

Oxivir[®]





Creating a Safer Environment for Patients

Healthcare-Associated Infections (HAIs) are a serious and growing problem across North America. HAIs are the most common complication of hospital care and are one of the top 10 leading causes of death in North America.

Recent studies have shown that the environment can play a significant role in the transmission of pathogens and that the cleaning and disinfection of surfaces plays a critical role in reducing the risk of HAIs and improving patient outcomes.

The Centers for Disease Control and Prevention (CDC) Guidelines recommend surface disinfection and hand washing as two of the most important environmental controls to reduce HAIs. Today's healthcare professionals need disinfectants that are fast, effective and responsible.

Until now, traditional Disinfectant Technologies have not kept pace with customer needs for **efficacy**, **cleaning**, **safety** and **sustainability**.

1930	1940	1950	1960	1970	1980	1990	2000	2010	
							(+) b (+) R	P Hydrogen Perox proad efficacy, fast ac Rated EPA Category I non-toxic, not an irrita	cide cting, superior cleaning, sustainable IV, the lowest level of hazard (practically ant) and require no safety warnings
						Silver (+) fast ((-) toxic		mental issues	
						Peracei (+) broad (-) unsta		ast acting asant odor	
				Quats (+) broad (-) slow	d efficacy, low to acting; can bin	oxicity d with cleaning	tools		
		Phenol (+) kills 7 (-) healt							
	Iodine (+) broa (-) stair	d efficacy ning, corrosive							
Chlorin (+) broa (-) unst	ne d efficacy able, poor clear	ner, corrosive							

Oxivir® – Powered by AHP® Technology – Tough on Pathogens, *Not* on People

- AHP is a patented, synergistic blend of commonly used, safe ingredients that when combined with low levels of hydrogen peroxide dramatically increase its germicidal potency and cleaning performance.
- Oxivir Disinfectant Cleaners provide an alternative to traditional disinfectants by delivering fast acting, broad spectrum disinfection with enhanced cleaning power that is staff and patient friendly while being gentle on most surfaces. The active ingredient, hydrogen peroxide, breaks down into environmentally-friendly water and oxygen just minutes after use.



Comprehensive product line meeting all application needs:

- Ready-to-use Liquid
- Pre-moistened Wipes
- Concentrate















Efficacy

- Oxivir[®] disinfectant cleaners are effective against
 a broad range of healthcare associated pathogens
 including enveloped and non-enveloped viruses, Gram
 negative and positive bacteria, tuberculosis and fungi.
- Oxivir disinfectant cleaners meet U.S. and Canadian Bloodborne Pathogen Standards for decontaminating blood and body fluid spills.

Fast-acting

- Oxivir 1, offers a ready-to-use (RTU) with 81 claims, effective against viruses, bacteria, fungi and TB in 60 seconds or less, including soft surface sanitizing. Oxivir 1 wipes also disinfect key pathogens in 60 seconds or less, leading the line in efficacy and reducing the risk of the spread of infection.
- Oxivir Tb RTU liquid and wipes disinfect against most common healthcare-associated pathogens, such as Hepatitis B, Hepatitis C, Norovirus and multi-drug resistant organisms such as MRSA and VRE in just 60 seconds.
- Oxivir Five 16 Concentrate disinfects against most common healthcare associated pathogens in five minutes – half the contact time required of most dilutable disinfectants.



Efficacy of Oxivir Disinfectant Cleaners

Bactericidal activity of disinfectants (log10 reduction) with a contact time of 30 seconds or 1 minute at 20° C with and without Fetal Calf Serum (FCS).

Organism	Oxivir Tb (0.5% H ₂ 0 ₂)	0.5% H ₂ 0 ₂	CHHPCD (1.4% H ₂ 0 ₂)	1.4% H ₂ 0 ₂	3.0% H ₂ O ₂	A456-II (QUAT)
~10° inoculum, contact time = 1 minute, no 5% FCS MRSA VRE MDR A. <i>baumannii</i>	>6.62 >6.34 >6.76	≤4.04 ≤3.61 ≤4.28	>6.54 >6.13 >6.76	≤4.04 ≤3.61 ≤4.28	≤4.04 ≤3.61 ≤4.28	5.55 4.58 >6.76
~10° inoculum, contact time = 30 seconds, no 5% FCS MRSA VRE MDR A. baumannii	>6.64 >6.28 >6.76	NT NT NT	>6.64 >6.28 >6.76	NT NT NT	≤4.16 ≤3.80 ≤4.28	≤4.165 ≤3.80 6.11
~10³ inoculum, contact time = 1 minute, no 5% FCS MRSA VRE MDR A. baumannii	>3.71 >3.26 >3.53	≤1.23 1.45 ≤1.05	>3.71 >3.26 >3.53	≤1.23 NT NT	≤1.23 1.40 >3.53	>3.71 >3.26 >3.53
~10° inoculum, contact time = 1 minute, 5% FCS present MRSA VRE MDR A. baumannii	>6.72 >6.26 >6.56	NT NT NT	>6.72 >6.26 >6.56	NT NT NT	≤4.24 ≤3.78 ≤4.08	≤4.24 ≤3.78 >6.56

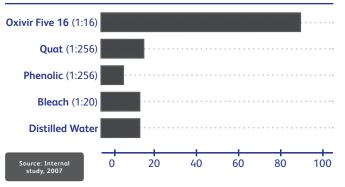
Note: Individual mean values may have the same result because the same inoculums on the same day may have been run against multiple disinfectants. If complete killing occurred, the minimum inactivation would equal the initial inoculum. Some results reported as "greater than X" because complete killing of the inoculums occurred. A. baumannii, Acinetobacter baumannii, CHHPCD, Clorox Healthcare Hydrogen Peroxide Cleaner Disinfectant; MDR, multidrug-resistant; MRSA, methicillin-resistant Staphylococcus aureus; NT, not tested; VRE, vancomycin-resistant Enterococcus.

Superior Cleaning Ability

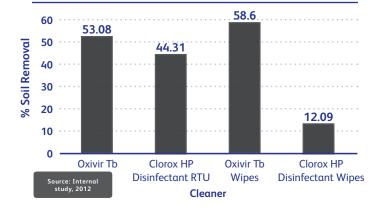
- The patented AHP® technology contains a high-performance surfactant system that delivers superior cleaning results versus many other disinfectant technologies.
- Exceptional cleaning properties even in the presence of organic soils and hard water.
- Thorough soil removal enables effective one-step cleaning and disinfection, improving staff productivity.
- Oxivir® Disinfectant Cleaners will not bind with cleaning tool fabrics such as cotton or microfiber, eliminating the risk of reduced efficacy due to quat binding.

AHP Technology Cleans Better Than Traditional Disinfectants

% Soil Removal in a Standard Cleaning Test



Urban Soil Test - Oxivir Tb vs. Clorox HHPCD



Standard cleaning test results of Oxivir Tb Wipes vs. competitive Hydrogen peroxide wipes, **5X better cleaning!**



"We began using Oxivir as our primary disinfectant about a year ago. Our operations manager called it "Magic Water" because it cleans so well. We noticed a significant difference in the cleanliness of the hospital right away and our ATP results improved dramatically and have stayed consistently low. I believe we provide our patients with a safer environment because we use the best disinfectant on the market."

Todd Thyssen, Director

Maricopa Integrated Health System





Safety

Although highly effective against key healthcare-associated pathogens, Oxivir® Disinfectant Cleaners were formulated with the comfort, safety and well-being of staff and patients in mind. Because of the low level of active ingredients in the AHP technology, Oxivir Disinfectant Cleaners are also compatible for use on most common surfaces in healthcare facilities.

Since Oxivir Disinfectant Cleaners are non-corrosive and non-irritating to skin and eyes at dilution, they can be safely used without personal protective equipment, enabling use by visitors or staff in public areas or patient settings. They are also pleasant to use, with no VOCs, added fragrances or strong chemical odors or fumes.

The EPA uses results from toxicity studies to determine safety ratings of cleaners and disinfectants in six areas: Acute Oral (ingestion), Acute Dermal (skin), Acute Inhalation, Primary Eye Irritation, Primary Skin Irritation and Dermal Sensitization. Products are categorized into one of four levels of toxicity for each of these areas. Category IV is the safest level, requiring no hazard indicators. In all six EPA toxicity categories, Oxivir Disinfectant Cleaners, at use dilutions, fall into Category IV, the lowest level of hazard (practically non-toxic, not an irritant) and require no safety warnings.



The Hazard Materials Identification System (HMIS) is a numerical rating that measures the health hazard, flammability and physical hazards of substances. Oxivir Disinfectant Cleaners, at use dilutions, are rated at the lowest possible toxicity levels 0 - 0 - 0.





- Health No significant risk to health
- Flammability Materials that will not burn
- **Physical Hazard -** Materials that are normally stable, even under fire conditions and will NOT react with water, polymerize, decompose, condense or self-react. Non-Explosives.



Oxivir Provides Fast, Effective & Responsible Disinfection

	Oxivir [®] Tb Wipes & Oxivir [®] 1 Wipes	PDI Super Sαni-Cloth™ Wipes	CaviWipes™ 1	Clorox Healthcare® Hydrogen Peroxide Wipes
HMIS Rating	0-0-0 (Safest)	2-3-0	3-2-0	1-0-0
Broader EPA Safety Category	Category IV (Safest)	Category I (Danger)	Category II (Warning)	Category III (Caution)
Irritancy Profile	Non-irritating to eyes and skin	Causes serious eye irritation	Moderately irritating to eyes	Moderately irritating to eyes

"In our long-term care facility, Oxivir Tb is used by our employees and other individuals who clean common equipment such as computers and fitness equipment. We tried other products, but the safety rating of Oxivir Tb, along with its low odor and efficacy makes it ideal. We will continue to use this product where ever we can because it does not stain or damage equipment."

Deb Burdsall Lutheran Life Communities





Sustainable

AHP° is a patented, synergistic blend of commonly used, safe ingredients that when combined with low levels of hydrogen peroxide dramatically increase its germicidal potency and cleaning performance.

Degradable

The active ingredient, hydrogen peroxide, degrades into environmentally friendly water and oxygen just minutes after use.

Environmentally Responsible

- All Oxivir[®] Disinfectant Cleaner ingredients appear on the EPA Inert or the FDA GRAS (Generally Regarded as Safe) listing.
- To improve the environmental and safety profile, no Alkylphenol Ethoxylates (APEs) or Nonylphenol Ethoxylates (NPEs) are used in Oxivir Disinfectant Cleaners; formulations include alternate raw materials that are more favorable for the environment.
- For improved indoor air quality, all Oxivir formulations are free of volatile organic compounds (VOCs).



Oxivir Ready-to-use disinfectant cleaners











Claims Overview*	Oxivir® 1 RTU	Oxivir® 1 Wipes	Oxivir® Tb RTU	Oxivir® Tb Wipes	Oxivir [®] Five 16
Gram Positive Bacteria	1 Minute	1 Minute	1 Minute	1 Minute	5 Minutes
Gram Negative Bacteria	1 Minute	1 Minute	1 Minute	1 Minute	5 Minutes
Tuberculocidal	1 Minute	1 Minute	5 Minutes	5 Minutes	N/A
Enveloped Virus	30 Sec - 1 Minute	30 Sec - 1 Minute	1 Minute	1 Minute	5 Minutes
Non-Enveloped Virus	30 Sec - 1 Minute	30 Sec - 1 Minute	1 Minute	1 Minute	5 Minutes
Fungicidal	1 Minute	1 Minute	10 Minutes	10 Minutes	10 Minutes
Non-Food Contact Sanitizer	10 Seconds	10 Seconds	30 Seconds	30 Seconds	30 Seconds 1:16; 3 Min αt 1:128
Soft Surface Sanitizer	30 Seconds	N/A	30 Seconds	N/A	N/A

^{*}For claims on specific organisms contact your Diversey representative or visit solutionsdesignedforhealthcare.com

Product Summaries

Oxivir® 1 RTU and Oxivir® 1 Wipes

One-Step Ready-to-use Hospital Disinfectant Cleaner Wipe

Next generation one-step disinfectant cleaner in ready-to-use liquid and pre-wetted wipe format, based on proprietary AHP technology. Oxivir 1 is formulated to deliver broad spectrum disinfection in ONE minute or less, with 81 total claims for the RTU and 75 for the wipes. Formulations have an active ingredient of 0.5% hydrogen peroxide

Key Benefits

- Fast-acting, convenient formula, suitable for daily use and contact time of ONE minute or less
- Short contact times of 1 minute or less for viruses, including norovirus, 1-minute bactericidal, tuberculocidal and fungicidal and 10-second non-food contact sanitizing
- Formulated with patented AHP® technology containing no phosphates, quats or phenols
- Meets the lowest EPA toxicity category in all 6 toxicity studies, making it a responsible choice for users, around patients and on most common healthcare surfaces
- Broad spectrum, multi-surface cleaner/disinfectant and sanitizer
- Harnesses the cleaning power of hydrogen peroxide.
 Specially designed to penetrate the toughest soils

The active ingredient breaks down to water and oxygen after use

Oxivir 1 Wipes

SKU 100850922

60 Count Canister – 7" x 8" wipe

SKU 100850923

160 Count Canister – 6" x 7" wipe

SKU 100850924

160 Count Bucket – 11" x 12" wipe

SKU 100850925

160 Count Refill for Bucket - 11" x 12" wipe

- Wipe substrate delivers superior cleaning performance
- Wipes have a 2-year shelf life and do not deteriorate in the presence of hydrogen peroxide





Oxivir 1 RTU

SKU 100850916

12 x 32 oz./946 mL spray bottle

- Can be used with microfiber or cotton cleaning tools with no loss of active ingredients
- RTU has a 2-year shelf life
- 30-second claims for sanitizing soft surfaces







Oxivir® Tb and Oxivir® Tb Wipes

Oxivir Tb and Oxivir Tb Wipes are ready-to-use hospital disinfectant cleaners, powered by AHP® technology, that disinfect hard nonporous surfaces in just 60 seconds. These products are highly effective against a wide variety of pathogenic organisms. Formulations have an active ingredient of 0.5% hydrogen peroxide.

Key Benefits

- Kills a wide variety of organisms associated with HAIs: Norovirus, Hepatitis B, Hepatitis C, MRSA, VRE, Acinetobacter and Klebsiella in 60 seconds
- Oxivir Tb Wipes contact time against Norovirus (60 seconds) is 3x faster than some competitive wipes
- Meets bloodborne pathogen standards for decontaminating blood and body fluids
- Realistic 60-second contact time increases the likelihood of proper usage and compliance
- Regular use helps reduce costs associated with HAIs
- Non-irritating to eyes and skin no gloves required when used as directed
- Non-corrosive formula is compatible with most hard, nonporous surfaces
- Active ingredients break down to oxygen and water
- No rinsing required at use dilution

Oxivir Tb Wipes

SKU 4599516

160 Count Canister – 6" x 7" wipe

SKU 5388471

60 Count Canister - 7" x 8" wipe

SKU 5627427

160 Count Bucket - 11" x 12" wipe

SKU 100823906

160 Count Refill for Bucket - 11" x 12" wipe

SKU 100949406

120 x 10 count Soft Pack - 7.5" x 10" wipe

- Wipe substrate delivers superior cleaning performance
- Wipes have a 3-year shelf life and do not deteriorate in the presence of hydrogen peroxide





Oxivir Tb RTU

SKU 4277285 12 x 32 fl. oz/946 mL

■ SKU 100898636 RTU 4 x 1 gal./3.78 L

- Available in a ready-to-use 32 oz./946 mL spray bottle
- Can be used with microfiber or cotton cleaning tools with no loss of active ingredients
- RTU has a 2-year shelf life



Product Summaries

Oxivir® Five 16 Concentrate

Oxivir Five 16 Concentrate is a one-step disinfectant cleaner powered by proprietary AHP technology that disinfects hard nonporous surfaces in just five minutes. These products are effective against a broad spectrum of pathogenic organisms including bacteria, antibiotic-resistant bacteria, viruses and fungi. Concentrate formulation has 4.25% hydrogen peroxide.

Key Benefits

- Kills a variety of organisms associated with HAIs: Norovirus, Hepatitis B, Hepatitis C, multi-drug resistant organisms such as MRSA and VRE in 5 minutes
- At a 1:16 dilution, is a hospital disinfectant cleaner in 5 minutes
- At a 1:64 dilution, is virucidal in 5 minutes, meeting bloodborne pathogen standards
- At a 1:128 dilution, is a non-food contact sanitizer in 3 minutes
- At a 1:256 dilution, is a floor and general cleaner
- At normal disinfectant dilution (1:16) non-irritating to eyes and skin, no gloves needed when used as directed
- Non-corrosive formula is compatible with most hard, nonporous surfaces
- Active ingredients break down to oxygen and water
- No rinsing required at use dilution



84.5 oz./2.5 Liter J-Fill®

- SKU 4963331
- Available in 84.5 oz./2.5 liter J-Fill container
- J-Fill Portable Dispensing System quick connects to water supply hose
- Consistently dispenses accurate dilutions with the touch of a button

One Gallon

- SKU 4963314
- Available in 1 gallon/3.78 liter container

1.5 Liter RTD®

- **SKU 4963357**
- Available in 1.5 liter RTD container
- Allows product to be attached to a water supply with a simple hose connector
- Unique dosing head is calibrated, ensuring right solution is available for buckets and bottles
- 100% recyclable container

1.4 Liter SmartDose™™C

- **SKU 5019296**
- Available in 1.4 liter SmartDose Container
- Spill proof, keeps concentrate away from hands
- Consistently provides accurate dose at predetermined dilution rates
- Economical option in use
- 100% recyclable container

1.5 Gallon Command Center™™C

- **SKU 5271361**
- Available in 1.5 gallon container for Command Center Dispensing System
- Push button system dispenses ready-to-use product accurately and consistently



Diversey has been, and always will be, pioneers and facilitators for life. We constantly deliver revolutionary cleaning and hygiene technologies that provide total confidence to our customers across all of our global sectors.

Led by Dr. Ilham Kadri, President & CEO, and headquartered in Charlotte, North Carolina, USA, Diversey employs approximately 9,000 people globally, generating net sales of approximately \$2.6 billion in 2016.

For more information, visit www.diversey.com or follow us on social media.