



MICROORGANISM INFORMATION

Kleenhanz® has been proven effective against the following microorganisms:*

<u>MICROORGANISM</u>	<u>TYPE</u>	<u>CHARACTERISTICS</u>
Aerobacter aerogenes	Gram negative	<u>Aerobic bacteria</u> that <u>produces gas</u> and <u>acid</u> from <u>sugars</u>
Bacillus subtilis	Gram positive	Non-pathogenic food contaminant
Candida albicans	Fungus	A form of yeast and causal agent of oral and genital infections
E Coli MG1655 type	Gram negative	Diarrhea, gastroenteritis, urinary tract infections and neonatal meningitis
Pseudomonas aeruginosa	Gram negative	Nosocomial pathogen infecting pulmonary and urinary tracts, and cross infections in hospitals
Saccharomyces cerevisiae	Fungus	A form of yeast and causal agent of the infection fungemia
Salmonella choleraesuis	Gram negative	Food contaminant that can cause gastroenteritis, septicemia and typhoid fever
Staphylococcus aureus	Gram positive	Parasitic <u>bacteria</u> that can cause boils, septicemia or infections
Streptococcus pyogenes	Gram positive	Bacterium that can cause skin and throat infections (i.e. scarlet fever)

The active ingredients in Kleenhanz® have been proven effective against many microorganisms including the following:**

<u>MICROORGANISM</u>	<u>TYPE</u>	<u>CHARACTERISTICS</u>
Acinetobacter baumannii	Gram negative	Causes pneumonia and urinary tract infections esp. in hospitals (AKA Iraqibacter)
Adenovirus	Virus	Upper respiratory infections (esp. children)
Campylobacter jejuni	Gram negative	Causes gastroenteritis and food poisoning
Chlamydia trachomatis	Gram negative	Causative agent for chlamydial infections
Cytomegalo	Virus	A Herpes virus that causes disease of infants characterized by circulatory dysfunction and microcephaly
Enterococcus VRE	Gram negative	Difficult to treat infections associated with outbreaks of hospital-acquired (nosocomial) infections
Enterovirus	Virus	RNA viruses that are the most common cause of aseptic meningitis (historically associated with Poliovirus)
Escherichia coli	Gram negative	Infant diarrhea, gastroenteritis, urinary tract infections, and neonatal meningitis
Haemophilus influenza	Gram negative	Causes <u>bacteremia</u> , <u>pneumonia</u> , and acute bacterial <u>meningitis</u> typically in children and infants
Hepatitis type B & C	Virus	Inflammation of the liver, fibrosis, cirrhosis
Herpes simplex type 1 & 2	Virus	Venereal disease causes cold sores, eye infections, stomatitis and even encephalitis
Human immunodeficiency virus (HIV) type 1	Virus	Causative agent of human acquired immune deficiency syndrome (AIDS)
Influenza A2	Virus	Respiratory disease
Influenza A (H1N1)	Virus	Common cause of influenza (flu) also known as "swine flu"
Klebsiella pneumonia	Gram negative	Gastrointestinal and urinary tract infections
Mycobacterium	Gram positive	Causes tuberculosis and leprosy
Neisseria gonorrhoeae	Gram negative	Causative agent of gonorrhea
Norwalk	Virus	Diarrheal and intestinal disease common to outbreaks on cruise ships
Pseudomonas aeruginosa	Gram negative	Pulmonary and urinary tract infections; frequent colonizer of medical devices
Respiratory syncytial virus	Virus	Respiratory tract infections
Rotavirus	Virus	Infant diarrhea and stomach flu
Salmonella typhi	Gram negative	Typhoid fever, diarrhea, and sometimes meningitis
Shigella dysenteriae	Gram negative	Dysentery
Staphylococcus auerus MRSA	Gram positive	Difficult to treat infections commonly involving open wounds
Staphylococcus epidermidis	Gram positive	Nosocomial or community acquired infections (esp. in hospitals)
Streptococcus pneumonia	Gram positive	Numerous infections and pneumonia
Treponema pallidum	Gram negative	Causative agent of Syphilis
Vibrio vulnificus	Gram negative	Causative agent of Cholera

*Reference data obtained from third party lab testing performed by Integrated Biomolecule Corporation

**Reference data obtained from Journal of Antimicrobial Chemotherapy (2000) 46, 685-693 • Handbook of Topical Antimicrobials (2002) • Journal of Antimicrobial Chemotherapy (2006) 57, 566-568