



THE PATH TO SMARTER, SAFER DISINFECTION

A Guide to Making Better Choices for Facility
Cleaning & Disinfection

HEALTH & WELLNESS DRIVE POSITIVE OUTCOMES



HEALTHCARE

Patient/Clinical
Outcomes & Staff
Retention



EDUCATION

Student Achievement
& Staff Satisfaction



KNOWLEDGE-ECONOMY BUSINESSES

Staff Satisfaction &
Productivity



RETAIL

Customer
Satisfaction &
Loyalty

Focus on health & wellness brings facility cleaning into the spotlight

Nearly every type of organization today is growing more aware of the connection between health, wellness and positive organizational outcomes: satisfaction and loyalty of customers in retail; satisfaction, productivity and retention of employees in businesses of all kinds; and successful outcomes for patients in healthcare and students in education, to name a few notable examples.

Intertwined with the sharpened focus on health and wellness is an overall rise in awareness of public health risks associated with facilities ranging from healthcare settings and schools, to retail environments and office buildings. These converging priorities – enhancing health and wellness and mitigating public health risks – bring facility cleaning into the spotlight as never before. Facilities are deploying informed cleaning and disinfecting protocols both as a means of protecting their businesses and as a source of competitive differentiation.

A large, stylized virus icon in a light blue color, featuring a circular body with internal details and several protruding spikes. It is positioned on the left side of the page, partially overlapping the dark blue background.

COVID crisis makes surface disinfection a top priority

The global COVID-19 pandemic makes public health risks around surface disinfection top-of-mind for all Americans – and a top priority for all organizations. Facilities are working to implement new guidance and recommendations from the CDC, while the likelihood of new regulatory standards around cleaning and disinfection loom on the horizon.



A simple question: What to use?

With demand for cleaning and disinfecting alternatives rapidly growing, the market has naturally expanded to include a wide range of products making bold claims around efficacy, safety and sustainability. Those responsible for facilities and the safety of customers, students and patients know they need products that work – but they also need products that are safe to use and cost-effective in the face of intensified budget pressures. This brief eBook helps organizations navigate those choices by addressing common safety concerns and other considerations when it's time to evaluate cleaning and disinfecting products.

When clean \neq healthy

Disinfectants feature active ingredients that work in different ways to kill viruses, bacteria and other microbiocidal pathogens. Active ingredients can also have potentially harmful effects for people who are regularly exposed to them. In recent years, there has been growing concern and a rise in health studies linking the use of harsh cleaning products with harmful impacts on individual health – both for those applying or using the products and those who enter the facilities where they are used.

Impact of Harsh Chemicals & Cleaners



**Skin
Irritation**



**Eye
Irritation**



**Lung
Irritation**

Label Literacy 101: Understanding Toxicity

In order to choose a product that's both effective against pathogens and safer and non-irritating for those within your facility, you need to understand how to read the product label. Every EPA-approved disinfectant product is required to have a label that covers critical information about the efficacy, safety and proper use of that product. The product label will tell you everything you need to know to make smarter, safer choices.

Antimicrobial Claims

WHAT TO LOOK FOR:

Broad-spectrum disinfectant.

This tells you exactly what germs the product has been validated to kill. Look for a broad-spectrum disinfectant with bactericidal, virucidal, fungicidal and tuberculocidal claims. Also look for a product that meets EPA List N criteria for use against SARS-CoV-2, the virus that causes COVID-19.

Signal Words

WHAT TO LOOK FOR:

No signal words; avoid concentrates with DANGER.

The EPA requires signal words listed in large, bold print, indicating how hazardous the product is. Products with DANGER and WARNING should be avoided. Products with CAUTION are less-hazardous. The least-hazardous products require no signal words on the label.



Precautionary Statements & First Aid Information

WHAT TO LOOK FOR:

No precautionary statements required.

Precautionary statements will tell you if the product is an eye or skin irritant, is harmful if swallowed, has contents under pressure, or needs to be used in a well-ventilated area. They will also make recommendations on personal protective gear (PPE) that should be worn and provide basic first aid information related to the specific hazards. Some of the least-hazardous disinfectant products require neither precautionary statements nor PPE use. These non-hazardous products are not required to include first aid information, although some may still choose to do so.

Other Claims

WHAT TO LOOK FOR:

Non-aerosol, low-fragrance; don't be fooled by unregulated claims.

Many product labels include claims such as "green," "natural," or "environmentally friendly." But these terms have no legal meaning and are not regulated or validated by the EPA. You should look for non-aerosol and low-fragrance products as they can be less irritating and safer for the environment.

Considering efficiency

Labor is one of the biggest costs in nearly every industry – and labor costs continue rising. Enhancing cleaning and disinfecting protocols presents potentially substantial increases in labor time and costs. So as facilities consider their options for cleaning and disinfecting products, they need to look closely at how best practices for the use of different products may produce substantially different levels of operational efficiency.

A new paradigm: One-step disinfection

Advances in chemistry enable cleaning teams to leverage a single product to achieve reliable cleaning and disinfection in just one step. An integrated surfactant dissolves and removes surface soils, allowing the active ingredient to effectively kill pathogens. And because these products do not leave behind residue, no additional rinsing step is required. This one-step disinfection can deliver significant time and cost savings.

Cleaning vs. Disinfecting



Cleaning:

Removal of visible soil, debris, microorganisms and organic substances from surfaces; will not eliminate germs but reduces their numbers by removing some contaminated matter.

vs.



Disinfecting:

Stops the spread of viruses, and is the elimination of pathogens and disease-causing microorganisms, except bacterial spores.

Smarter, safer solutions emerging

As the risks and other issues with commonly used quat-based disinfectants become more widely known, forward-thinking organizations are looking for a smarter, safer way to clean their facilities. Organizations are increasingly turning to a set of powerful active ingredients that combine high antimicrobial efficacy with a more user friendly toxicity profile. These antimicrobial agents – including citric acid-based and Thymol-based disinfectants, as well as phenolic derivatives – are helping cleaning teams drive more efficient, lower-cost cleaning, with lower risks to cleaning teams and facility users.

Citric acid-based disinfectants for daily use

Citric acid has been used as an effective antiseptic for more than 200 years, but today, advanced chemistry has created citric acid-based disinfectant wipes and ready-to-use (RTU) solutions that are some of the most effective and easy-to-use products available on the market.

ADVANTAGES OF CITRIC ACID-BASED DISINFECTANTS

BROAD EFFICACY

Proven, broad spectrum, hospital-grade antimicrobial efficacy
– virucidal, germicidal, fungicidal, tuberculocidal

LOWEST EPA TOXICITY

EPA Category IV, requiring no safety warnings

ASTHMA SAFER

Citric Acid is considered an Asthma Safer ingredient

BOTANICAL AND BIODEGRADABLE

Rapidly, naturally degrades with no residues

NON-IRRITATING

Will not irritate skin, eyes or lungs

NON-CORROSIVE

Will not damage most surfaces

ONE-STEP CLEANING/DISINFECTION

Leading formulations enable cleaning and disinfection with a single product

Phenolic derivative concentrates for large areas

For facilities that require disinfection of large areas, concentrated disinfectant solutions using advanced phenolic derivatives as the active ingredient provide a practical and economical option – with several advantages over traditional quat-based products. Phenolic derivative concentrates are considered intermediate-level disinfectants – a step above the low-level disinfection of quats – with the ability to inactivate a broader spectrum of pathogens, including highly resistant *Mycobacterium tuberculosis*, as well as less-resistant organisms such as bloodborne pathogens (e.g., hepatitis B and C viruses, HIV). But this higher level of disinfectant efficacy does not mean phenolic derivatives are harsh. In fact, phenolic derivatives do not present the same user risks (i.e., irreversible blindness) as many quat-based products, are compatible with a wider range of surfaces, and are non-persistent in the environment.

ADVANTAGES OF PHENOLIC DERIVATIVE CONCENTRATES

BROAD-SPECTRUM EFFICACY

Phenolics are effective against bacteria, mycobacteria, fungi and viruses, including SARS-CoV-2

ONE-STEP CLEANING/DISINFECTION

In the presence of organic matter, phenolics are more effective than any other commonly used disinfectant

LOW RISK OF ANTIMICROBIAL RESISTANCE

There are no known forms of antimicrobial resistance to phenolics

BIODEGRADABLE

Phenolics deliver good biodegradability and are non-persistent in the environment

Making safer choices

While the number of cleaning and disinfecting products seems to grow daily, here are some simple tips for navigating your options and making safer choices:

Ignore marketing gimmick words

Terms like non-toxic, natural or green are used to evoke safety, but there is little-to-no regulation of the use of these terms on product labels.

What to look for on the label

- Active ingredients listed
- No “danger” or “harmful if absorbed through the skin” on label
- Non-aerosol
- No overwhelming chemical odor
- Low-fragrance/fragrance-free and dye-free

Look for the U.S. EPA Design for the Environment Disinfectant logo



The EPA has a special Safer Choice label for safer chemical-based products that meet stringent human health and environmental criteria.

In addition, the EPA also adds the Design for the Environment Disinfectants (DfE) logo to EPA-authorized antimicrobial products that meet strict standards. When you see a product with the EPA DfE logo on the label, you know the product:

- Is in the least-hazardous classes
- Is unlikely to have carcinogenic or endocrine disruptor properties
- Is unlikely to cause developmental, reproductive, mutagenic, or neurotoxicity issues
- Does not require the use of Agency-mandated personal protective equipment (PPE)
- Has no unresolved or unreasonable adverse effects reported
- Has no unresolved efficacy failures
- Has no unresolved compliance or enforcement actions associated with it

About Wexford Labs

Wexford Labs formulates and manufactures proven, broad-spectrum antimicrobial solutions that offer a less-harsh, less-irritating option for healthcare facilities and dental offices, hospitality and food service businesses, educational institutions and public service agencies, pharmaceutical and personal care production facilities, agricultural businesses and more. Since 1973, we have been committed to engineering sophisticated antimicrobial solutions that deliver confident protection against pathogens, while also helping to protect cleaning teams, the users of facilities and the environment from the impacts of chemicals like alcohol, bleach or quaternary ammonium-based products. Our antimicrobial products – including concentrates, ready-to-use solutions and disinfecting wipes – deliver high efficacy against a wide range of pathogens. Every Wexford Labs product is engineered to meet the lowest EPA toxicity standards – requiring no PPE or signal words, and safe for use on any surface. As we continue investing in innovation, Wexford Labs remains committed to creating smarter, safer and more efficient ways for our customers to maintain healthy and safe environments for all.



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