

LANXESS

Multi-Purpose Disinfectant Cleaner

UNIQUE ADVANCED TECHNOLOGY

- Patented Formulation
- Mode of Action
- Broad Spectrum Efficacy



Unique Composition Patented Worldwide

RelyOn™ Multi-Purpose Disinfectant Cleaner (RelyOn™ MDC) Patented Formulation

The unique formulation comprising RelyOn™ MDC consists of multiple ingredients that access and attack multiple parts of pathogenic microorganisms.

This combination of active oxidizing species, organic acids, inorganic buffers, and surfactants optimizes both the contact environment as well as biocidal conditions, resulting in broad spectrum efficacy against viruses, bacteria, and fungi.*

Surfactant

- Ensures contact with microorganism
- Helps solubilize lipids
- Helps denature proteins

Active Ingredients

- Oxidize glycoproteins, polypeptides, nucleic acids, and carbohydrates
- React with Sulfhydryl and Disulfide groups in nuclear proteins
- Stability and Activity optimized under acidic conditions

Organic Acids

- Produce low pH without corrosiveness
- Control oxidizing activity

Inorganic Buffers

- Maintains pH which optimizes biocidal activity
- Improves resistance to inactivation by hard water and organic soil

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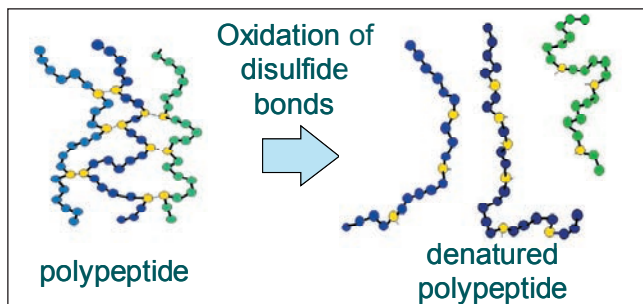
TruBioUS 480-688-2008 sales@trubious.com

RelyOn™ MDC Mode of Action

RelyOn™ MDC has a unique, multifaceted mode of antimicrobial action. It denatures a microorganism's proteins and enzymes, increases virus permeability by disrupting sulfhydryl (-SH) and disulfide (S-S) bonds, causes lysis, and exposes/reacts with nucleic acids. There are no known mechanisms for developing resistance to this type of attack.



“RelyOn™ MDC is not a single chemical agent relying on one mode of attack.”



Mode of Action

- Oxidation damages cell walls, membranes, and proteins.
- No resistance mechanisms currently identified.

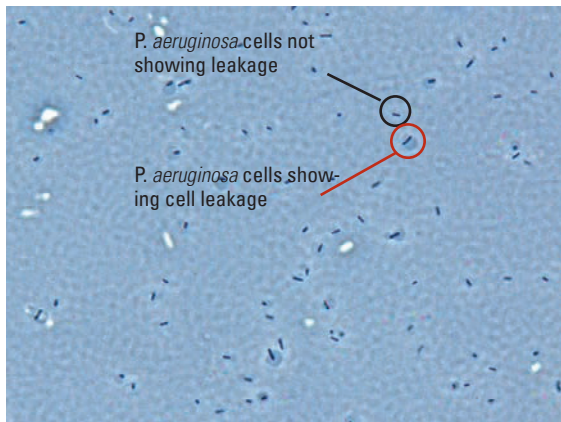
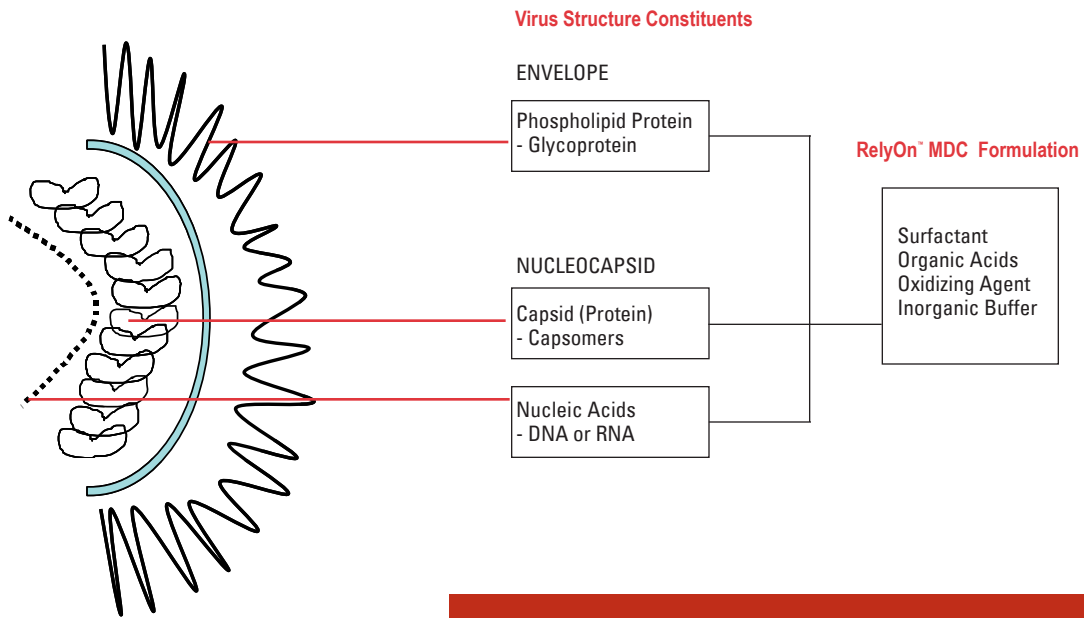


Figure 1a. Wet mount preparation of *Pseudomonas aeruginosa* after 5-min. exposure to RelyOn™ MDC. Numerous cells are beginning to demonstrate leakage of cellular material (examples are in red circle) that appears as a 'balloon' around the cell. (1000x magnification, phase contrast microscopy)

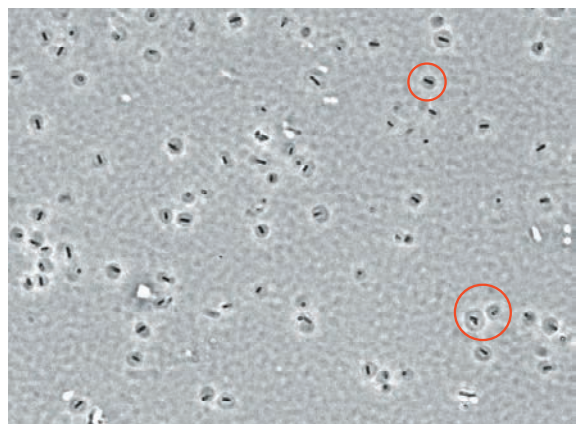


Figure 1b. Wet mount preparation of *Pseudomonas aeruginosa* after 10-min. exposure to RelyOn™ MDC. Almost all cells demonstrate leakage of cellular material (examples are in red circle) that appears as a 'balloon' around the cell. (1000x magnification, phase contrast microscopy)

Advantages of a Broad Spectrum Disinfectant

In many situations hard surface disinfection products are chosen based on factors such as materials compatibility, safety and health concerns for applicators, cost in use, storage and shelf life, and efficacy against pathogens of concern in specific settings, i.e. bloodborne pathogens, food processing etc.

In other, less controlled scenarios, such as natural disasters, or disease outbreaks, the specific threat may not be known. Here it is always wise to use a broad spectrum disinfectant such as RelyOn™ MDC, with proven efficacy against a wide spectrum of pathogenic organisms including bacteria, antibiotic resistant bacteria, enveloped/non-enveloped viruses, and fungi.

In both cases, RelyOn™ MDC, with an extensive efficacy database, proven track record, and excellent materials compatibility, environmental and toxicity profiles make it the natural choice disinfectant as part of any infection control program.

Factors Affecting Disinfection Performance

- Contact time
- pH
- Concentration
- Soil Load, organic and inorganic
- Temperature
- Consumption of Active During Use
- Type Organisms (virus, bacteria, fungi)
- Density of Organisms



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