

Chlorine Dioxide is registered with the United States Environmental Protection Agency (EPA) as a disinfectant, sanitizer and sterilizer which is defined as the ability “to destroy or eliminate all forms of microbial life including fungi, viruses, and all forms of bacteria and their spores”. Below are some of the more commonly seen organisms that Chlorine Dioxide has been proven to eliminate. To date, no organism tested against Chlorine Dioxide has proven to be resistant.

Bacteria

Bacillus anthracis Ames 30
Blakeslea trispora 28
Bordetella bronchiseptica 8
Brucella suis 30
Burkholderia mallei 36
Burkholderia pseudomallei 36
Campylobacter jejuni 39
Clostridium botulinum (Botulism) 32
Clostridium difficile 44
Clostridium perfringens (Epsilon Toxin) 59
Corynebacterium bovis 8
Coxiella burnetii (Q-fever) 35
E. coli ATCC 11229 3
E. coli ATCC 51739 1
E. coli K12 1
E. coli O157:H7 13B88 1
E. coli O157:H7 204P 1
E. coli O157:H7 ATCC 43895 1
E. coli O157:H7 EDL933 13
E. coli O157:H7 G5303 1
E. coli O157:H7 C7927 1
Erwinia carotovora (soft rot) 21
Franscicella tularensis 30
Fusarium sambucinum (dry rot) 21
Fusarium solani var. *coeruleum* (dry rot) 21
Helminthosporium solani (silver scuff) 21
Klebsiella pneumonia 3
Lactobacillus acidophilus NRRL B1910 1
Lactobacillus brevis 1
Lactobacillus buchneri 1
Lactobacillus plantarum 5
Legionella 38
Legionella pneumophila 42
Leuconostoc citreum TPB85 1
Leuconostoc mesenterpides 5
Listeria innocua ATCC 33090 1
Listeria monocytogenes F4248 1
Listeria monocytogenes F5069 19
Listeria monocytogenes LCDC-81-861 1
Listeria monocytogenes LCDC-81-886 19
Listeria monocytogenes Scott A 1
Methicillin-resistant *Staphylococcus aureus* (MRSA) 3
Multiple Drug Resistant *Salmonella typhimurium* (MDRS) 3
Mycobacterium bovis 8
Mycobacterium fortuitum 42
Pediococcus acidilactici PH3 1
Pediococcus pentosaceus 45
Pseudomonas aeruginosa 3

Psittacosis (*Chlamydia psittaci*) 58
Salmonella 1
Salmonella agona 1
Salmonella anatum Group E 1
Salmonella choleraesuis ATCC 13076 1
Salmonella choleraesuis 8
Salmonella enterica (PT30) BAA-1045 1
Salmonella enterica S. *Enteritidis* 13
Salmonella enterica S. *Javiana* 13
Salmonella enterica S. *Montevideo* 13
Salmonella javiana 1
Salmonella newport 4
Salmonella paratyphi (Typhoid Fever) 52
Salmonella typhimurium C133117 1
Salmonella anatum Group E 1
Shigella 38
Staphylococcal enterotoxin B 56
Staphylococcus aureus 23
Staphylococcus aureus ATCC 25923 1
Staphylococcus epidermidis 45
Staphylococcus faecalis ATCC 344 1
Staphylococcus gallinarum 45
Staphylococcus hominis 45
Staphylococcus xylosus 45
Streptococcus mutans 45
Tuberculosis 3
Tsukamurella inchonensis 45
Vancomycin-resistant *Enterococcus faecalis* (VRE) 3
Vibrio cholera 53
Vibrio strain Da-2 37
Vibrio strain Sr-3 37
Yersinia enterocolitica 40
Yersinia pestis 30
Yersinia ruckerii ATCC 29473 31

Viruses:

Adenovirus Type 40 6
Adenovirus Human 62
Adenovirus Canine 62
Arenaviridae (*Arenavirus*) including *Gbagroube*, *Ippy*, *Kodoko*, *Lassa*, *Lujo*, *Luna*, *Lunk*, *Lymphocytic Choriomeningitis*, *Merino* Walk, *Menekre*, *Mobala*, *Mopeia*, *Tacaribe*, *Amapari*, *Chapare*, *Flexal*, *Guanarito*, *Junin*, *Latino*, *Machupo*, *Oliveros*, *Parana*, *Pichinde*, *Piritall*, *Sabia*, *Tamiami*, *Whitewater* Arroyo 54
Calicivirus 42
Canine Distemper Virus 62
Canine Parvovirus 8, 62
Coronavirus 3
Ebola Virus 61

Enterovirus including D68, D71 60
Feline Calici Virus 3
Filoviridae (*Filovirus*) *Marburg* 54
Foot and Mouth Disease 8
Hantavirus 8
Hepatitis A Virus 3
Hepatitis B Virus 8
Hepatitis C Virus 8
Herpes Virus 62
Human coronavirus 8
Human Immunodeficiency Virus 3
Human Rotavirus Type 2 (HRV) 15
Influenza A 22
Influenza H1N1, H5N1 49
Influenza H1N1, H1N2, H2N2, H3N1, H3N2, H3N8, H5N1, H5N2, H5N3, H5N8, H5N9, H7N1, H7N2, H7N3, H7N4, H7N7, H9N2, and H10N7 50
Influenza H7N9 51
Measles Virus 62
Minute Virus of Mouse (*Parvovirus*, MVM-i) 8
Minute Virus of Mouse (*Parvovirus*, MVM-p) 8
Mouse Hepatitis Virus (MHV-A59) 8
Mouse Hepatitis Virus (MHV-JHM) 8
Mouse Parvovirus type 1 (MPV-1) 8
Murine Parainfluenza Virus Type 1 (Sendai) 8
Newcastle Disease Virus 8
Norwalk Virus 8
Poliovirus 20
Rotavirus 3
Severe Acute Respiratory Syndrome (SARS) *Coronavirus* 43
Sialodacryoadenitis Virus (SDAV) 8
Simian rotavirus SA-11 15
Theiler’s *Mouse Encephalomyelitis* Virus (TMEV) 8
Vaccinia Virus 10
Variola vera (*Smallpox*) 57

Algae/Fungi/Mold/Yeast:

Alternaria alternata 26
Aspergillus aeneus 28
Aspergillus aurolatus 28
Aspergillus brunneo-uniseriatus 28
Aspergillus caespitosus 28
Aspergillus cervinus 28
Aspergillus clavatonanicus 28
Aspergillus egyptiacus 28
Aspergillus elongates 28
Aspergillus fischeri 28
Aspergillus fumigatus 28
Aspergillus giganteus 28

Aspergillus longivesica 28
Aspergillus niger 12
Aspergillus ochraceus 28
Aspergillus parvathecius 28
Aspergillus sydowii 28
Aspergillus uniguis 28
Aspergillus ustus 28
Aspergillus versicolor 28
Botrytis spp. 3
Botrytis cinerea 47
Candida spp. 5
Candida albicans 28
Candida dubliniensis 28
Candida edax 45
Candida maltose 28
Candida parapsilosis 28
Candida sake 28
Candida tropicalis 28
Candida viswanathil 28
Chaetomium globosum 7
Cladosporium cladosporioides 7
Cryptococcus curvatus A 45
Cryptosporiosis perennans 47
Debaryomyces etchellsii 28
Eurotium spp. 5
Fusarium solani 3
Lodderomyces elongisporus 28
Mucor circinelloides 28
Mucor flavus 28
Mucor indicus 28
Mucor piriformis 47
Mucor rademosus 28
Mucor ramosissimus 28
Mucor saturnus 28
Penicillium chrysogenum 7

Penicillium digitatum 3
Penicillium expansum 47
Penicillium herquei 28
Penicillium spp. 5
Phormidium boneri 3
Pichia pastoris 3
Poitrasia circinans 28
Rhizopus oryzae 28
Roridin A 33
Saccharomyces cerevisiae 3
Stachybotrys bisbyi 45
Stachybotrys chartarum 7
T-mentag (athlete's foot fungus) 3
Verrucarina A 33

Bacterial Spores:

Alicyclobacillus acidoterrestris 17
Bacillus coagulans 12
Bacillus anthracis 10
Bacillus anthracis Ames 30
Bacillus atrophaeus 14
Bacillus atrophaeus ATCC 49337 31
Bacillus megaterium 12
Bacillus polymyxa 12
Bacillus pumilus ATCC 27142 12
Bacillus pumilus ATCC 27147 11
Bacillus subtilis (globigii) ATCC 9372 11
Bacillus subtilis ATCC 19659 31
Bacillus subtilis 5230 12
Bacillus thuringiensis 18
Clostridium sporogenes ATCC 19404 12
Geobacillus stearothermophilus ATCC 12980 11
Geobacillus stearothermophilus ATCC 7953 31

Geobacillus stearothermophilus VPHP
 11

Beta Lactams:

Amoxicillin 29
Ampicillin 29
Cefadroxil 29
Cefazolin 29
Cephalexin 29
Imipenem 29
Penicillin G 29
Penicillin V 29

Protozoa:

Chironomid larvae 27
Cryptosporidium 34
Cryptosporidium parvum Oocysts 9
Cyclospora cayetanensis oocysts 41
Giardia 34

Microsporidia:

Encephalitozoon intestinalis 41

Chemical Decontamination:

Cylindrospermopsin (CYN) 25
Dihydronicotinamide adenine dinucleotide 24
Microcystin-LR (MC-LR) 25
Mustard Gas 46
Ricin Toxin 10
Sarin 46
Soman (GD) 46
VX 46

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