



4855 Whisper Wood Dr.  
Lehi, UT 84043

To whom it may concern,

ZEHN-X® designs, formulates and makes wet wipes. Our proprietary formulation uses Lonza 4250Z (EPA Registration Number 6836-26) quaternary compounds as our active ingredient (0.35%). Under normal market conditions we would obtain a supplemental registration from Lonza and sell our product range under their existing EPA registration number. Since the initial outbreak of SARS-COV-2 all chemical manufacturers have ceased to provide supplemental registrations. Although redundant (because the Lonza product is already EPA registered), ZEHN-X® is well on the path to obtaining our own EPA Product Registration (EPA Number 96193). We have commissioned a 3rd party EPA regulatory consultant and GLP laboratory to complete the necessary product physical chemistry, chemical characterization, method validation, storage stability and efficacy studies to submit to the EPA based on OPPTS 830 & ASTM standards.

Our application details and substantiates the standard disinfecting claims plus additional healthcare specific claims (bactericidal, fungicidal, tuberculocidal and virucidal). Our application and testing is based on a 2 minute kill time claim premise. This not only includes the standard bacterial claims but also claims against blood borne pathogens (HIV-1 & Hep-C) and emerging pathogen claims (such as SARS-COV-2). (Staphylococcus aureus; Pseudomonas aeruginosa; Trichophyton interdigitale (ATCC 9533) ;Mycobacterium bovis (ATCC 35743); Methicillin Resistant Staphylococcus aureus – MRSA ; Human Immunodeficiency Virus type 1 (HIV-1); Rhinovirus (type 37); Norovirus Surrogate (Feline Calicivirus); Human Hepatitis C Virus Surrogate (Bovine Viral Diarrhea Virus). We cannot make these claims until we have our EPA registration number.

#### LONZA formula kill claims and times

Formulation Name Lonza Disinfectant

Wipes

Lonza Disinfectant

Wipes Plus™

Lonza Disinfectant

Wipes Plus 2™

EPA Registration # 6836-313 6836-336 6836-340

Organisms Contact Times (min)

Acinetobacter baumannii 10 4 4

Brevibacterium ammoniagenes 10 4 4

Campylobacter jejuni 10 4 4

Enterobacter aerogenes 10 4 4

Enterococcus faecalis 10 4 4

Enterococcus faecalis – Vancomycin resistant 10 4 4

Escherichia coli 10 4 4

Escherichia coli O157:H7 – 4 4

Escherichia coli ESBL (antibiotic resistant) 10 4 4

Klebsiella pneumoniae 10 4 4

Legionella pneumophila 10 4 4

Listeria monocytogenes 10 4 4

Pseudomonas aeruginosa 10 4 4

Pseudomonas cepacia – Strain 25416 10 4 4

Salmonella enterica 10 4 4

Salmonella schottmuelleri 10 4 4

Salmonella typhi 10 4 4

Serratia marcescens 10 4 4

Shigella dysenteriae 10 4 4

Staphylococcus aureus 10 4 4

Staphylococcus aureus – Multi-drug resistant 10 4 4

Staphylococcus aureus – MRSA 10 4 4

Staphylococcus aureus – CA-MRSA (USA 300/400) 10 4 4

Staphylococcus aureus – VISA 10 4 4

Streptococcus pyogenes 10 4 4

Vibrio cholerae 10 4 4

Organism Contact Times (min)



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Hepatitis B Virus (HBV) 10 – 4  
Hepatitis C Virus (HCV) 10 – 4  
Herpes Simplex Virus Type 1 10 4 4  
Herpes Simplex Virus Type 2 10 4 4  
HIV-1 (AIDS Virus) 1 1 1  
Human Coronavirus 10 4 4  
Influenza A/Brazil 10 4 4  
Norwalk Virus  
(Feline Caliciviruses the  
surrogate for Norwalk virus)  
10  
—  
10  
Respiratory Syncytial Virus 10 4 4  
Rotavirus 10 – 10  
SARS associated Coronavirus 10 4 4  
Vaccinia Virus 10 4 4  
Avian Influenza Virus (H3N2) 10 4 4  
Avian Influenza Virus (H5N1) 10 4 4  
Canine Distemper Virus 10 4 4  
Feline Calicivirus 10 – 10  
Newcastle's Disease Virus 10 4 4  
Pseudorabies Virus 10 4 4

**WIPES PLUS EFFICACY with .308% active ingredients compared to Zehn-X .35%**

**Kills the following in 2 minutes:**

- Acinetobacterbaumannii (ATCC 19606)
- Avian Influenza A Virus (ATCC VR-2072)
- Bordetellabronchiseptica (kennel cough) (ATCC 10580)
- Bovine Viral Diarrhea Virus ( BVDV-Surrogate Hepatitis C Virus)
- Canine Distemper Virus (ATCC VR-128)
- Canine Para-Influenza Virus (ATCC VR-666)
- Duck Hepatitis B Virus (DHBV-Surrogate Hepatitis B Virus)
- Enterococcus faecium (VRE) (ATCC 51559)
- Feline Leukemia Virus
- Hepatitis B Virus (HBV)
- Hepatitis C Virus (HCV)
- Herpes Simplex II Virus (HSV 2) G Strain
- Human Immunodeficiency Virus (HIV-1) (associated with AIDS)



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- Infectious Bovine Rhinotracheitis Virus (ATCC VR-188)
- Influenza Virus Strain A2/Hong Kong
- Methicillin-Resistant Staphylococcus aureus (MRSA) (ATCC 33591)
- Mycobacterium bovis, BCG (tuberculosis) (TB)
- Pandemic 2009 H1N1 Influenza A Virus
- Polio I Virus (ATCC VR-58)
- Pseudomonas aeruginosa (ATCC 15442)
- Rhinovirus ATCC (VR-286)
- Rotavirus Strain WA
- Salmonella enterica (ATCC 10708)
- Staphylococcus aureus (ATCC 6538)
- Streptococcus equi (ATCC 33398)
- Trichophyton mentagrophytes (ringworm) (ATCC 9533)
- Vancomycin-Resistant Enterococcus faecium (VRE) (ATCC 51559) and effectively kills with a 5-minute contact time at room temperature (69°F/20°C)
- Canine Parvovirus

*Scott Pinckney*

Scott Pinckney  
Owner