

Gram Negative Bacteria	Use Method	Contact Time	Study Conclusion
Acinetobacter baumannii ATCC 19606	AOAC Use-Dilution	10 min.	Disinfection
Pseudomonas aeruginosa ATCC 15442	AOAC Use-Dilution	10 min.	Disinfection
Legionella pneumophila ATCC 33153	AOAC Use-Dilution	10 min.	Disinfection
Salmonella enterica ATCC 10708	AOAC Use-Dilution	10 min.	Disinfection
Klebsiella pneumoniae (NDM-1) ATCC BAA-2146	AOAC Use-Dilution	10 min.	Disinfection
Escherichia coli ATCC 11229	AOAC Use-Dilution	10 min.	Disinfection
Bordetella bronchiseptica ATCC 10580	AOAC Use-Dilution	10 min.	Disinfection
Chlamydia psittaci, Strain 6BC, ATCCVR-125	AOAC Use-Dilution	10 min.	Disinfection
Gram Positive Bacteria	Use Method	Contact Time	Study Conclusion
Staphylococcus aureus MRSA ATCC 33592	AOAC Use-Dilution	10 min.	Disinfection
Staphylococcus aureus ATCC 6538	AOAC Use-Dilution	10 min.	Disinfection
Listeria monocytogenes ATCC 15313	AOAC Use-Dilution	10 min.	Disinfection
Mycobacterium bovis- BCG	AOAC Use-Dilution	10 min.	Disinfection
Penicillin- Resistant Streptococcus pneumoniae, ATCC 700677	AOAC Use-Dilution	10 min.	Disinfection
Enveloped Viruses	Use Method	Contact Time	Study Conclusion
Swine Influenza (H1N1) Virus**	Virucidal Efficacy	5 min.	Complete inactivation
Respiratory Syncytial Virus**	Virucidal Efficacy	5 min.	Complete inactivation
Influenza B Virus**	Virucidal Efficacy	5 min.	Complete inactivation
Hepatitis A Virus**	Virucidal Efficacy	5 min.	Complete inactivation
Hepatitis B Virus**	Virucidal Efficacy	5 min.	Complete inactivation
Hepatitis C Virus**	Virucidal Efficacy	5 min.	Complete inactivation
Human Immunodeficiency Virus (HIV Type 1)**	Virucidal Efficacy	5 min.	Complete inactivation
Hantavirus (Prospect Hill Virus) University of Ontario**	Virucidal Efficacy	5 min.	Complete inactivation
Canine Distemper Virus, Strain Snyder Hill, ATCC VR**	Virucidal Efficacy	5 min.	Complete inactivation
Felid Herpesvirus 1, Strain C-27, ATCC VR-636**	Virucidal Efficacy	10 min.	Complete inactivation

Feline coronavirus, Strain WSU 79-1683, ATCC VR-989**	Virucidal Efficacy	10 min.	Complete inactivation
Canine coronavirus, Strain 1-71, ATCC VR-809**	Virucidal Efficacy	10 min.	Complete inactivation
Canine Influenza (H3N8) virus, Strain A/Ca/NY/105913/08, Cornell University**	Virucidal Efficacy	10 min.	Complete inactivation
Feline Infectious Peritonitis Virus, Strain: WSU 79, ATCC VR-990**	Virucidal Efficacy	10 min.	Complete inactivation
Rabies Virus, Strain: Flury (HEP), ATCC VR-139**	Virucidal Efficacy	10 min.	Complete inactivation
Herpes Simplex Virus 1 (Human), Strain HF, ATCC VR-260**	Virucidal Efficacy	10 min.	Complete inactivation
Porcine Epidemic Diarrhea Virus, Strain CO 2013, USDA APHIS 025-PDV001	Virucidal Efficacy	10 min.	Complete inactivation
Herpes Simplex Virus 1 (Human), Strain HF, ATCC VR-260**	Virucidal Efficacy	10 min.	Complete inactivation
Non-Enveloped Viruses	Use Method	Contact Time	Study Conclusion
Rotavirus**	Virucidal Efficacy	5 min.	Complete inactivation
Norovirus Feline Calicivirus**	Virucidal Efficacy	5 min.	Complete inactivation
Murine Norovirus (MNV-1)**	Virucidal Efficacy	5 min.	Complete inactivation
Adenovirus 1, Strain Adenoid 71, ATCC VR-1**	Virucidal Efficacy	10 min.	Complete inactivation
Canine Parvovirus, Strain Cornell-780916, ATCC VR-2016**	Virucidal Efficacy	10 min.	Complete inactivation
Canine adenovirus 1, Strain Utrecht, ATCC VR-293**	Virucidal Efficacy	10 min.	Complete inactivation
Feline panleukopenia virus, Strain Philips-Roxane, ATCC VR-648**	Virucidal Efficacy	10 min.	Complete inactivation
Food Contact Sanitizer Dilution Rate: 9:1	Use Method	Contact Time	Study Conclusion
Escherichia coli ATCC 11229	AOAC Food Contact Sanitization	60 min.	99.999 Kill (no rinse required)
Staphylococcus aureus ATCC 33592	AOAC Food Contact Sanitization	60 min.	99.999 Kill (no rinse required)
Carpet Sanitizer Dilution Rate: 5:1	Use Method	Contact Time	Study Conclusion
Staphylococcus aureus ATCC 6538	DIS/TSS-8 Carpet Sanitizer	60 min.	99.9 Carpet Sanitizer
Enterobacter aerogenes ATCC 13048	DIS/TSS-8 Carpet Sanitizer	60 min.	99.9 Carpet Sanitizer
Soft Surface Sanitizer	Use Method	Contact Time	Study Conclusion
Staphylococcus aureus ATCC 6538	Soft Surface Sanitization	5 min.	Sanitization
Enterobacter aerogenes ATCC 13048	Soft Surface Sanitization	5 min.	Sanitization



X-OXIDE™ – 3rd Party Testing Summary

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Fungi on Surface	Use Method	Contact Time	Study Conclusion
Aspergillus niger ATCC 6275	Mildewstat	10 min.	>4 weeks protection
Trichophyton rubrum ATCC MYA	Fungicide	10 min.	No germination of spores
Trichophyton mentagrophytes ATCC 9533	Fungicide	10 min.	No germination of spores
Not EPA approved organisms	Use Method	Contact Time	Study Conclusion
Stachybotrus Chartarum	Sporicidal Viability	10 min.	No germination of spores
Aspergillus Fumigatus	Sporicidal Viability	10 min.	No germination of spores
Alternaria Alternata	Sporicidal Viability	10 min.	No germination of spores
Penicillum sp	Sporicidal Viability	10 min.	No germination of spores