



ABOUT NOVEX 21D

SAFE

NOVEX 21D™

- **NOVEX 21D** Cleaner Protectorant with NOVEX-AMG™, promotes healthy living, a safe environment, and public health
- **NOVEX 21D** uses only sustainable materials that are not harmful to the environment, helping to support a sustainable future

EFFECTIVE

NOVEX 21D

- **NOVEX-AMG™** additives are compatible with cleaning geometries down to micro-scale tolerances to ensure complete coverage even to "Hidden" surfaces
- **NOVEX 21D** is ideal for reducing bacteria, viruses, mold and mildew from surfaces contacted daily
- **NOVEX 21D** Cleaner Protectorant with NOVEX-AMG™ has been registered with NSF (National Sanitation Foundation) as a Category C1 cleaner.

DIFFERENCE

NOVEX 21D

- **NOVEX 21D** is time effective, cleaning the surface of 99.999% of pathogens in less than 5 minutes
- **NOVEX 21D** is uniquely formulated with a plasticizer to bind NOVEX-AMG™ to the surface for up to 21 days.
- Due to the ability to continuously clean surfaces, **NOVEX 21D** will increase janitorial efficiency by reducing the need to reapply disinfectants on surfaces



NOVEX 21D Is safe for all

surfaces:

- Metals (Brass, Stainless Steel)
- Plastics & Laminates
- Ceramics
- Wood & Leather

Can be used on:

- Appliances
- Faucets
- Countertops & Sinks
- Shower Walls
- Walls & Light Switches
- Door Handles
- Electronic Devices
- Keyboards
- Furniture & Desktops
- Upholstery
- Health Care Surfaces

WORLD CLASS EFFECTIVENESS

- **NOVEX 21D** Cleaner Protectorant leaves behind an invisible shield to reduce the spread of infectious agents.
- **NOVEX 21D** formula has proven effective against multiple pathogens.
- **NOVEX 21D** additive system containing NOVEX-AMG™ has demonstrated greater than 99.999% reduction of against bacteria **E. coli, salmonella, listeria, Staphylococcus aureus, Bacillus subtilis, Klebsiella pneumoniae**, Viruses including **SARS-CoV-2 (COVID-19), molds, and fungi**.
- **NOVEX 21D** continues to protect surfaces from pathogen contamination for up to 21 days (depending on traffic in the environment).
- **NOVEX 21D** is formulated with 100% responsible and sustainable materials.



THE OPPORTUNITY

- To provide a safe and sustainable cleaning solution for today and tomorrow that meets worldwide health concerns for bacterial resistance in public and private areas
- Provide antimicrobial protection between regularly scheduled cleanings
- Increase labor efficiency by reducing the need to reapply the disinfectant to the surfaces.
- Addresses today's and tomorrow's global market driver – meet worldwide health concerns for pathogens resistance in public and private areas.



THE SOLUTION

- Using **Novex 21D** will improve cleaning and sanitizing efficiency
- Using **Novex 21D** provides active surface protection for up to 21 days on treated surfaces.
- Surface treated with **Novex 21D** improves cleaning and sanitizing efficiency by eliminating the need to reapply the disinfectant to the surfaces.



THE NEED

- Current disinfectants like Oxycide and QUAT are typically effective for up to 5–10 minutes.
- Once the disinfectant evaporates, there is no protection on the surfaces from bacteria build up over time.
- Using **Novex 21d** can help improve operational efficiency by reducing the need to reapply conventional disinfectants to the surfaces.

Factor	Clorox	Parker Labs	Sealed Air	Novex 21D
Strengths	-Kills 51 Microorganisms in 3 minutes or less. -Made with Corrosion Inhibitors to be safe on surfaces	-Effective against a broad spectrum of pathogens including MRSA, HIV, Staph and many others -Safe on all surfaces.	-Kills Bactericidal, Virucidal, HBV, HCV, HIV-1 (AIDS virus) in one minute. Kills tuberculocidal in five minutes. Kills fungi in ten minutes. -No added fragrance and non-irritating to skin -Active ingredient breaks down to water and oxygen	-Cleans many types of surfaces -Creates protective barrier to reduce bacteria loading on surfaces -Protective barrier lasts for up to 21 days providing long-term cleaning action -Naturally safe to surfaces
Customer Segment	-General Cleaning Products	-Pharmaceutical preparations	-Hospitals, Education, Health Clubs, Lodging, Retail and Industrial Facilities	General Cleaning Products suitable for use in multiple environments
Novex 21D benefits over competitors	Novex 21d has <u>no issues</u> with corrosion. whereas Clorox does because it has chlorine as it's primary ingredient. In fact, NOV21D not only leaves a coating that is noncorrosive to the surface, it also prevents further bacteria buildup.	Novex 21d has <u>no issues</u> with corrosion whereas this cleaner does because it has chloride as it's primary ingredient. The length of time for which the Samaritan Shield is effective on surfaces is also a benefit over Parker Lab's products.	<u>Novex 21d is safe</u> on all surfaces, whereas Sealed Air products are not.	Novex 21d is clearly superior to its competitors as it is safe to use on all surfaces and provides cleaning longevity.

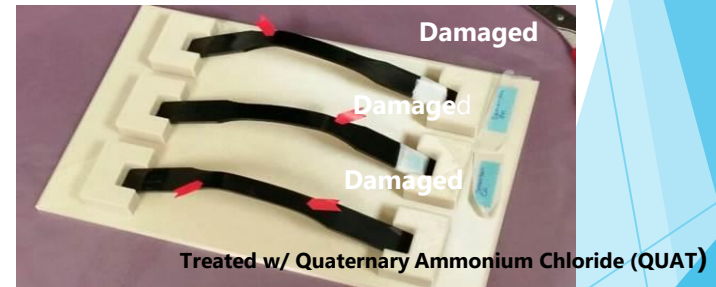
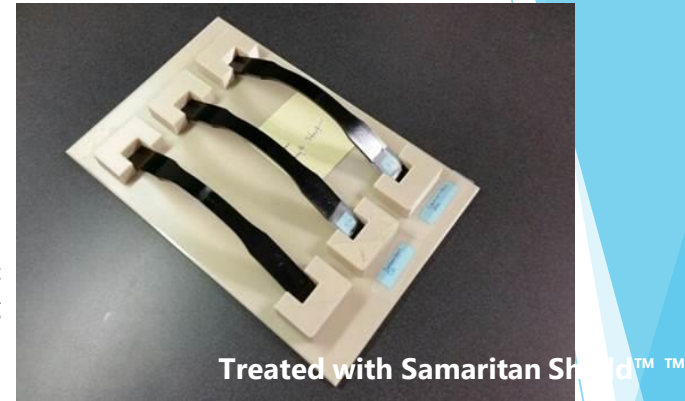
SAFE FOR ALL SURFACES

Tensile Strength Tests were conducted to compare **NOVEX 21D** to Off-The-Shelf Cleaners on Polycarbonate Plastics

- Goal - Exceed 7 days or 168 hours w/o causing cracks in Polycarbonate Plastic
 - polycarbonate is used in a wide variety of common products including digital media (e.g. CDs, DVDs), electronic equipment, automobiles, eye-glasses, sports safety equipment and medical devices.

Test Conclusions Determined

- **NOVEX 21D** did **not** damage Polycarbonate Plastic
- Bleach Free wipes with Quaternary Ammonium Chloride (QUAT) **did** damage Polycarbonate Plastic within 4 days



TEST RESULTS

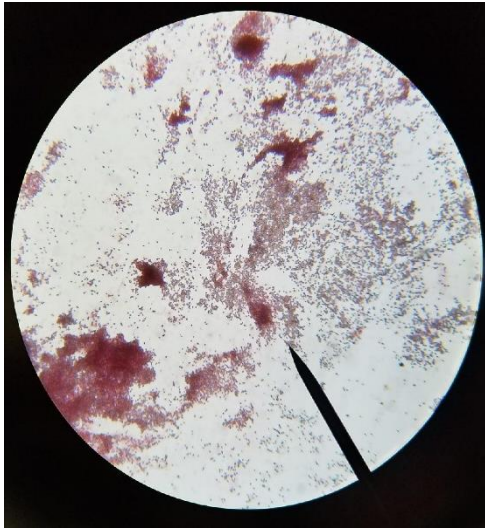


Image of surface **not treated** with **NOVEX 21D™** showing *E. coli* after 24-hours

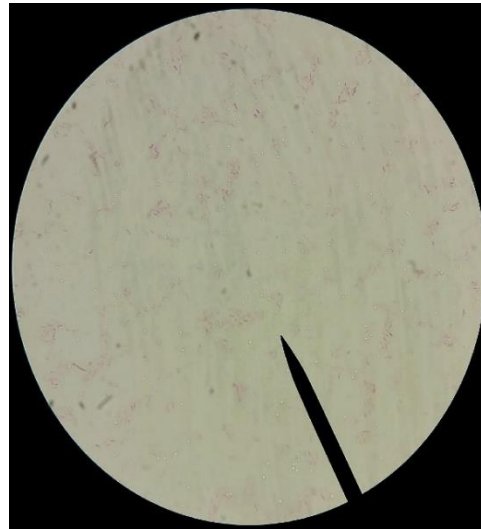


Image of surface **treated** with **NOVEX 21D™** showing *E. coli* after 24-hours

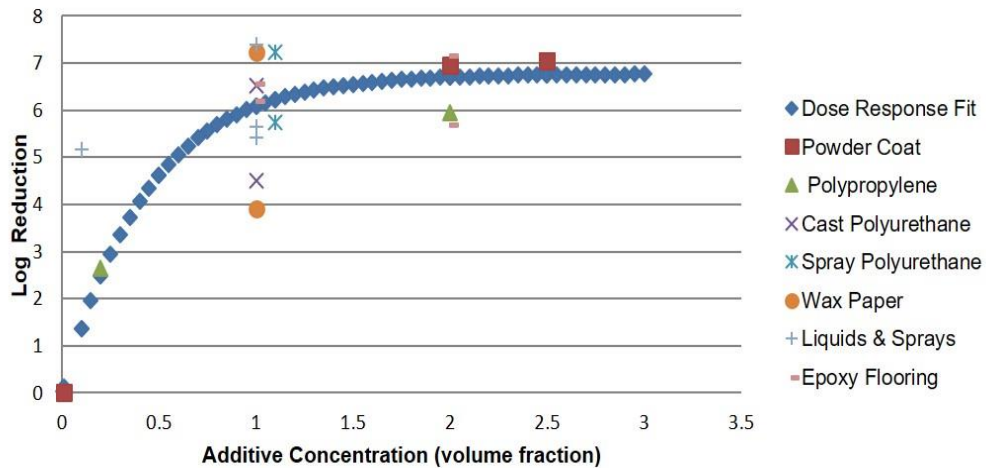
Tests conducted at University of Wisconsin-Whitewater (UWW)

Test conducted to determine bacteria kill mechanism of **NOVEX 21D** with **NOVEX-AMG™**

- Representative photos of general mechanistic test to determine that **NOVEX 21D™** products are bactericidal.
- Bacterial cultures were incubated for 24 hours with increasing amount of product and checked for growth in order to
- determine the minimum inhibitory concentration.
- The left figure, which was not treated with **NOVEX™**, shows significant *Escherichia coli* growth.
- The right figure, which was treated with, **NOVEX 21D™** shows virtually no *Escherichia coli* growth

SUMMARY OF MICROCHEM LABORATORY TEST RESULTS

Novex-AMG™ Efficacy in Various Material Hosts JIS Z 2801 Test Protocol



- NOVEX-AMG™ has been successfully added to and tested in more than 80 sample products using more than 24 unique commercially available host systems including **7** for **NOVEX 21D** .
- The above figure shows that products containing NOVEX-AMG™ demonstrate greater than Log 6 performance, i.e., greater than 99.9999% pathogen reduction.

RINGS OF DEFENSE

