

The Safe and Effective Disinfectant and Decontamination Fluid

Energis® disinfection technology was originally developed to help solve the complex problems associated with the decontamination of highly sensitive and valuable equipment and systems contaminated by chemical and biological warfare agents in military environments. The formulas have been designed and manufactured to have excellent material compatibility characteristics to protect sensitive equipment while at the same time being highly effective against a broad array of microbial pathogens. In laboratory testing, Energis has been shown to be less corrosive than non-chlorinated tap water, a key to successful equipment decontamination.

From this point, the formula has been formulated to solve unique challenges in health care, life sciences, commercial and industrial settings and industries. Energis transcends the shortcomings of traditional chlorine dioxide solutions due to its unique, patented formulation and manufacturing processes. The proprietary formula's active ingredient up to 200 parts per million (ppm) of chlorine dioxide (ClO₂) in a highly energized, water-based fluid. While many of the existing options in product treatment, cleaning and disinfecting technologies were developed decades ago, Energis is new and different in a number of important ways, and is capable of addressing the ever increasing treatment, disinfection and sanitization challenges of the twenty- first century.

We know of no other product that achieves both a near immediate 99.9999% (six-log) kill on the industry's most stubborn pathogens, and yet has a toxicity rating similar to tap-water, or EPA's lowest toxicity rating, Category IV, described as "Practically Non-Toxic".

EPA Toxicity Categories				
Category	Description	Products		
T	Highly Toxic & Severely Irritating	Nitric & Peracetic Acid		
II	Moderately Toxic & Moderately Irritating	Hypochlorite		
III	Slightly Toxic & Slightly Irritating	Quaternary Ammonium		
IV	Practically Non-Toxic and Not an Irritant	Electro-BioCide		

Electro-BioCide Toxicity Results					
Test	Result	Category			
Acute Eye Irritation	Practically Non Toxic	IV			
Acute Dermal Toxicity	Practically Non Toxic	IV			
Acute Inhalation	Practically Non Toxic	IV			
Acute Oral Toxicity	Practically Non Toxic	IV			
Acute Skin Irritation	Practically Non Toxic	IV			
Acute Skin Sensitization	Non Sensitizer	IV			



Recommended Uses

Energis is an EPA-registered, broad-spectrum, hospital-grade bactericidal and viricidal disinfectant and cleaner with an EPA Category IV toxicity rating. Due to the unique, patented processes developed to create the biocide, plus the formula's low level of active ingredients, it is safe for most disinfecting applications. For instance, it can be safely used in food preparation settings without leaving behind harmful residues. It can also be used to disinfect hard surfaces in work areas, health care facilities, day care centers, sports arenas and gyms, veterinary clinics, and any place where people or animals congregate.

The Benefits of Using Energis

Energis disinfects hard, non-porous surfaces such as stainless steel, chrome and glass, plastic, vinyl, glazed porcelain, glazed ceramic, plastic laminate, sealed terrazzo or granite, linoleum, metal and finished wood. Energis is recommended for use in settings such as hospitals, schools, nursing homes, universities, various health care settings, gymnasiums, hotels & motels, locker rooms, cruise ships, restrooms, dormitory rooms, fitness centers, temporary housing, households and public transportation.

In hospitals and any other patient care facility, Energis is recommended for use on the call bell, patient equipment, over-bed tables, restroom fixtures, side tables, trash cans, closets, shelves drawers, telephones, TV remotes, f loors and walls.

Energis can be applied to various food and feed products for the reduction of pathogens and mycotoxins. Examples of treatments include tempering type systems, spray washes, spray dips, moisture and seed treatment systems, etc.

Energis has been developed to kill bacteria, viruses and fungi quickly and effectively. It has been tested by accredited laboratories and in medical care centers, where it has been found to be both safe for workers and highly effective. The formula will not harm equipment or corrode metal, and will not damage sensitive medical electronics and computers, and is safe for use around plants, when properly applied.

Easy Applications

Energis can be applied in multiple ways, and a little goes a long way. The solution can be applied directly to surfaces by hand spray bottles, electrostatic sprayers and foggers, or it can be dispensed from a foam bottle and wiped across the surface to be cleaned. It also can be applied via tempering type systems, spray washes, spray dips, moisture and seed treatment systems, etc. Storage is easy; simply keep it in a tightly closed container in a cool room out of direct sunlight and it can remain effective for weeks to months. There is no need to wipe-off any treated area as Energis will dry clean and clear. A light application in the form of an electrostatic coating is all that is needed.

Energis has been tested and proven effective against both enveloped and non-enveloped viruses and has been listed on EPA's List N as effective against SARS-CoV-2, the viral pathogen responsible for COVID-19. The formula has also been shown to be effective against emerging fungal pathogens such as *Candida Auris* and has proven efficacy in third-party lab tests against a variety of bacterial, fungal and viral organisms.



Microorganism	Grouping	Contact Time	Result
Staphylococcus aureus	Bacteria	60 Seconds	Pass
Salmonella enterica	Bacteria	60 Seconds	Pass
Pseudomonas aeruginosa	Bacteria	60 Seconds	Pass
Methycillin Resistant Staph Aureus (MRSA)	Bacteria	60 Seconds	Pass
Carbapenem Resistant E. coli (CRE)	Bacteria	60 Seconds	Pass
Vancomycin Resistant Enterococcus faecium (VRE)	Bacteria	60 Seconds	Pass
Listeria monocytogenes	Bacteria	60 Seconds	Pass
Klebsiella pneumoniae	Bacteria	60 Seconds	Pass
Acinetobacter Bahmani	Bacteria	60 Seconds	Pass
Klebsiella aerogenes	Bacteria	60 Seconds	Pass
Trichophyton interdigitale	Fungal	60 Seconds	Pass
SARS Coronavirus 2 (Human coronavirus)	Viral	60 Seconds	Pass
Human Norovirus (Feline calicivirus)	Viral	60 Seconds	Pass
Hepatitis A Virus	Viral	60 Seconds	Pass
Influenza A (H1N1) Virus	Viral	60 Seconds	Pass
Human Immunodeficiency Virus (HIV-1)	Viral	60 Seconds	Pass
Canine parvovirus	Viral	60 Seconds	Pass
Rhinovirus Type 37	Viral	60 Seconds	Pass
Chlorine equivalency (Food contact surfaces)	Bacterial	60 Seconds	Pass
Soft Surface Sanitizer	Bacterial	240 Seconds	Pass

Directions for Use

Energis can be used on any pre-cleaned, hard, non-porous surface such as stainless steel, chrome and glass, plastic, vinyl, glazed porcelain, glazed ceramic, plastic laminate, sealed terrazzo or granite, linoleum, metal, and finished wood. It can be used in light applications on and around equipment such as medical equipment, computers, programmable control systems, and in pipelines, tanks, vats, filters and evaporators. Energis should be stored in a cool, dark area and kept from heat or sunlight to increase its useful life.

Energis can be applied to various food and feed products for the reduction of pathogens and mycotoxins. Examples of treatments include tempering type systems, spray washes, spray dips, moisture and seed treatment systems, etc. In grain type of applications, up to 10% moisture can be added for the desired moisture target. Meats can be applied with traditional methods.

Application Methods

Treatments can be applied by hand sprayer, electrostatic sprayer or by foggers, depending on the surfaces to be treated and disinfected. The product also works well in traditional spray and wipe applications and is an excellent cleaner for removing gross contamination from high-touch surfaces and for the safe cleaning of bodily fluids.

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Concentration

Energis formula is produced up to 200 parts per million (PPM) of chlorine dioxide (ClO₂) and is provided as Ready-to-Use.

Safety Information

Energis has been rated as an EPA Category IV product, or "Practically Non-Toxic". When applying the product, customary personal protection including eye and respiratory protection for chemical use should be employed. In most settings, protection against any potential pathogens present is more imperative than protection for the use of the formula. While testing has shown that Energis is not harmful to persons or animals, the following instructions should be followed.

If on Skin: Normally Energis will not harm or irritate skin. If any irritation does occur, wash affected area with copious amounts of soap and water to remove from skin.

If in Eyes: Tests have shown that Energis will not harm or irritate the eyes. If any irritation occurs, rinse the eye with clean water for 2 minutes, or longer if needed. If irritation persists, seek medical attention.

If Swallowed: If swallowed and discomfort or adverse effects occur, consult with a medical professional.

If Inhaled: Energis aerosols can cause some irritation to mucous membranes in the nose, mouth and airways if sufficient amounts are inhaled. Seek fresh air or adequate ventilation if necessary. Irritation effect will normally subside without treatment, but if irritation persists, seek medical attention.

For more information about this product please contact:

Energis Solutions 5140 N. Colorado Blvd. Denver, CO 80216-3120 www.energis.io