# **Mark 11** Cleaner, Disinfectant, Non-Food Contact Sanitizer, Deodorizer, Fungicide, Mildewstat, Virucide\*

EPA Reg. No. 10324-93-3640 EPA Est. No. 3640-WI-1 **EFFICACY SUMMARY** 

Dispenser-Free Control Systems

One Packs

**MARK 11** KEEP OUT OF REACH OF CHILDREI DANGER PELIGRO 4 Case UPC No. Mfg. No. Each UPC No. Mfg. No. ST-No. New Item Case Size Yield Case Cases 071206 071206 Weight /Pallet # 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 10 x 10 fl. oz. packs ST-747 #2308916 008916 N/A 8 pounds 100 5 Gallons 4 x 1gallon case ST-2020 #2102000 202000 320209 48 37 pounds 1/2 oz. per quart 12 x 32 oz. empty silk-screened spray bottles ST-9950 #2909166 009180 N/A 3.5 pounds 40 N/A

Hospital and General Disinfection This product is bactericidal according to the AOAC Use Dilution Test method on hard inanimate surfaces modified in the presence of 5% organic serum at 2 ounces of this product per gallon of water (703 ppm active). Treated surfaces must remain wet for 10 minutes.

Contact Time: 10 minutes	Organic Serum: 5%	Dilution/Concentration: 2 oz. / gal. (703 p		: 2 oz. / gal. (703 ppm)
Test Method Performed per the AOAC UDT/GST	method (DIS/TSS-1)			
Organism	Carrier Population	Sample	# Carriers	# Positive
Pseudomonas aeruginosa ATCC #15442	8.2 x 10 <sup>6</sup> CFU/Carrier 4.3 x 10 <sup>6</sup> CFU/Carrier 9.7 x 10 <sup>5</sup> CFU/Carrier	A (60 Days Old) B C	60 60 60	0/60 1/60 1/60
Salmonella enterica ATCC #6538	1.4 x 10 <sup>4</sup> CFU/Carrier 7.3 x 10 <sup>4</sup> CFU/Carrier 4.8 x 10 <sup>5</sup> CFU/Carrier	A (60 Days Old) B C	60 60 60	0/60 0/60 0/60
Staphylococcus aureus ATCC #6538	1.4 x 10 <sup>6</sup> CFU/Carrier 2.8 x 10 <sup>5</sup> CFU/Carrier 9.2 x 10 <sup>5</sup> CFU/Carrier	A (60 Days Old) B C	60 60 60	1/60 1/60 1/60
Organism	Carrier Population	Sample	# Carriers	# Positive
Acinetobacter baumannii ATCC 19606	6.2 x 10 <sup>5</sup> CFU/Carrier	A B	10 10	0/10 0/10
Bordetella bronchiseptica ATCC 10580	1.38 x 10 <sup>7</sup> CFU/Carrier	A B	10 10	0/10 0/10
Campylobacter jejuni ATCC 29428	4.0 x 10 <sup>4</sup> CFU/Carrier	A B	10 10	0/10 0/10
Corynebacterium ammoniagenes ATCC 6871	9.6 x 10 <sup>4</sup> CFU/Carrier	A B	10 10	0/10 0/10
Enterobacter aerogenes ATCC 13048	4.1 x 10 <sup>5</sup> CFU/Carrier	A B	10 10	0/10 0/10
Enterococcus faecalis ATCC 19433	3.5 x 10 <sup>6</sup> CFU/Carrier	A B	10 10	0/10 0/10
Escherichia coli ATCC 11229	3.5 x 10 <sup>5</sup> CFU/Carrier	A B	10 10	0/10 0/10
Escherichia coli 0111:H8 ATCC BAA-184	1.34 x 10 <sup>6</sup> CFU/Carrier	A B	10 10	0/10 0/10
Escherichia coli 0157:H7 ATCC 35150	3.1 x 10 <sup>6</sup> CFU/Carrier 3.4 x 10 <sup>6</sup> CFU/Carrier	A B	10 10	0/10 0/10
Klebsiella pneumoniae ATCC 13883	4.2 x 10 <sup>4</sup> CFU/Carrier	A B	10 10	0/10 0/10
Listeria monocytogenes ATCC 984	4.5 x 10 <sup>5</sup> CFU/Carrier	A B	10 10	0/10 0/10
Salmonella schottmuelleri ATCC 8759	9.6 x 10 <sup>6</sup> CFU/Carrier	A B	10 10	0/10 0/10

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Organism	Carrier Population	Sample	# Carriers	# Positive
Salmonella typhyi ATCC 6539	1.7 x 10 <sup>5</sup> CFU/Carrier	A B	10 10	0/10 0/10
Shigella dysenteriae ATCC 9361	3.7 x 10 <sup>5</sup> CFU/Carrier	A B	10 10	0/10 0/10
Staphylococcus aureus (Methicillin Resistant) (MRSA) ATCC 33591	1.3 x 10 <sup>5</sup> CFU/Carrier	A B	10 10	0/10 0/10
Staphylococcus aureus Community Associated Methicillin Resistant (CA-MRSA)	1.68 x 10 <sup>6</sup> CFU/Carrier	A B	10 10	0/10 0/10
Streptococcus salivarius ATCC 13419	1.5 x 10 <sup>4</sup> CFU/Carrier	A B	10 10	0/10 0/10

Virucide against (at 2 ounces) This product was evaluated at 2 ounces per gallon use level (703 ppm quat active), in the presence of 5% serum with a 10 minute contact time and found to be effective against the following viruses on hard nonporous environmental surfaces.

Contact Time: 10 minutes Test Method Performed per EPA Guidance (DIS/TSS-7)	Organic Serum: 5%	Dilution/Concentration: 2 oz. / gal. (703 ppm)		
Organism	Dried Virus Control;	Sample	Result	Log Reduction
Avian Influenza A (H5N1) virus	4.5 Log <sub>10</sub>	A B	≤0.5 Log <sub>10</sub> ≤0.5 Log <sub>10</sub>	≥4.0 Log <sub>10</sub> ≥4.0 Log <sub>10</sub>
Avian influenza/Turkey/Wisconsin ATCC VR-798	7.5 Log <sub>10</sub>	A B	≤1.8 Log <sub>10</sub> ≤1.8 Log <sub>10</sub>	≥5.7 Log <sub>10</sub> ≥5.7 Log <sub>10</sub>
Avian Reovirus ATCC VR-2449	6.0 Log <sub>10</sub>	A B	≤0.5 Log <sub>10</sub> ≤0.5 Log <sub>10</sub>	≥5.5 Log <sub>10</sub> ≥5.5 Log <sub>10</sub>
Bovine Viral Diarrhea ATCC VR-534	4.5 Log <sub>10</sub>	A B	≤0.5 Log <sub>10</sub> ≤0.5 Log <sub>10</sub>	≥4.0 Log <sub>10</sub> ≥4.0 Log <sub>10</sub>
Canine Distemper ATCC VR-534	4.8 Log <sub>10</sub>	A B	≤1.5 Log <sub>10</sub> ≤1.5 Log <sub>10</sub>	≥3.3 Log <sub>10</sub> ≥3.3 Log <sub>10</sub>
Canine Coronavirus ATC VR-809	4.5 Log <sub>10</sub>	A B	≤1.5 Log <sub>10</sub> ≤0.5 Log <sub>10</sub>	≥3.0 Log <sub>10</sub> ≥4.0 Log <sub>10</sub>
Equine Arteritis virus ATCC VR-796	5.75 Log <sub>10</sub>	A B	≤0.5 Log <sub>10</sub> ≤0.5 Log <sub>10</sub>	≥5.25 Log <sub>10</sub> ≥5.25 Log <sub>10</sub>
Hepatitis B Virus	6.84 Log <sub>10</sub>	A B	≤1.78 Log <sub>10</sub> ≤2.05 Log <sub>10</sub>	≥5.06 Log <sub>10</sub> ≥4.79 Log <sub>10</sub>
	7.14 Log <sub>10</sub>	Confirmatory B	≤2.35 Log <sub>10</sub>	≥4.79 Log <sub>10</sub>
Heptatitis C Virus ATCC CCL-22	6.85 Log <sub>10</sub>	A B Confirmatory B	≤1.29 Log <sub>10</sub> ≤1.06 Log <sub>10</sub> <1.06 Log <sub>10</sub>	≥5.56 Log <sub>10</sub> ≥5.79 Log <sub>10</sub> >5.79 Log <sub>10</sub>
	0.00 LUGIU	Δ	<1.8 L0010	>5.0 L0010
Herpes Simplex Type 1 ATCC VR-266	6.8 Log <sub>10</sub>	B	≤1.8 Log <sub>10</sub>	≥5.0 Log <sub>10</sub>
Human Coronavirus ATCC VR-740	4.5 Log <sub>10</sub>	A B	≤1.5 Log <sub>10</sub> ≤1.5 Log <sub>10</sub>	≥3.0 Log <sub>10</sub> ≥3.0 Log <sub>10</sub>
Human Immunodeficiency Virus type 1 (HIV 1) HTLV-III <sub>B</sub>	6.0 Log <sub>10</sub>	A B	≤2.5 Log <sub>10</sub> ≤2.5 Log <sub>10</sub>	≥3.5 Log <sub>10</sub> ≥3.5 Log <sub>10</sub>
Infectious Bovine Rhinotracheitis virus (IBR) ATCC VR-188	5.2 Log <sub>10</sub>	A B	≤1.5 Log <sub>10</sub> ≤1.5 Log <sub>10</sub>	≥3.7 Log <sub>10</sub> ≥3.7 Log <sub>10</sub>
Infectious Bronchitis Virus Beaudette IB42	5.25 Log <sub>10</sub>	A B	≤0.5 Log <sub>10</sub> ≤0.5 Log <sub>10</sub>	≥4.75 Log <sub>10</sub> ≥4.75 Log <sub>10</sub>
Infectious Laryngotracheities Virus (LT) Strain LT-IVAX	4.5 Log <sub>10</sub>	A B	≤0.5 Log <sub>10</sub> ≤0.5 Log <sub>10</sub>	≥4.0 Log <sub>10</sub> ≥4.0 Log <sub>10</sub>
Influenza A (H1N1) Virus ATCC VR-1469	6.5 Log <sub>10</sub>	A B	≤0.5 Log <sub>10</sub> ≤0.5 Log <sub>10</sub>	≥6.0 Log <sub>10</sub> ≥6.0 Log <sub>10</sub>
Influenza A <sub>2</sub> /Japan/305 ATCC VR-100	7.5 Log <sub>10</sub>	A B	≤1.8 Log <sub>10</sub> ≤1.8 Log <sub>10</sub>	≥5.7 Log <sub>10</sub> ≥5.7 Log <sub>10</sub>
Newcastle disease virus	6.0 Log <sub>10</sub>	A B	≤1.8 Log <sub>10</sub> ≤1.8 Log <sub>10</sub>	≥4.2 Log <sub>10</sub> ≥4.2 Log <sub>10</sub>
Norwalk/Norovirus ATCC VR-782	5.75 Log <sub>10</sub> 5.5 Log <sub>10</sub>	A B Confirmatory A	≤1.5 Log <sub>10</sub> ≤1.5 Log <sub>10</sub> ≤0.5 Log <sub>10</sub>	≥4.25 Log <sub>10</sub> ≥4.25 Log <sub>10</sub> ≥5.0 Log <sub>10</sub>
Porcine Respiratory & Reproductive (PRRSV)	5.5 Log <sub>10</sub>	A B	≤1.5 Log <sub>10</sub> ≤1.5 Log <sub>10</sub>	≥4.0 Log <sub>10</sub> ≥4.0 Log <sub>10</sub>
Porcine Rotavirus ATCC VR-893	4.5 Log <sub>10</sub>	A B	≤1.5 Log <sub>10</sub> ≤1.5 Log <sub>10</sub>	≥3.0 Log <sub>10</sub> ≥3.0 Log <sub>10</sub>
Pseudorabies virus ATCC VR-135	4.5 Log <sub>10</sub>	A B	≤1.5 Log <sub>10</sub> ≤1.5 Log <sub>10</sub>	≥3.0 Log <sub>10</sub> ≥3.0 Log <sub>10</sub>
Transmissible Gastroenteritis (TGE) ATCC VR-742	5.7 Log <sub>10</sub>	A B	≤2.5 Log <sub>10</sub> ≤2.5 Log <sub>10</sub>	≥3.2 Log <sub>10</sub> ≥3.2 Log <sub>10</sub>
Vaccinia virus Hoffmann La Roche	6.8 Log <sub>10</sub>	A B	≤2.5 Log <sub>10</sub> ≤2.5 Log <sub>10</sub>	≥4.3 Log <sub>10</sub> ≥4.3 Log <sub>10</sub>

# Virucide against (at 2.5 ounces)

This product was evaluated at 2.5 ounces per gallon use level (879 ppm quat active), in the presence of 5% serum with a 10 minute contact time and found to be effective against the following viruses on hard nonporous environmental surfaces.

Contact Time: 10 minutes	Organic Serum: 5%	Dilu	Dilution/Concentration: 2.5 oz. / gal. (703 ppm		
Organism	Dried Virus Control;	Sample	Result	Log Reduction	
Canine Adenovirus ATCC VR-800	6.0 Log <sub>10</sub>	A B	≤0.5 Log <sub>10</sub> ≤1.5 Log <sub>10</sub>	≥5.5 Log <sub>10</sub> ≥4.5 Log <sub>10</sub>	
Canine Parainfluenza Virus ATCC VR-666	4.75 Log <sub>10</sub>	A B	≤0.5 Log <sub>10</sub> ≤0.5 Log <sub>10</sub>	≥4.25 Log <sub>10</sub> ≥4.25 Log <sub>10</sub>	
Feline Calicivirus ATCC VR-782	6.5 Log <sub>10</sub>	A B	≤1.5 Log <sub>10</sub> ≤1.5 Log <sub>10</sub>	≥5.0 Log <sub>10</sub> ≥5.0 Log <sub>10</sub>	
Feline leukemia	6.5 Log <sub>10</sub>	A B	≤2.5 Log <sub>10</sub> ≤2.5 Log <sub>10</sub>	≥4.0 Log <sub>10</sub> ≥4.0 Log <sub>10</sub>	
Feline Infectious Peritonitis ATCC VR-2202	5.25 Log <sub>10</sub>	A B	≤1.5 Log <sub>10</sub> ≤1.5 Log <sub>10</sub>	≥3.75 Log <sub>10</sub> ≥3.75 Log <sub>10</sub>	
Feline Panleukopenia ATCC VR-648	4.5 Log <sub>10</sub>	A B	≤0.5 Log <sub>10</sub> ≤0.5 Log <sub>10</sub>	≥4.0 Log <sub>10</sub> ≥4.0 Log <sub>10</sub>	
Feline Picornavirus ATCC VR-649	4.5 Log <sub>10</sub>	A B	≤1.5 Log <sub>10</sub> ≤1.5 Log <sub>10</sub>	≥3.0 Log <sub>10</sub> ≥3.0 Log <sub>10</sub>	
Feline Rhinotrachetis ATCC VR-636	5.0 Log <sub>10</sub>	A B	≤0.5 Log <sub>10</sub> ≤0.5 Log <sub>10</sub>	≥4.5 Log <sub>10</sub> ≥4.5 Log <sub>10</sub>	
Infectious Canine Hepatitis Virus ATCC VR-293	6.25 Log <sub>10</sub>	A B	≤1.5 Log <sub>10</sub> ≤1.5 Log <sub>10</sub>	≥4.75 Log <sub>10</sub> ≥4.75 Log <sub>10</sub>	
Murine Parainfluenza virus type 1 ATCC VR-105	7.5 Log <sub>10</sub>	A B	≤1.5 Log <sub>10</sub> ≤1.5 Log <sub>10</sub>	≥6.0 Log <sub>10</sub> ≥6.0 Log <sub>10</sub>	
Rabies Virus	6.23 Log <sub>10</sub>	A B	≤2.5 Log <sub>10</sub> ≤2.5 Log <sub>10</sub>	≥3.73 Log <sub>10</sub> ≥3.73 Log <sub>10</sub>	

# Virucide against (at 8 ounces)

This product was evaluated at 8 ounces per gallon use level (2,800 ppm quat active), in the presence of 5% serum with a 10 minute contact time and found to be effective against the following viruses on hard nonporous environmental surfaces.

>99.9

Contact Time: 10 minutes	Organic Serum: 5%	Di	ilution/Concentration: 8 of	z. / gal. (2,800 ppm)
Organism	Dried Virus Control;	Sample	Result	Log Reduction
Canine Parvovirus	7.5 Log <sub>10</sub>	A B	≤4.0 Log <sub>10</sub> ≤4.33 Log <sub>10</sub>	≥3.5 Log <sub>10</sub> ≥3.17 Log <sub>10</sub>
Minute virus of Mice (Parvovirus) ATCC VR-1346	4.75 Log <sub>10</sub>	A B	≤2.5 Log <sub>10</sub> ≤2.5 Log <sub>10</sub>	≥3.25 Log <sub>10</sub> ≥3.25 Log <sub>10</sub>
Porcine Parvovirus ATCC VR-742	5.5 Log <sub>10</sub>	A B	≤2.5 Log <sub>10</sub> ≤2.5 Log <sub>10</sub>	≥3.0 Log <sub>10</sub> ≥3.0 Log <sub>10</sub>

Non-Food Contact Surface Sanitizer Add 2 ounces of this product to 1 gallon of water to sanitize hard porous and non-porous non-food contact surfaces. Treated surfaces must remain wet for 60 seconds. Then wipe with sponge, mop or cloth or allow to air dry. At this dilution food contact surfaces must be rinsed.

Contact Time: 60 seconds	Dilution/Concentration: 2 oz. / gal. (703 ppm)	Test	Method Performed per EPA	Guidance (DIS/TSS-10	J)
Organism	Carrier Population	Sample	Survivor Average Log <sub>10</sub>	60 Second Percent Kil	1
Klebsiella pneumoniae ATCC 4352	5.71 Log <sub>10</sub>	A (60 Days Old) B C	) >4.23 Log <sub>10</sub> >4.31 Log <sub>10</sub> >4.03 Log <sub>10</sub>	>99.9 >99.9 >99.9	
Staphylococcus aureus ATCC #6538	6.45 Log <sub>10</sub>	A (60 Days Old) B C	>4.69 Log <sub>10</sub> >4.87 Log <sub>10</sub> >4.33 Log <sub>10</sub>	>99.9 >99.9 >99.9	

# Mold and Mildew Control

Use this product at 2 ounces per gallon to control the growth of mold and mildew and their odors on hard, non-porous surfaces. Thoroughly wet all treated surfaces completely. Let air-dry. Repeat application weekly or when growth or odor reappears.

Contact Time: air-dry	Dilution/Concentration: 2 oz. / gal.
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Organism	Tile Number	Untreated After 7 Days	Sample A After 7 Days	Sample B After 7 Days
	1	Growth 80%	No Growth 0%	No Growth 0%
Asperaillus niger ATCC #6275	2	Growth 100%	No Growth 0%	No Growth 0%
	3	Growth 90%	No Growth 0%	No Growth 0%
	4	Growth 80%	No Growth 0%	No Growth 0%
	5	Growth 80%	No Growth 0%	No Growth 0%
	6	Growth 80%	No Growth 0%	No Growth 0%
	7	Growth 80%	No Growth 0%	No Growth 0%
	8	Growth 100%	No Growth 0%	No Growth 0%
	9	Growth 100%	No Growth 0%	No Growth 0%
	10	Growth 80%	No Growth 0%	No Growth 0%

This product was evaluated at 2 ounces per gallon with a 10 minute contact time and found to be effective against the following fungi on hard nonporous environmental surfaces. **Fungicidal against** 

Contact Time: 10 minutes Dilution/Concentration: 2 oz. / gal.		Test Method Performed per AOAC fungicidal method (DIS/TSS-6			
Organism	Carrier Population	Sample	# Carriers	# Positive	
Trichophyton mentagrophytes ATCC	#9533 1.1 x 10 <sup>6</sup> CFU/Carrier	A	10 10	0/10 0/10	

Mark 11 is a multi-purpose 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, non-food countact surfaces of 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, non-food contact 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. This product kills Pandemic 2009 H1N1 Influenza A Virus, formerly called swine flu. This product kills Avian Influenza A Virus H5N1 and influenza A virus H1N1.

#### **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 0.5 oz. of this product per quart of water (or equivalent use dilution) to disinfect hard, non-food contact, 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
BiodegradableY	es
California Compliant	Yes
Corrosive Category (Concentrate) Eye	e Dama ge 1
Corrosive Category (Use Dilution)	N o
DEA-Free	Yes
Fragrance	Fresh Scent
Non-AcidY	es
Non-Butyl	Yes
Non-FlammableY	es
NPE-Free	Yes
NSF Certified	D2
pH (Concentrate)	11.0-11.5
pH (Use Dilution 1:64)9	.7-9.9
Phosphate-Free	Yes
VOCN	one

## Active Ingredients

Alkyl (60% C <sub>14</sub> , 30% C <sub>16</sub> , 5% C <sub>12</sub> , 5% C <sub>18</sub> )	
Dimethyl Benzyl Ammonium Chloride	2.25%
Alkyl (68% C <sub>12</sub> , 32% C <sub>14</sub> )	
Dimethyl Ethylbenzyl Ammonium Chloride	2.25%
OTHER INGREDIENTS:	<u>95.50%</u>
FOTAL:	100.00%



# STEARNS PACKAGING CORPORATION

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