



nano-Shield 1181AMD

BDT-1181AMD Antimicrobial Disinfectant Textile Coating

Technical Data Sheet

nano-Shield 1181AMD is a clear when cured, easy to apply Antimicrobial Disinfectant formulation that helps to significantly lower the bio-burden and continuously protect treated surfaces from the colonization of bacteria, mold, mildew and fungus while the disinfectant additive in the formulation kills bacteria and viruses such as; **Corona Virus-Human, HIV, HCV & HBV** and more than 140 others from cleaned, product coated surfaces for as long as the coating remains intact.

nano-Shield 1181AMD formulated for woven cloth, textiles and other fibrous surfaces, as well as leather goods. Can be used to treat clothing, upholstery, bedding, linen, car interior, RV and boat interior, all types of carpets used in offices, homes and apartments or in other residential and commercial applications.

nano-Shield 1181AMD can be used in school settings and daycare facilities in a myriad of solutions for protecting children's toys, student uniforms, flooring, furniture, upholstery and any other covering made of cloth and/or woven, fibrous organic or synthetic material.

nano-Shield 1181AMD creates a hydrophobic surface, which allows fabrics and fibrous materials to shed water while allowing the fabric to breathe and flex without stiffness.

nano-Shield 1181AMD helps to lubricate the fibers - reducing fiber wear during movement and general use. The U/V inhibitor protects against color fading and typical fiber breakdown from prolonged U/V exposure.

nano-Shield 1181AMD - Properties:

- Color_____ Clear
- Viscosity_____ 12 sec. #2 Zahn
- Percent of Solids_____ 14
- Odor (liquid)_____ Slight mint smell
- Odor (cured)_____ Slight mint smell
- V.O.C._____ Exempt per CFR 51.1 / regulation 8
- RoHS_____ Compliant
- REACH_____ Compliant



- Halogens_____None
- Conical Bond (1/8 inch mandrel)_____Passed (ASTM D522-93a)
- Cross cut adhesion_____5B (ASTM D3359)
- Coefficient of Friction_____0.03 μ (ASTM D2047)
- Specific Gravity_____0.889 (ASTM D891-09)
- Average applied dry film thickness_____2 to 3 microns
- Estimated Coverage Rate(@ 2 microns)_____2,800 sq./ft.+ per gallon
 - (***) absorbency of the solution into the substrate will vary results)
- Transfer to surrounding material_____Zero (0) (non-toxic)
- Dry to Touch (time @ambient)_____5 – 15 minutes** (average)
 - (** a warm airflow (110°F or less) will reduce the “Dry to Touch” and full cure time)
- Ambient cure time_____1 hour average

EPA Reg. No. 83019-1

FIFRA Reg. no. 61178-5, Refer to EPA list N

EPA Est. No. 96461-GA-1

APPLICATION

- Apply by trigger spray or similar low-pressure sprayer, wetting the surface thoroughly and allow to dry to touch.
- Application of a second coat and/or third coat is recommended for heavier weave articles or just to give the article's surface more thorough protection.
- Allow 15 minutes, minimum, between 2nd, 3rd, 4th coats etc.



nano-Shield 1181AMD's antimicrobial disinfectant formulation helps to continuously kill and protect coated surfaces from the colonization of the following list of microorganisms, significantly lowering the bio-burden upon that surface for an extended period of time.

MICROORGANISM EFFECTIVE KILL LIST

Human Viruses

Adenovirus type 2 – Cytomegalovirus – HBV (Hepatitis B Virus) – HCV (Hepatitis C Virus) – Herpes Simplex type 1 Virus – Herpes Simplex type 2 Virus – HIV-1 (AIDS Virus)

*Human Coronavirus

Influenza A/Brazil Virus – Influenza A/Victoria(H3N2) Virus

Influenza A2-Asian Virus – Influenza B Virus (Allen strain) – Influenza C Virus (Taylor strain) – Measles Virus

Non-Human Viruses

Avian Influenza/Turkey/ Wisconsin Virus

Canine Coronavirus – Canine Distemper Virus – Canine Herpesvirus

Equine Herpesvirus – Equine Influenza

Feline Calicivirus Norovirus – Feline Infectious Peritonitis –

Infectious Bovin Rhinotracheitis (IBR) – Newcastle Disease Virus

Isolates From AIDS Patients

Aspergillus niger – Candida albicans

Cryptococcus neoformans

Gram Positive Clinical Isolates

Staphylococcus aureus (Toxic shock) – Staphylococcus epidermidis – Staphylococcus saprophyticus

Gram Negative Clinical Isolates

Acinetobacter calcoaceticus var. anitratus – Acinetobacter calcoaceticus var. Iwoffii Bordetella bronchiseptica – Brevundimonas diminuta

Burkholderia cepacia – Enterobacter agglomerans – Enterobacter cloacae – Enterobacter gergoviae – Enterobacter liquefaciens – Escherichia coli (Urinary) – Escherichia coli (Wound) – Flavobacterium meningosepticum – Hafnia alvei



Other Bacteria

Actinobacillus pleuropneumoniae – Actinomyces pyogenes – Bacillus cereus – Bacteroides fragilis – Corynebacterium ammoniagenes, (Brevibacterium ammoniagenes) - Bordetella bronchiseptica – Burkholderia pickettii

Parainfluenza type 1 – Poliovirus type 1 (Chat strain) – Respiratory Syncytial Virus - Rotavirus
Vaccinia Virus

Porcine Parvovirus – Porcine Respiratory & Reproductive Syndrome Virus – Porcine Rotavirus – Pseudorabies Virus – Transmissible Gastroenteritis (TGE) T1 bacteriophage – T4 bacteriophage – Vesicular Stomatitis Virus (VSV) Bovine – Viral Diarrhea Virus (BYDV) – Avian Influenza Virus (H5N1)

Pseudomonas aeruginosa – Staphylococcus aureus – Streptococcus pneumoniae - Streptococcus haemolyticus – Streptococcus pyogenes

Klebsiella oxytoca – Klebsiella pneumoniae – Morganella morganii – Proteus mirabilis - Proteus vulgaris – Pseudomonas aeruginosa – Pseudomonas fluorescens – Pseudomonas pseudomallei – Pseudomonas putida – Pseudomonas stutzeri – Serratia marcescens – Sphingomonas paucimobilis

Campylobacter jejuni – Chryseomonas luteol – Corynebacterium pseudotuberculosis – Enterobacter aerogenes – Enterococcus faecalis – Enterococcus faecium – Enterococcus hirae – Escherichia coli

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