

# Mark 11

Disinfectant, Non-Food Contact Sanitizer, Cleaner, Mildewstat, Fungicide, Virucide\*, and Deodorizer

**ONE PACKS**  
Dispenser-Free Control Systems®

EPA Reg. No. 10324-154-3640  
EPA Est. No. 3640-WI-1

## EFFICACY SUMMARY



| ST-No.  | New Item # | Case UPC No. Mfg. No. 071206 | Each UPC No. Mfg. No. 071206 | Case Size                                     | Case Weight  | Cases /Pallet | Yield             |
|---------|------------|------------------------------|------------------------------|-----------------------------------------------|--------------|---------------|-------------------|
| ST-735  | #2309043   | 009043                       | N/A                          | 72 x 2 fl. oz. packs                          | 10.75 pounds | 75            | 1 Gallon          |
| ST-738  | #2307384   | 007384                       | N/A                          | 36 x 4 fl. oz. packs                          | 11 pounds    | 75            | 2 Gallons         |
| ST-740  | #2309951   | 009951                       | N/A                          | 144 x 0.5 fl. oz. packs                       | 6.5 pounds   | 75            | 1 Quart           |
| ST-740E | #2374007   | 274007                       | 027405                       | 10 x 10 x 0.5 fl. oz. packs                   | 5.5 pounds   | 64            | 1 Quart           |
| ST-1394 | #2313941   | 013941                       | N/A                          | 10 x 0.5 fl. oz. packs                        | 1.25 pounds  | 200           | 1 Quart           |
| ST-1398 | #2313989   | 013989                       | N/A                          | 5 x 0.5 fl. oz. packs                         | 1 pound      | 176           | 1 Quart           |
| ST-1375 | #2313750   | 013750                       | N/A                          | 25 x 0.5 fl. oz. packs w/bottle               | 1.75 pounds  | 162           | 1 Quart           |
| ST-747  | #2308916   | 008916                       | N/A                          | 10 x 10 fl. oz. packs                         | 8 pounds     | 100           | 5 Gallons         |
| ST-2020 | #2102000   | 202000                       | 320209                       | 4 x 1gallon case                              | 37 pounds    | 48            | 1/2 oz. per quart |
| ST-9950 | #2909166   | 009180                       | N/A                          | 12 x 32 oz. empty silk-screened spray bottles | 3.5 pounds   | 40            | N/A               |

### Hospital Disinfection

Conclusion: All lots of Mark 11 satisfied the established test criteria for disinfection. Mark 11 meets EPA standards (OCSP 810.2200) for hard surface disinfectant claims that can be used by products sold in hospitals, households, healthcare facilities, schools, restaurants, food services, dairies, farm, beverage and food processing plants and other medical facilities when used (diluted) as directed. Mark 11 has been recognized by the EPA for effectiveness against the following antibiotic resistant strains of Staphylococcus and Enterococcus. As a result Mark 11 can be found on the EPA list of effective disinfectants: List H.

Contact Time: 10 minutes

Water Conditions: 400 ppm CaCO<sub>3</sub>

Organic Soil: 5%

Test Method Official Method of the AOAC, Use-Dilution Method (UDM)

Dilution/Concentration: 2 oz. / gal. (660 ppm)

| Organism                                        | Carrier Population (Log <sub>10</sub> ) | # Positive Carriers |
|-------------------------------------------------|-----------------------------------------|---------------------|
| Pseudomonas aeruginosa ATCC 15442               | 6.46                                    | 3/60                |
|                                                 | 6.38                                    | 6/60                |
|                                                 | 6.51                                    | 4/60                |
| Staphylococcus aureus ATCC 6538                 | 6.11                                    | 2/60                |
|                                                 | 6.36                                    | 3/60                |
|                                                 | 6.53                                    | 2/60                |
| Organism                                        | Carrier Population (Log <sub>10</sub> ) | # Positive Carriers |
| Acinetobacter baumannii ATCC 19003              | 6.71                                    | 0/10                |
| Acinetobacter lwoffii ATCC 9957                 | 5.60                                    | 0/10                |
|                                                 |                                         | 0/10                |
| Acinetobacter lwoffii ATCC 15309                | 5.76                                    | 0/10                |
|                                                 |                                         | 0/10                |
| Bordetella bronchiseptica ATCC 10580            | 6.97                                    | 0/10                |
|                                                 |                                         | 0/10                |
| Chlamydia psittaci <sup>2</sup> ATCC VR-125     | 7.25                                    | ≥6.75<br>≥6.75      |
| Citrobacter freundii ATCC 8090                  | 5.29                                    | 0/10                |
|                                                 |                                         | 0/10                |
| Enterobacter aerogenes ATCC 13046               | 7.37                                    | 0/10                |
|                                                 |                                         | 0/10                |
| Enterobacter agglomerans ATCC 27155             | 5.59                                    | 0/10                |
|                                                 |                                         | 0/10                |
| Enterobacter cloacae ATCC 13047                 | 7.52                                    | 0/10                |
|                                                 |                                         | 0/10                |
| Enterobacter faecalis ATCC 10433                | 5.79                                    | 0/10                |
|                                                 |                                         | 0/10                |
| Enterobacter faecalis VRE ATCC 51299            | 7.11                                    | 0/10                |
|                                                 |                                         | 0/10                |
| Enterobacter hirae ATCC 10541                   | 4.38                                    | 0/10                |
|                                                 |                                         | 0/10                |
| Escherichia coli Carbapenem Resistant CDC 81371 | 5.88                                    | 0/10                |
|                                                 | 5.52                                    | 0/10                |
| Escherichia coli ATCC 11229                     | 7.11                                    | 0/10                |
|                                                 |                                         | 0/10                |

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| Organism                                                                    | Carrier Population (Log <sub>10</sub> ) | # Positive Carriers  |
|-----------------------------------------------------------------------------|-----------------------------------------|----------------------|
| Escherichia coli ESBL ATCC BAA-196                                          | 6.66                                    | 0/10<br>0/10         |
| Escherichia coli Tetracycline Resistant ATCC 47041                          | 5.49                                    | 0/10<br>0/10         |
| Escherichia coli O111:H8 ATCC BAA-184                                       | 6.63                                    | 0/10<br>0/10         |
| Fusobacterium necrophorum ATCC 27852                                        | 5.76                                    | 0/10<br>0/10         |
| Klebsiella oxytoca ATCC 13182                                               | 5.03                                    | 0/10<br>0/10         |
| Klebsiella pneumonia NDM-1 positive CDC 1000527                             | 5.98                                    | 0/10<br>0/10         |
| Klebsiella pneumonia ATCC 13883                                             | 6.05                                    | 0/10<br>0/10         |
| Listeria monocytogenes ATCC 19117                                           | 6.89                                    | 0/10<br>0/10         |
| Micrococcus luteus ATCC 14452                                               | 5.04                                    | 0/10<br>0/10         |
| Micrococcus luteus ATCC 4698                                                | 5.68                                    | 0/10<br>0/10         |
| Pasturella multocida ATCC 12047                                             | 7.12                                    | 0/10<br>0/10         |
| Proteus vulgaris ATCC 13315                                                 | 4.28                                    | 0/10<br>0/10         |
| Proteus vulgaris ATCC 9920                                                  | 5.09                                    | 0/10<br>0/10         |
| Pseudomonas aeruginosa Tetracycline Resistant ATCC 27853                    | 6.54                                    | 0/10<br>0/10         |
| Pseudomonas cepacia ATCC 25416                                              | 6.21                                    | 0/10<br>0/10         |
| Salmonella enterica ATCC 10708                                              | 5.11                                    | 1/60<br>1/60<br>0/60 |
| Salmonella enterica ATCC 23564                                              | 4.96                                    | 0/10<br>0/10         |
| Salmonella enterica serotype pullorum ATCC 19945                            | 5.85                                    | 0/10<br>0/10         |
| Salmonella enteritidis ATCC 4931                                            | 6.18                                    | 0/10<br>0/10         |
| Salmonella typhi ATCC 6539                                                  | 6.92                                    | 0/10<br>0/10         |
| Salmonella typhimurium ATCC 23564                                           | 5.75                                    | 0/10<br>0/10         |
| Serratia marcescens ATCC 14756                                              | 6.79                                    | 0/10<br>0/10         |
| Serratia marcescens ATCC 9103                                               | 6.78                                    | 0/10<br>0/10         |
| Shigella flexneri ATCC 12022                                                | 4.41                                    | 0/10<br>0/10         |
| Shigella flexneri ATCC 9380                                                 | 6.30                                    | 0/10<br>0/10         |
| Shigella sonnei ATCC 25931                                                  | 6.02                                    | 0/10<br>0/10         |
| Staphylococcus aureus ATCC 14154                                            | 5.96                                    | 0/10<br>0/10         |
| Staphylococcus aureus ATCC 25923                                            | 6.82                                    | 0/10<br>0/10         |
| Staphylococcus aureus CA-MRSA NRS 123 Genotype USA400                       | 6.80                                    | 0/10<br>0/10         |
| Staphylococcus aureus CA-MRSA <sup>1</sup> NARSA NRS384 123 Genotype USA300 | 6.23                                    | 0/10<br>0/10         |
| Staphylococcus aureus sub species aureus ATCC 33586                         | 4.86                                    | 0/10<br>0/10         |
| Staphylococcus aureus MRSA NRS ATCC 33592                                   | 6.73                                    | 0/10<br>0/10         |
| Staphylococcus aureus VISA HIP 5836                                         | 6.51                                    | 0/10<br>0/10         |
| Staphylococcus epidermidis ATCC 14990                                       | 6.19                                    | 0/10<br>0/10         |
| Staphylococcus epidermidis antibiotic resistant ATCC 51625                  | 5.93                                    | 0/10<br>0/10         |
| Staphylococcus haemolyticus ATCC 29970                                      | 5.98                                    | 0/10<br>0/10         |
| Streptococcus agalactiae ATCC 13813                                         | 6.75                                    | 0/10<br>0/10         |

| Organism                                                 | Carrier Population (Log <sub>10</sub> ) | # Positive Carriers |
|----------------------------------------------------------|-----------------------------------------|---------------------|
| Streptococcus mutans ATCC 25175                          | 4.11                                    | 0/10<br>0/10        |
| Streptococcus pneumoniae Penicillin Resistant ATCC 51915 | 4.98                                    | 0/10<br>0/10        |
| Streptococcus pyogenes ATCC 19615                        | 4.67                                    | 0/10<br>0/10        |
| Vibrio cholera ATCC 11623                                | 6.00                                    | 0/10<br>0/10        |
| Yersinia enterocolitica ATCC 23715                       | 7.08                                    | 0/10<br>0/10        |

**Virucide** *Conclusion: All lots of Mark 11 satisfied the established test criteria for a virucide. Mark 11 meets EPA standards (OCSP 810.2200) for hard surface virucidal claims that can be used by products sold in hospitals, households, healthcare facilities, schools, restaurants, food services, dairies, farm, beverage and food processing plants and other medical facilities when used (diluted) as directed. Complete inactivation of the virus by 2 separate lots, 1 surface each, is required for each claim. If cytotoxicity is present a 3-log<sub>10</sub> reduction must be demonstrated. Mark 11 has been recognized by the EPA for effectiveness against the following viruses HIV, Hepatitis B, Hepatitis C, and Avian influenza. As a result Mark 11 can be found on several EPA lists of effective virucides: EPA Lists: C, D, F, and M. Mark 11 satisfies the OSHA Blood Borne pathogen directive for neutralizing blood spills.*

**Contact Time:** 10 minutes

**Water Conditions:** 400 ppm CaCO<sub>3</sub>

**Organic Soil:** 5%

**Test Method** Virucidal Efficacy of a Disinfectant for Use on Inanimate Environmental Surfaces

**Dilution/Concentration:** 2 oz. / gal. (660 ppm)

| Organism                                                                     | Virus Population (Log <sub>10</sub> ) | Log Reduction (Log <sub>10</sub> ) |
|------------------------------------------------------------------------------|---------------------------------------|------------------------------------|
| Avian Influenza A Virus (H5N1) CDC 2006719965                                | 6.75                                  | ≥ 6.25<br>≥ 6.25                   |
| Avian Influenza A Virus (H3N2) ATCC VR-2072                                  | 4.75                                  | ≥ 4.25<br>≥ 4.25                   |
| Cytomegalovirus ATCC VR-538                                                  | 4.50                                  | ≥ 4.0<br>≥ 4.0                     |
| Coronavirus (SARS-associated)                                                | 6.50                                  | ≥ 3.0<br>≥ 3.0                     |
| Hantavirus (PHV)                                                             | 5.00                                  | ≥ 3.5<br>≥ 3.5                     |
| Hepatitis B Virus (HBV) (Duck-surrogate) Clinical Isolate                    | 4.79                                  | ≥ 4.79<br>≥ 4.79                   |
| Hepatitis C Virus (HCV) (BVDV-surrogate) Clinical                            | 5.88                                  | ≥ 5.88<br>≥ 5.88                   |
| Herpes Simplex Type 1 Virus VR-733                                           | 5.50                                  | ≥ 5.0<br>≥ 5.0                     |
| Herpes Simplex Type 2 Virus ATCC VR-734                                      | 6.00                                  | ≥ 5.5<br>≥ 5.5                     |
| Human Coronavirus ATCC VR-740                                                | 4.50                                  | ≥ 4.0<br>≥ 4.0                     |
| Human Immunodeficiency Virus Type 1 (AIDS Virus) (Strain III <sub>RF</sub> ) | 5.25                                  | ≥ 3.75<br>≥ 3.75                   |
| Influenza A Virus (H1N1) ATCC VR-1469                                        | 5.50                                  | ≥ 5.0<br>≥ 5.0                     |
| Influenza A2/Hong Kong Virus (H3N2) ATCC VR-544                              | 6.50                                  | ≥ 6.0<br>≥ 6.0                     |
| Respiratory Syncytial Virus ATCC VR-26                                       | 4.50                                  | ≥ 4.0<br>≥ 4.0                     |
| Vaccinia Virus ATCC VR-119                                                   | 6.72                                  | ≥ 6.25<br>≥ 6.25                   |

**Virucide Animal Premises** *Conclusion: All lots of Mark 11 satisfied the established test criteria for a virucide. Mark 11 meets EPA standards (OCSP 810.2200) for hard surface virucidal claims that can be used by products sold in kennels, households, veterinarian facilities, schools, dairies, farms, zoos and other facilities that housed animals when used (diluted) as directed. Complete inactivation of the virus by 2 separate lots, 1 surface each, is required for each claim. If cytotoxicity is present a 3-log<sub>10</sub> reduction must be demonstrated.*

**Contact Time:** 10 minutes

**Water Conditions:** 400 ppm CaCO<sub>3</sub>

**Organic Soil:** 5%

**Test Method** Virucidal Efficacy of a Disinfectant for Use on Inanimate Environmental Surfaces

**Dilution/Concentration:** 2 oz. / gal. (660 ppm)

| Organism                                             | Virus Population (Log <sub>10</sub> ) | Log Reduction (Log <sub>10</sub> ) |
|------------------------------------------------------|---------------------------------------|------------------------------------|
| Avian Infectious Bronchitis Virus Beaudette IB42     | 6.42                                  | ≥ 5.92<br>≥ 5.92                   |
| Avian Influenza A Virus (H3N2) ATCC VR-2072          | 4.75                                  | ≥ 4.25<br>≥ 4.25                   |
| Avian Influenza A Virus (H3N2) ATCC VR-2072          | 4.75                                  | ≥ 4.25<br>≥ 4.25                   |
| Canine Coronavirus ATCC VR-809                       | 4.50                                  | ≥ 4.0<br>≥ 4.0                     |
| Canine Distemper Virus ATCC VR-128                   | 6.25                                  | ≥ 5.75<br>≥ 5.75                   |
| Feline Picornavirus ATCC VR-649                      | 4.50                                  | ≥ 4.0<br>≥ 4.0                     |
| Infectious Bovine Rhinotracheitis Virus ATCC VR-188  | 4.50                                  | ≥ 4.0<br>≥ 4.0                     |
| Pseudorabies Virus ATCC VR-135                       | 6.25                                  | ≥ 5.75<br>≥ 5.75                   |
| Swine Influenza A Virus (H1N1) ATCC VR-333           | 5.50                                  | ≥ 5.0<br>≥ 5.0                     |
| Transmissible Gastroenteritis Virus Clinical Isolate | 4.75                                  | ≥ 4.25<br>≥ 4.25                   |

## Virucide Animal Premises

*Conclusion: All lots of Mark 11 satisfied the established test criteria for a virucide. Mark 11 meets EPA standards (OCSP 810.2200) for hard surface virucidal claims that can be used by products sold in kennels, households, veterinarian facilities, schools, dairies, farms, zoos and other facilities that housed animals when used (diluted) as directed. Complete inactivation of the virus by 2 separate lots, 1 surface each, is required for each claim. If cytotoxicity is present a 3-log<sub>10</sub> reduction must be demonstrated.*

**Contact Time:** 10 minutes

**Water Conditions:** Deionized

**Organic Soil:** 5%

**Test Method** Virucidal Efficacy of a Disinfectant for Use on Inanimate Environmental Surfaces

**Dilution/Concentration:** 8 oz. / gal. (5280 ppm)

| Organism                       | Virus Population (Log <sub>10</sub> ) | Log Reduction (Log <sub>10</sub> ) |
|--------------------------------|---------------------------------------|------------------------------------|
| Canine Parvovirus ATCC VR-2017 | 6.25                                  | ≥3.75<br>≥3.75                     |
| Rabies Virus <sup>3</sup> CDC  | 5.35                                  | ≥3.25<br>≥3.25                     |

## Mildewstatic

*MILDEWSTATIC PERFORMANCE: Mark 11 controls mildew and non-pathogenic fungal growth on indoor, hard, non-porous surfaces when applied at 2 oz. per gal of water (660 ppm active). Thoroughly wet all treated surfaces completely. Let air-dry. Repeat application weekly or when growth or odor reappears.*

**Contact Time:** 10 minutes

**Water Conditions:** 400 ppm CaCO<sub>3</sub>

**Organic Soil:** 5%

**Test Method** EPA Hard Surface Mildew Fungistatic Test

**Dilution/Concentration:** 2 oz. / gal. (600 ppm)

| Organism                       | Tile | Untreated (% Covered) | 7 Days Post Treatment (% Covered) |
|--------------------------------|------|-----------------------|-----------------------------------|
| Aspergillus niger<br>ATCC 6275 | 1    | 90                    | 0/0                               |
|                                | 2    | 70                    | 0/0                               |
|                                | 3    | 90                    | 0/0                               |
|                                | 4    | 80                    | 0/0                               |
|                                | 5    | 80                    | 0/0                               |
|                                | 6    | 90                    | 0/0                               |
|                                | 7    | 80                    | 0/0                               |
|                                | 8    | 70                    | 0/0                               |
|                                | 9    | 90                    | 0/0                               |
|                                | 10   | 70                    | 0/0                               |

## Fungicide

*Conclusion: All lots of Mark 11 satisfied the established test protocol for a fungicidal. Mark 11 meets EPA standards (OCSP 810.2200) for hard surface fungicidal claims that can be used by products sold in hospitals, households, healthcare facilities, schools, locker rooms, dressing rooms, shower and bath areas, and exercise facilities when used (diluted) as directed.*

**Contact Time:** 10 minutes

**Water Conditions:** 400 ppm CaCO<sub>3</sub>

**Organic Soil:** 5%

**Test Method** Fungicidal Activity

**Dilution/Concentration:** 2 oz. / gal. (469 ppm)

| Organism                              | Fungal Population (Log <sub>10</sub> ) | Result       |
|---------------------------------------|----------------------------------------|--------------|
| Trichophyton mentagrophytes ATCC 9533 | 4.78                                   | 0/10<br>0/10 |
| Candida albicans ATCC 10231           | 5.75                                   | 0/10<br>0/10 |

## Sanitizer

*Conclusion: All lots of Mark 11 satisfied the established test protocol for a sanitizer. Mark 11 meets EPA standards (Subdivision G, 91-2) for hard surface sanitizer claims that can be used by products sold in households, schools, offices, retail stores, other public places when used (diluted) as directed.*

**Contact Time:** 3 minutes

**Water Conditions:** 400 ppm CaCO<sub>3</sub>

**Organic Soil:** 5%

**Test Method** Sanitizer: AOAC Germicidal and Detergent Sanitizer

**Dilution/Concentration:** 2 oz. / gal. (600 ppm)

| Organism                        | Average Population (Log <sub>10</sub> ) | Log Reduction (Log <sub>10</sub> ) |
|---------------------------------|-----------------------------------------|------------------------------------|
| Klebsiella pneumonia ATCC 4352  | 6.04                                    | ≥4.56<br>≥4.17<br>≥4.56            |
| Staphylococcus aureus ATCC 6538 | 6.69                                    | ≥5.21<br>≥5.21<br>≥5.21            |

Mark 11 is a neutral pH multi-surface cleaner, deodorizer and disinfectant.

Mark 11 is a phosphate-free formulation designed to provide effective cleaning, deodorizing and disinfection in areas where housekeeping is of prime importance in controlling the hazard of cross-contamination on treated surfaces. Cross-contamination is of major housekeeping concern not only in hospitals, but also in schools, institutions and industry.

Mark 11 is formulated to disinfect, clean, deodorize on hard, non-porous surfaces such as: floors, countertops, sinks, toilet bowls, tables, chairs, washable walls and telephones.

Mark 11 will effectively inhibit the growth of mold and mildew and the odors caused by them when applied to hard, non-porous surfaces leaving bathrooms and kitchens clean and fresh smelling.

Mark 11 provides effective cleaning strength that will not dull most metal-interlock floor finishes, and does not require a rinse prior to recoat. This product is designed to provide both general cleaning and disinfection for larger areas such as operating rooms and patient care facilities. This product Kills Pandemic 2009 H1N1 Influenza A Virus, formerly called swine flu. This product Kills Avian Influenza A Virus H5N1 and H3N2.

### Directions

It is a violation of Federal law to use Mark 11 in a manner inconsistent with its labeling.

Before using Mark 11, food products and packaging materials must be removed from room or carefully protected.

Mark 11 is not for use on medical device surfaces.

### FOR USE AS A GENERAL, HOSPITAL DISINFECTANT, FUNGICIDE, VIRUCIDE\*, CLEANER:

1. Pre-clean heavily soiled areas.
2. Apply use solution of 2 oz. of this product per gal. of water (or equivalent use dilution) to disinfect hard, non-porous surfaces with a sponge, brush, cloth, mop, auto scrubber, mechanical spray device, coarse trigger spray device. For sprayer applications, spray 6-8 inches from surface. Do not breathe spray.
3. Treated surfaces must remain wet for 10 minutes.
4. Allow to air dry.
5. Prepare a fresh solution daily or when visibly dirty.

### Chemical Characteristics

|                                        |              |
|----------------------------------------|--------------|
| Appearance .....                       | Red Liquid   |
| Biodegradable .....                    | Yes          |
| California Compliant .....             | Yes          |
| Corrosive Category (Concentrate).....  | Eye Damage 1 |
| Corrosive Category (Use Dilution)..... | No           |
| DEA-Free .....                         | Yes          |
| Fragrance .....                        | Fresh Scent  |
| Non-Acid .....                         | Yes          |
| Non-Butyl .....                        | Yes          |
| Non-Flammable .....                    | Yes          |
| NPE-Free .....                         | Yes          |
| NSF Certified .....                    | D2           |
| pH (Concentrate).....                  | 7.0-8.0      |
| pH (Use Dilution 1:64).....            | 7.0-8.0      |
| Phosphate-Free .....                   | Yes          |
| VOC .....                              | None         |

### Active Ingredients

|                                                                          |         |
|--------------------------------------------------------------------------|---------|
| Didecyl Dimethyl Ammonium Chloride.....                                  | 2.54%   |
| Alkyl (50% C <sub>14</sub> , 40% C <sub>12</sub> , 10% C <sub>16</sub> ) |         |
| Dimethyl Benzyl Ammonium Chloride.....                                   | 1.69%   |
| OTHER INGREDIENTS: .....                                                 | 95.77%  |
| TOTAL:.....                                                              | 100.00% |



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