	Cavicide	Metrex Research	Human coronavirus	2	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
4822-548	Triethylene glycol; Quaternary ammonium	Combo	S.C. Johnson & Son Inc	Human coronavirus	5	Pressurized liquid	Hard Nonporous (HN)	Residential	No	03/13/2020
4822-606	L-Lactic Acid	Fangio	S.C. Johnson & Son Inc	Human coronavirus	10	RTU	Hard Nonporous (HN)	Institutional; Residential	No	03/13/2020
4822-607	Quaternary ammonium	Lauda	S.C. Johnson & Son Inc	Human coronavirus	5	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Institutional; Residential	No	03/13/2020
4822-608	L-Lactic acid	Gurney	S.C. Johnson	Human	5	RTU	Hard	Institutional;	No	03/13/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
			& Son Inc	coronavirus			Nonporous (HN)	Residential		
4822-609	Quaternary ammonium	Stewart	S.C. Johnson & Son Inc	Human coronavirus	3	RTU	Hard Nonporous (HN)	Institutional; Residential	No	03/13/2020
54289-4	Peroxyacetic acid	Peraclean 15 (Peroxyacetic Acid Solution)	Evonik Corporation	Human coronavirus	1	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional	No	03/13/2020
56392-10	Sodium hypochlorite	Caltech Swat 200 9B	Clorox Professional Products Company	Human coronavirus	2	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional	No	03/13/2020
5813-103	Sodium hypochlorite	Cgb3	The Clorox Company	Human coronavirus	5	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
5813-104	Sodium hypochlorite	Cgb4	The Clorox Company	Human coronavirus	5	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
5813-106	Sodium hypochlorite	Axl	The Clorox Company	Human coronavirus	1	RTU	Hard Nonporous (HN)	Residential	No	03/13/2020
5813-50	Sodium hypochlorite	Ultra Clorox Brand Regular Bleach	The Clorox Company	Human coronavirus	5	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
5813-73	Quaternary ammonium	Clorox Everest	The Clorox Company	Human coronavirus	0.5 (30 seconds)	RTU	Hard Nonporous (HN)	Institutional; Residential	No	03/13/2020
5813-86	Glycolic acid	CBW	The Clorox Company	Human coronavirus	10	Impregnated materials	Hard Nonporous	Residential	No	03/13/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
							(HN)			
5813-98	Sodium hypochlorite	Lite	The Clorox Company	Human coronavirus	1	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Institutional; Residential	No	03/13/2020
5813-99	Sodium hypochlorite	Wave	The Clorox Company	Human coronavirus	1	Wipe	Hard Nonporous (HN)	Institutional; Residential	No	03/13/2020
61178-1	Quaternary ammonium	D-125	Microgen Inc	Human coronavirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
61178-5	Quaternary ammonium	CCX-151	Microgen Inc	Human coronavirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
6198-4	Quaternary ammonium	Q. A. Concentrated Solution	National Chemicals Inc	Human coronavirus	10	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	No	03/13/2020
62472-2	Quaternary ammonium	Kennelsol HC	Alpha Tech Pet Inc.	Human coronavirus	10	Dilutable	Hard Nonporous (HN)	Institutional; Residential	No	03/13/2020
67619-10	Quaternary ammonium	CPPC Everest	Clorox Professional Products Company	Human coronavirus	10	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required	Healthcare; Institutional; Residential	No	03/13/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
67619-11	Sodium hypochlorite	CPPC Shower	Clorox Professional Products Company	Human coronavirus	1	RTU	(FCR) Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	No	03/13/2020
67619-13	Sodium hypochlorite	CPPC Storm	Clorox Professional Products Company	Human coronavirus	1	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	No	03/13/2020
67619-27	Sodium hypochlorite	Buster	Clorox Professional Products Company	Human coronavirus	5	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
67619-28	Sodium hypochlorite	Milo	Clorox Professional Products Company	Human coronavirus	5	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
67619-8	Sodium hypochlorite	CPPC Ultra Bleach 2	Clorox Professional Products Company	Human coronavirus	5	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
6836-336	Quaternary ammonium	Lonza Disinfectant Wipes Plus	Lonza LLC	Human coronavirus	4	Wipe	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
6836-381	Quaternary ammonium	Lonzagard R-82G	Lonza LLC	Human coronavirus	1	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
6836-382	Quaternary ammonium	Nugen Low Streak Disinfectant Wipes	Lonza LLC	Human coronavirus	4	Wipe	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
70590-2	Sodium hypochlorite	Bleach-rite Disinfecting Spray With Bleach	Current Technologies Inc	Human coronavirus	1	RTU	Hard Nonporous (HN)	Healthcare; Institutional	No	03/13/2020
70627-15	Quaternary ammonium	Warrior	Diversey Inc	Human coronavirus	10	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional	No	03/13/2020
70627-2	Quaternary ammonium	Disinfectant D.C. 100	Diversey Inc	Human coronavirus	2	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional	No	03/13/2020
70627-23	Quaternary ammonium	Virex II/ 64	Diversey Inc	Human coronavirus	10	Dilutable	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional	No	03/13/2020
70627-6	Phenolic	Phenolic Disinfectant HG	Diversey Inc	Human coronavirus	10	Dilutable	Hard Nonporous (HN); Food Contact	Healthcare; Institutional	No	03/13/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
							Post-Rinse Required (FCR)			
70627-62	Hydrogen peroxide	Phato 1:64 Disinfectant Cleaner	Diversey Inc	Human coronavirus	5	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional	No	03/13/2020
70627-63	Quaternary ammonium	512 Sanitizer	Diversey Inc	Human coronavirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional	No	03/13/2020
70627-75	Sodium hypochlorite	Avert Sporicidal Disinfectant Cleaner Wipes	Diversey Inc	Human coronavirus	1	Wipe	Hard Nonporous (HN)	Healthcare; Institutional	No	03/13/2020
70627-78	Hydrogen peroxide	Suretouch	Diversey Inc	Human coronavirus	5	RTU	Hard Nonporous (HN)	Healthcare; Institutional	No	03/13/2020
72977-5	Silver ion; Citric acid	Sdc3a	ETI H2O Inc	Human coronavirus	1	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
74559-6	Hydrogen peroxide	Oxy-res (Concentrate)	Virox Technologies Inc	Human coronavirus	5	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
74559-8	Hydrogen peroxide	Accel 5 RTU	Virox Technologies Inc	Human coronavirus	5	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
777-136	Ethanol	Lysol Neutra Air® 2 in 1	Reckitt Benckiser	Human coronavirus	0.5 (30 seconds)	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	No	03/13/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
74986-4	Sodium chlorite	Selectocide 2L500	Selective Micro Technologies LLC	Human coronavirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional	No	03/13/2020
74986-5	Sodium chlorite	Selectocide 5g	Selective Micro Technologies LLC	Human coronavirus	10	Solid	Hard Nonporous (HN)	Healthcare; Institutional	No	03/13/2020
777-130	Quaternary ammonium	Caterpillar	Reckitt Benckiser	Human coronavirus	2.5 (2 minutes & 30 seconds)	Wipe	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
8383-14	Hydrogen peroxide; Peroxyacetic acid	PeridoxRTU (Brand) One-step Germicidal Wipes	Contec Inc	Human coronavirus	0.5 (30 seconds)	Wipe	Hard Nonporous (HN)	Healthcare; Institutional	No	03/13/2020
777-66	Quaternary ammonium	Lysol® Brand All Purpose Cleaner	Reckitt Benckiser	Human coronavirus	2	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
777-82	Quaternary ammonium	Lysol Brand Deodorizing Disinfectant Cleaner	Reckitt Benckiser	Human coronavirus	10	Dilutable	Hard Nonporous (HN)	Institutional; Residential	No	03/13/2020
777-91	Quaternary ammonium	Lysol® Kitchen Pro Antibacterial Cleaner	Reckitt Benckiser	Human coronavirus	2	RTU	Hard Nonporous (HN); Food Contact Post-Rinse Required (FCR)	Healthcare; Institutional; Residential	No	03/13/2020
8383-7	Phenolic	Sporicidin (Brand)	Contec Inc	Human coronavirus	5	Wipe	Hard Nonporous	Healthcare; Institutional;	No	03/13/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
		Disinfectant Towelettes					(HN)	Residential		
85343-1	Quaternary ammonium	Teccare Control	Talley Environmental Care Limited	Human coronavirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
88494-1	Quaternary ammonium; Ethanol	Wedge Disinfectant	North American Infection Control LTD	Human coronavirus	1	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
89896-2	Hypochlorous acid	Cleansmart	Simple Science Limited	Human coronavirus	10	RTU	Hard Nonporous (HN); Food Contact No Rinse (FCNR)	Healthcare; Institutional; Residential	No	03/13/2020
89900-1	Hydrogen peroxide	Nathan 2	S.C. Johnson Professional	Human coronavirus	5	RTU	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
90287-1	Quaternary ammonium	Maquat 25.6-PDX	VI-JON INC	Human coronavirus	10	Dilutable	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
9402-14	Hydrogen peroxide; Ammonium carbonate; Ammonium bicarbonate	Hitman Spray	Kimberly-Clark Global Sales LLC	Human coronavirus	5	RTU	Hard Nonporous (HN)	Institutional; Residential	No	03/13/2020
9402-15	Hydrogen peroxide; Ammonium carbonate; Ammonium bicarbonate	Victor Spray	Kimberly-Clark Global Sales LLC	Human coronavirus	5	Pressurized liquid	Hard Nonporous (HN)	Healthcare; Institutional; Residential	No	03/13/2020
9402-17	Hydrogen peroxide; Ammonium carbonate; Ammonium bicarbonate	Hitman Wipe	Kimberly-Clark Global Sales LLC	Human coronavirus	6	Wipe	Hard Nonporous (HN)	Institutional; Residential	No	03/13/2020
9480-5	Quaternary ammonium	Sani-cloth Germicidal	Professional Disposables	Human coronavirus	3	Wipe	Hard Nonporous	Healthcare; Institutional;	No	03/13/2020

EPA Registration Number	Active Ingredient(s)	Product Name	Company	Follow the disinfection directions and preparation for the following virus	Contact Time (in minutes)	Formulation Type	Surface Type	Use Site	Emerging Viral Pathogen Claim?	Date Added to List N
-------------------------	----------------------	--------------	---------	--	---------------------------	------------------	--------------	----------	--------------------------------	----------------------

		Disposable Cloth	International Inc				(HN); Food Contact Post-Rinse Required (FCR)	Residential		
--	--	------------------	-------------------	--	--	--	--	-------------	--	--

KORONAWIRUS A PROMIENIOWANIE UV

Zgodnie z doniesieniami naukowymi [1-7] oraz oświadczeniem Narodowej Komisji Zdrowia w Chinach [8], koronawirus SARS-CoV-2 jest wrażliwy na promieniowanie nadfioletowe, zwłaszcza z zakresu UVC (200 - 280 nm). Zatem, podobnie jak inne bakterie i wirusy, może on być efektywnie eliminowany poprzez zastosowanie lamp bakteriobójczych.

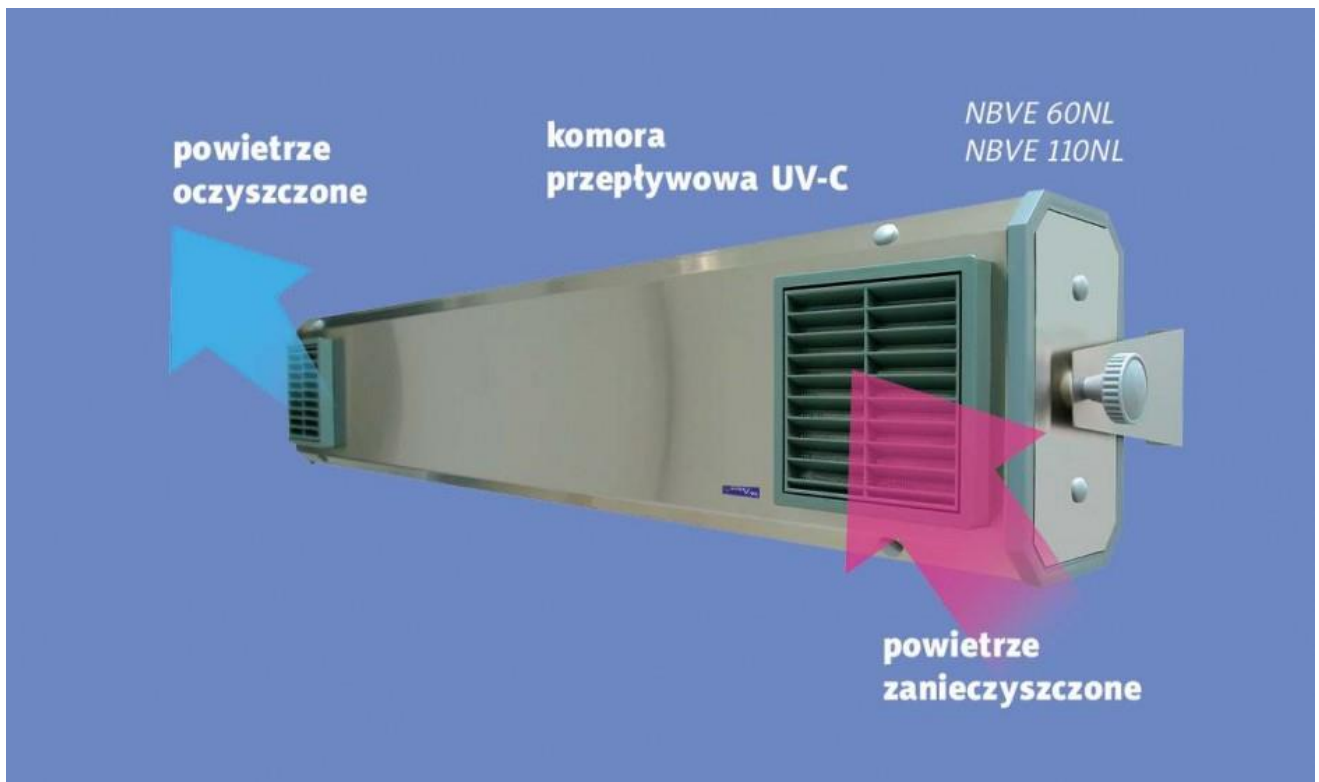
Należy jednak pamiętać, że promieniowanie lamp bakteriobójczych (UVC) jest szkodliwe dla zdrowia człowieka, szczególnie narażona jest skóra i oczy. W związku z tym, ustanowione są wartości graniczne ekspozycji tzw. maksymalne dopuszczalne ekspozycje (MDE) na promieniowanie UV (zawarte w Rozporządzeniu Ministra Rodziny, Pracy i Polityki Społecznej z dnia 12 czerwca 2018 r. w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy). W ciągu zmiany roboczej (bez względu na czas jej trwania) skuteczne aktywnie napromienienie promieniowaniem UV (dawka aktywna) nie może przekraczać wartości 30 J/m².

W jaki sposób dezynfekować pomieszczenia promieniowaniem UVC?

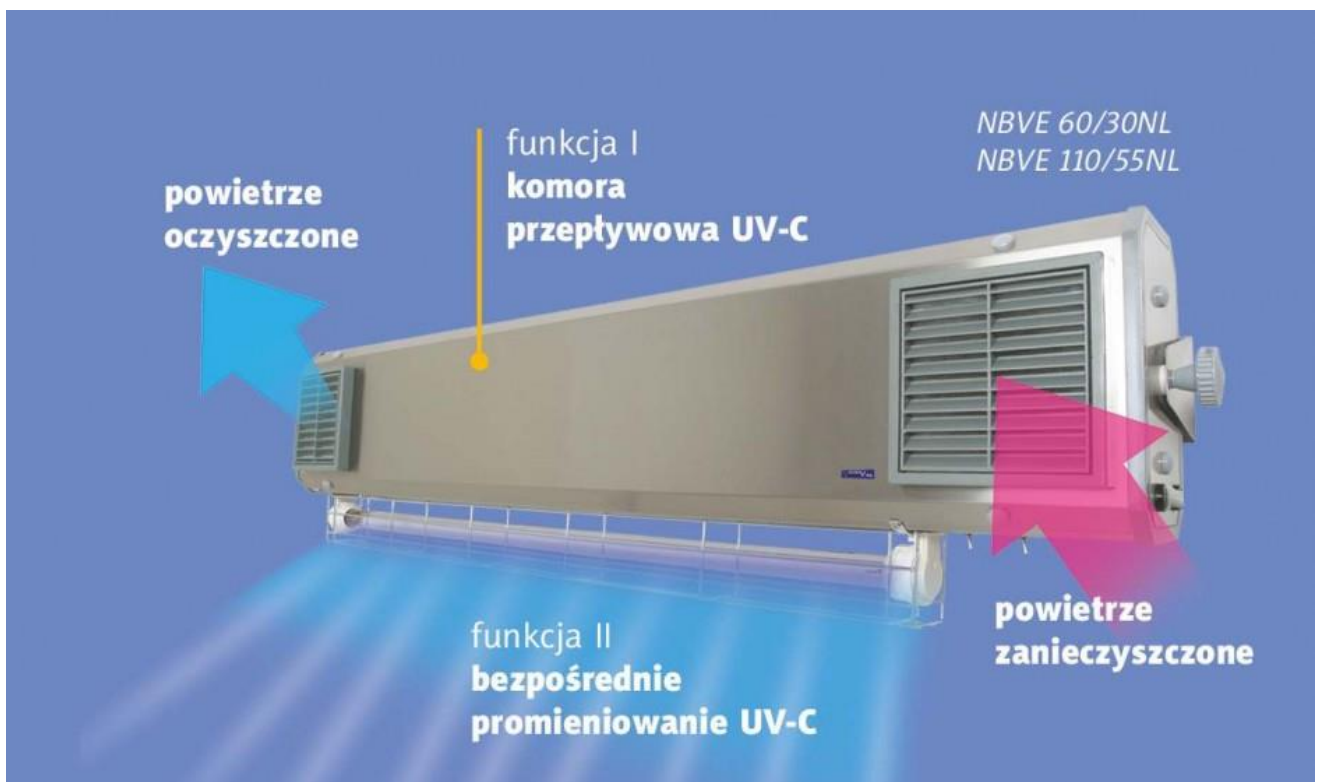
Zgodnie z najnowszymi doniesieniami skuteczna dezynfekcja powierzchni i pomieszczeń może być osiągnięta poprzez zastosowanie naświetlania bezpośrednim promieniowaniem nadfioletowym z zakresu UVC lub poprzez przepływową dezynfekcję promieniowaniem UVC.

Rozwiązaniem bezpieczniejszym dla ludzi jest zastosowanie opraw bakteriobójczych z funkcją wymuszonego przepływu powietrza. W tych oprawach dezynfekcja powietrza odbywa się w zamkniętej obudowie znacznie ograniczającej przenikanie promieniowania UVC na zewnątrz oprawy, dzięki czemu podczas procesu dezynfekcji osoby przebywające w pomieszczeniu nie są narażone na oddziaływanie promieniowania UVC.

Tego typu oprawy bakteriobójcze występują w dwóch podstawowych wariantach: jednofunkcyjnym: tylko przepływowa dezynfekcja powietrza (rys. 1a) lub dwufunkcyjnym z dodatkową funkcją dezynfekcji bezpośredniej tzn. z dodatkowymi promiennikami UVC zamontowanymi na zewnątrz oprawy (rys. 1b).



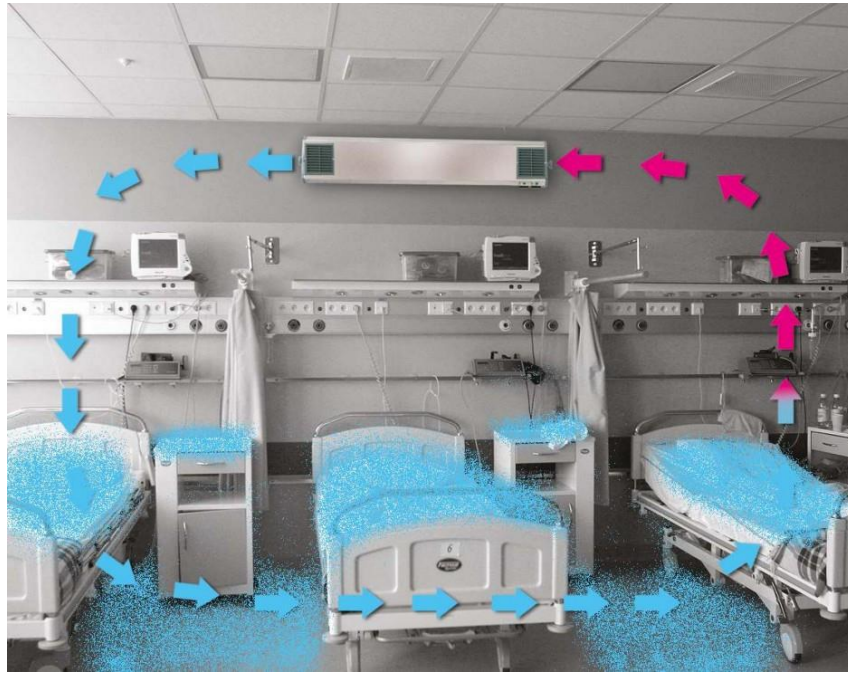
a)



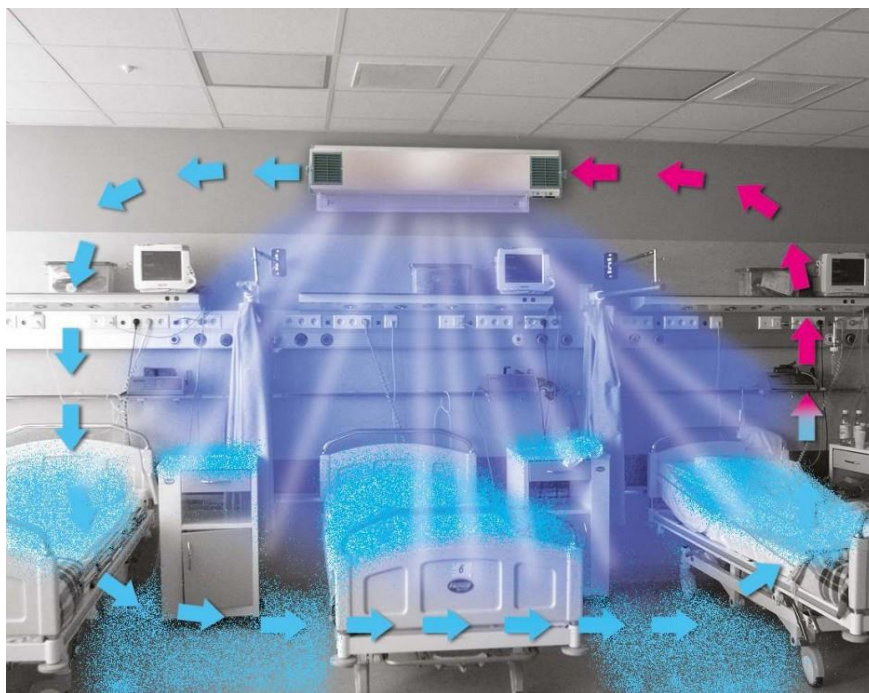
b)

Rys. 1. Oprawa bakteriobójcza a) wersja jednofunkcyjna, b) wersja dwufunkcyjna [12]

Zasada działania takiej oprawy przedstawiona jest na rys. 2 a i 2 b.



a)



b)

Rys. 2. Zasada działania oprawy bakteriobójczej a) wersja jednofunkcyjna, b) wersja dwufunkcyjna [12]

W obecnej sytuacji zagrożenia koronawirusem wydaje się najlepszym rozwiązaniem stosowanie opraw bakteriobójczych w wariacie jednofunkcyjnym (tzn. z wymuszonym przepływem powietrza). Oprawy takie mogą być umieszczone na suficie, ścianie lub mocowane na ruchomym (mobilnym) statywie (rys. 3). Z tego względu możliwe jest ich stosowanie zarówno w pomieszczeniach pracy, w poczekalniach, korytarzach itp. Należy jednak pamiętać, że wydajność jednej oprawy (w zależności od jej mocy) wynosi od ok.100 do 200 m³/h.

Należy jednak pamiętać, że oprawy bakteriobójcze zaleca się stosować tylko w środowisku pracy czy w obiektach użyteczności publicznej i pod ścisłą kontrolą osób odpowiedzialnych za ich nadzór. Konieczne jest po ich zastosowaniu odpowiednie wietrzenie pomieszczeń, że względu na wytwarzany w powietrzu ozon, który jest szkodliwy dla zdrowia.

Nie należy stosować opraw bakteriobójczych w domach.



Rys. 3. Przykładowa oprawa bakteriobójcza w wersji mobilnej [12]

Więcej informacji o sposobach dezynfekcji powierzchni i powietrza promieniowaniem UVC można znaleźć w publikacjach [6, 7].

Jakie dawki promieniowania UVC stosować do dezynfekcji powierzchni i powietrza?

Nie ma aktualnie zgodności, co do stosowanych dawek promieniowania skutecznych w dezaktywacji wirusa SARS-CoV-2. Poniżej przedstawiono aktualnie dostępne dane.

Narodowa Komisja Zdrowia w Chinach, jako jedna z pierwszych instytucji, opracowała zalecenia dotyczące naświetlania promieniowaniem UVC w celu dezaktywacji wirusa SARS-CoV-2. Zalecenia te opublikowano 4 marca 2020 r. w magazynie China Daily [9]. Zgodnie z nimi, na powierzchni oddalonej o 1 m od źródła promieniowania UVC powinno występować natężenie napromienienia o wartości powyżej $1,5 \text{ W/m}^2$, a czas naświetlania powinien wynosić, co najmniej 30 minut. W ten sposób obiekty znajdujące się w obszarze do 1 m od źródła powinny być skutecznie zdezynfekowane. Oznacza to, że niezbędna dawka do eliminacji tych patogenów wynosi, co najmniej $2\,700 \text{ J/m}^2$. Jeśli jest to dezynfekcja promieniowaniem UVC o długości fali 254 nm (czyli występującym w powszechnie stosowanych świetlówkach bakteriobójczych), to wartość skutecznego aktywnie napromienienia promieniowaniem UV (wyznaczanego do celu oceny zagrożenia zdrowia człowieka) wynosi wówczas $1\,350 \text{ J/m}^2$ co jest równoznaczne z 45-krotnym przekroczeniem wartości MDE wynoszącej 30 J/m^2 .

Natomiast w publikacji Międzynarodowego Stowarzyszenia ds. Promieniowania Nadfioletowego (IUVA) [3] zaleca się znacznie większe dawki do 99,9% dezaktywacji tego wirusa w warunkach rzeczywistego środowiska życia i pracy, i są one rzędu $10\,000 - 30\,000 \text{ J/m}^2$. W tym przypadku przekroczenie wartości MDE wynosi od 167 do 500 krotności wartości 30 J/m^2 (przy stosowaniu świetlówkowych lamp bakteriobójczych).

W związku z tym człowiek nie może przebywać w pomieszczeniu dezynfekowanym bezpośrednim promieniowaniem UVC.

Dlaczego zalecane dawki promieniowania UVC są tak wysokie skoro w literaturze [3, 10] podawane są też dużo niższe dawki ($20 \text{ J/m}^2 - 200 \text{ J/m}^2$)?

Niższe dawki promieniowania UVC odnoszą się do działania bakteriobójczego wykazanego w kontrolowanych warunkach laboratoryjnych. Natomiast skuteczność promieniowania UVC w warunkach rzeczywistego środowiska jest znacznie mniejsza i zależy, oprócz czasu ekspozycji, od możliwości dotarcia tego promieniowania do wirusów znajdujących się w różnych odległościach od źródła zarówno w powietrzu jak i na powierzchniach. Ponadto utrudnione jest dotarcie tego promieniowania np. do szczelin czy zagłębień w powierzchniach oraz do powierzchni przesłanianych przez inne obiekty. Stąd zalecane dawki UVC są nawet 150-krotnie wyższe od tych stosowanych w kontrolowanych warunkach laboratoryjnych.

Jakie dawki UVC należy stosować do sterylizacji masek ochronnych?

Do sterylizacji masek chirurgicznych w odniesieniu do dezaktywacji wirusa SARS-CoV-2, zaleca się dawkę UVC wynoszącą, co najmniej $10\,000 \text{ J/m}^2$, co powinno gwarantować 99,9% dezaktywacji wirusa [5]. Wartość tę można aktualnie przyjąć do sterylizacji masek ochronnych wielokrotnego użytku. Należy zwrócić uwagę, że naświetlanie w tym przypadku jest w dużo mniejszej odległości od źródła UVC i stosuje się znacznie mniejsze natężenia napromienienia, rzędu $0,641 \text{ W/m}^2$, przy czasie naświetlania znacznie dłuższym, bo 4,3 godziny.

Należy wziąć pod uwagę fakt, że w zależności od materiału dezynfekowanego mogą być skuteczne dezaktywacja wirusa SARS-CoV-2 może wymagać różnych dawek UVC. Istotne są również stosowane wartości natężenia napromienienia. Stosując zbyt wysokie wartości natężenia napromienienia można doprowadzić np. do szybkiej degeneracji czy uszkodzenia naświetlanego materiału.

Więcej informacji na temat dezynfekcji środków ochrony indywidualnej można znaleźć w publikacjach [4, 5].

Bibliografia:

1. Kowalski W. J., Walsh T.J., Paetratis V. *2020 COVID-19 Coronavirus Ultraviolet Susceptibility*. (March 2020). Technical report. Report number: COVID-19_UV_V20200312, DOI: 10.13140/RG.2.2.22803.22566
2. International Ultraviolet Association (IUVA) *UV disinfection for COVID-19*. <http://iuva.org/iuva-covid-19-faq> [21.05.2020]
3. *Ultraviolet devices (UVDI). Effectiveness of UVC Light to Mitigate Coronavirus (COVID-19)* https://www.uvdi.com/wp-content/uploads/2020/03/News-Release-Mar2020_MKTFM-453-Rev-A-1.pdf [21.05.2020]
4. Centers for Disease Control and Prevention (CDC), *Decontamination and Reuse of Filtering Facepiece Respirators*, April 29, 2020. <https://www.cdc.gov/coronavirus/2019-ncov/hcp/ppe-strategy/decontamination-reuse-respirators.html> [21.05.2020]
5. Card KJ, Croizer D., Dhawan A., Dinh M., Dolson E., Farrokhian N., i. in. *UV Sterilization of Personal Protective Equipment with Idle Laboratory Biosafety Cabinets During the Covid-19 Pandemic*. medRxiv - preprint server for Health Sciences : April 15, 2020. <https://doi.org/10.1101/2020.03.25.20043489>
6. Kowalski W. *Ultraviolet Germicidal Irradiation Handbook. UVGI for air and surface disinfection*. Springer, Berlin, 2009. <https://link.springer.com/book/10.1007/978-3-642-01999-9> [21.05.2020]
7. Rozenberg Y. Lowentahl A. *Can We Use Adenovirus Validated Ultraviolet Systems for Inactivation of SARS-CoV-2, The Virus That Causes COVID-19?* https://atlantium.com/uploads/1/2/8/7/128775896/adenovirus_validated_ultraviolet_systems_for_inactivation_of_sars-cov-2_032020.pdf [21.05.2020]
8. *Protocol on Prevention and Control of Novel Coronavirus Pneumonia*, Edition 6, March 7, 2020, National Health Commission, <https://www.chinadaily.com.cn/pdf/2020/2.COVID-19.Prevention.and.Control.Protocol.V6.pdf> [21.05.2020]
9. Shiyue Z. *Can ultraviolet light kill the novel coronavirus?* ChinaDaily.com.cn <https://www.chinadaily.com.cn/a/202003/04/WS5e5ee878a31012821727c0f4.ht>

[ml?fbclid=IwAR0HSVznpi6Y3xb96gVytUfIx4Vr6rLw2pOOJP3CdW6lXg3LlX8cYR1AYTw](https://www.facebook.com/IwAR0HSVznpi6Y3xb96gVytUfIx4Vr6rLw2pOOJP3CdW6lXg3LlX8cYR1AYTw) [21.05.2020]

10. International Commission on Illumination *CIE Position Statement on Ultraviolet (UV) radiation to manage the Risk of COVID-19*
Transmission http://cie.co.at/files/CIE%20Position%20Statement%20-%20UV%20radiation%20%282020%29.pdf?utm_source=CIE+Newsletter&utm_campaign=ea16590831-CIE+2018%2C+ABSTRACT+SUBMISSION+DEADLINE+2017-11-17_&utm_medium=email&utm_term=0_e7eabc7f5b-ea16590831-18660170
[21.05.2020]
11. 2019 ASHRAE Handbook—HVAC Applications (SI), CHAPTER 62. *Ultraviolet air and surface treatment*,
https://www.ashrae.org/file%20library/technical%20resources/covid-19/si_a19_ch62uvairandsurfacetreatment.pdf [21.05.2020]
12. UltraViol, Lampy Bakteriobójcze NBVE I NBV.
<https://ultraviol.pl/produkty/lampy-bakteriobojcze-nbve-i-nbv/> [21.05.2020]

Modyfikacja materiału: 21.05.2020 r.

Opracowali:

dr hab. inż. Agnieszka Wolska

mgr inż. Mariusz Wiselka

mgr inż. Andrzej Pawlak