64 Millennium Q

TECHNICAL BULLETIN

64 Millennium Q is a Non-Acid Restroom Disinfectant Cleaner that Disinfects and Cleans

One Step Disinfectant Detergent
Disinfectant Cleaner, Mildewstat, Fungicide, Virucide*, for Home, Hospital, Institutional and Industrial Use. Suitable For Farm, School, Restaurant, Food Handling and Processing Areas, Equine, Poultry/Turkey Farm, Bar, Tavern and Institutional Kitchen Use.

Cleans and Disinfects
64 Millennium Q delivers non-acid disinfection performance in an economical concentrate. Millennium Q is for use on hard, non-porous surfaces in: restrooms, shower stalls and toilets, patient care facilities, schools and colleges, athletic facilities and locker rooms, veterinary clinics, hotels, day care centers and newborn nurseries.

* This Product is effective against the virus that causes COVID-19 on non-porous surfaces in just 1 minute.

* Kills Pandemic 2009 H1N1 influenza A virus.

Millennium Q has demonstrated effectiveness against viruses similar to Monkeypox virus on hard non-porous surfaces. Therefore, this product can be used against Monkeypox virus when used in accordance with the directions for use against Norovirus (Norwalk Virus) on hard non-porous surfaces. Refer to the CDC website at https://www.cdc.gov/poxvirus/monkeypox/index.html for additional information.

64 Millennium Q Specifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Red Liquid, Floral Scent</td>
</tr>
<tr>
<td>pH (undiluted)</td>
<td>11-12</td>
</tr>
<tr>
<td>Flashpoint</td>
<td>None</td>
</tr>
<tr>
<td>Dilutions</td>
<td>2 oz./gal. (1:64)</td>
</tr>
<tr>
<td>Water Hardness</td>
<td>Effective up to 400 ppm</td>
</tr>
<tr>
<td>CaCO3</td>
<td>In the presence of 5% serum</td>
</tr>
<tr>
<td></td>
<td>contamination</td>
</tr>
<tr>
<td>% Active</td>
<td>4.5% (Quaternary)</td>
</tr>
<tr>
<td>Foam</td>
<td>Low - Moderate</td>
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<tr>
<td>EPA Registration No</td>
<td>1839-95-5449</td>
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<td>EPA Establishment No</td>
<td>5449-MN-01</td>
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<tr>
<td>DIN Registration Number</td>
<td>02435500</td>
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<tr>
<td>USDA</td>
<td>A4, C1, D1</td>
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</tbody>
</table>

At 8 ounces per gallon with a 10 minute contact time, this product is effective against Canine Parvovirus.
64 Millennium Q Claims

At 2 ounces per gallon with a 10 minute contact time, this product is effective against:

**Virucidal Activity:**
- Adenovirus Type 2
- Hepatitis B virus (HBV)
- Hepatitis C virus (HCV)
- Herpes Simplex Type 1
- Human Coronavirus
- Human Immunodeficiency Virus Type 1 (HIV-1)
- Influenza A2/Japan
- Norovirus (Norwalk Virus)
- Pandemic 2009 H1N1 Influenza A Virus
- SARS Associated Coronavirus
- SARS COV-2

**Fungicidal Activity:**
- Trichophyton mentagrophytes

**Mildewstat Activity:**
- Aspergillus Niger

**Bactericidal Activity:** When diluted at the rate of 2 fluid ounces per gallon of water, this product exhibits effective, one-step disinfectant activity against the organisms:
- Brevibacterium ammoniagenes
- Klebsiella aerogenes
- Escherichia coli
- Klebsiella pneumoniae
- Methicillin resistant Staphylococcus aureus (MRSA)
- Pseudomonas aeruginosa
- Salmonella enterica
- Salmonella schottmuelleri
- Shigella dysenteriae
- Staphylococcus aureus
- Streptococcus faecalis
- Streptococcus pyogenes
- Streptococcus salivarius
- Vancomycin intermediate resistance Staphylococcus aureus (VISA)
- Kelbsiella pneumoniae New Dehli Metallo-Beta Lactamase (NDM-1) Carbapenem Resistant
- Acinetobacter baumannii
- Enterococcus faecium
- Vancomycin resistant Enterococcus faecalis (VRE)

**Animal Viruses (2oz/gallon):**
- Avian Influenza A Virus (H3N2) (Avian Reasortant)
- Avian Influenza Virus Type A (Turkey/WIS/66) (H9N2)
- Bovine Viral Diarrhea Virus (BVDV)
- Feline Calicivirus (FCV)
- Porcine Respiratory & Reproductive Syndrome Virus (PRRSV)
- Vaccinia Virus

**Animal Viruses (8oz/gallon):**
- Canine Parvovirus
- Canine Adenovirus
- Canine Coronavirus
- Canine Parainfluenza Virus
- Feline Panleukopenia
- Feline Rhinotracheitis
- Feline Coronavirus
- Feline Picornavirus
- Porcine Parvovirus
DIRECTIONS FOR USE
It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. This product is not for use on critical and semi-critical medical device surfaces.

DISINFECTION - To disinfect inanimate, hard, non-porous surfaces add 2 ounces of this product per gallon of water. Apply solution with a mop, cloth, sponge, hand pump trigger sprayer or low pressure coarse sprayer so as to wet all surfaces thoroughly. Allow to remain wet for 10 minutes, then remove excess liquid. For heavily soiled areas, a pre-cleaning step is required.

BACTERICIDAL STABILITY OF USE-DILUTION: Efficacy tests confirm that this product when diluted as directed remains effective against Pseudomonas aeruginosa, Staphylococcus aureus and Salmonella enterica for up to 30 days when stored in a sealed container such as a spray bottle. If the diluted product becomes visibly dirty or contaminated, it must be discarded and fresh diluted product must be prepared. Always use clean, properly labeled containers when diluting this product. Bactericidal stability of the diluted product does not apply to open containers such as buckets or pails.

To disinfect food processing premises: Before using this product, food products and packaging materials must be removed from the area or carefully protected. For floors, walls, and storage areas, add 2 ounces of 64 Millennium Q per gallon of water. For heavily soiled areas, a pre-cleaning step is required. Apply solution with a mop, cloth, sponge, hand pump trigger sprayer or low pressure coarse sprayer so as to wet all surfaces thoroughly. After use, all surfaces in the area must be thoroughly rinsed with potable water.

To disinfect food service establishment food contact surfaces: Before using this product, food products and packaging materials must be removed from the area or carefully protected. For countertops, appliances, tables, add 2 ounces of 64 Millennium Q per gallon of water. For heavily soiled areas, a pre-cleaning step is required. Apply solution with a cloth, sponge, hand pump trigger sprayer or low pressure coarse sprayer so as to wet all surfaces thoroughly. This product cannot be used to clean the following food contact surfaces: utensils, glassware and dishes.

BACTERICIDAL ACTIVITY - When diluted at the rate of 2 ounces per gallon of water, this product exhibits effective, one-step disinfectant activity against the organisms: Pseudomonas aeruginosa PRD 10, Escherichia coli, Klebsiella pneumoniae, Salmonella schottmuelleri, Salmonella enterica, Streptococcus salivarius, Brevibacterium ammoniagenes, Streptococcus faecalis, Shigella dysenteriae, Enterobacter aerogenes, Staphylococcus aureus, Methicillin resistant Staphylococcus aureus (MRSA), Vancomycin intermediate resistant Staphylococcus aureus (VISA), Streptococcus pyogenes (Clinical-Flesh Eating Strain BIRD M3) and Klebsiella pneumoniae New Delhi Metallo-Beta Lactamase (NDM-1) Carbapenem Resistant, Acinetobacter baumannii, Enterococcus faecium, Vancomycin resistant Enterococcus faecalis (VRE) and meets all requirements for hospital use.

FUNGICIDAL ACTIVITY - At the 2 ounces per gallon dilution, this product is also fungicidal against the pathogenic fungi, Trichophyton mentagrophytes (causative agent of Athlete’s Foot Fungus) (a cause of ringworm), when used as directed on hard surfaces found in bathrooms, shower stalls, locker rooms, exercise facilities or other clean, hard, non-porous, surfaces commonly contacted by bare feet. Follow the Disinfection directions.

"VIRUCIDAL ACTIVITY – 64 Millennium Q, when used on environmental, inanimate, hard, non-porous surfaces at 2 ounces per gallon of water, exhibits effective virucidal activity against Influenza A2/Japan (representative of the common flu virus), Herpes Simplex Type 1, Adenovirus Type 2 (causative agent of upper respiratory infections), Vaccinia virus (representative of the Pox virus group), Human Coronavirus (ATCC VR-740, Strain 229E), Human Immunodeficiency Virus Type I (HIV-1), Hepatitis B Virus (HBV), Hepatitis C Virus (HCV), Norovirus (Norwalk Virus), Bovine Viral Diarrhea Virus (BVDV), Feline calicivirus (FCV), SARS Associated Coronavirus, Porcine Respiratory & Reproductive Syndrome Virus (PRRSV) (Strain NVSL) and Avian Influenza A. Follow the Disinfection directions.

At 8 ounces per gallon or equivalent dilution rate, this product is effective against the following viruses on hard non-porous environmental surface with a 10 minute contact time: Canine Parvovirus (CPV), Canine Adenovirus (causative agent of Infectious Canine Hepatitis), Canine Coronavirus (causative agent of Canine Coronavirus Disease, Canine Gastroenteritis), Canine Parainfluenza Virus (causative agent of viral Kennel Cough), Feline Panleukopenia (Feline Parvovirus), Feline Rhinotracheitis (causative agent of Feline Herpes virus Infection), Feline Coronavirus (causative agent of Feline Infectious Peritonitis), Feline Picornavirus and Porcine Parvovirus.