

AT-705-AM – AM OUTDOOR

Part of the **AlphaSAFE** Antimicrobial Line

TECHNICAL DATA SHEET

AM OUTDOOR is a high-performance nano-ceramic coating that creates a hard, super slick, long lasting hydrophobic clear finish. AM OUTDOOR significantly reduces drag on treated surfaces in water, air, or other mediums. Treated surfaces also become self-cleaning and will repel water, ice, snow, dirt, marine organisms, etc. AM OUTDOOR is durable and provides excellent UV protection. AM OUTDOOR is an inert (benign) material that is safe for use in marine environments. The coating may be re-applied as needed to maintain optimal performance. Finish is available as either matte or glossy.

Proudly manufactured in the USA.

Technical Data

| | |
|--|------------------------------------|
| Color | Clear |
| Viscosity | 16-18 sec. #2 Zahn |
| Percent of Solids (%) | 19 |
| V.O.C | Exempt per CFR 51.1 / Regulation 8 |
| RoHS | Compliant |
| REACH | Compliant |
| Halogens | None |
| Thermal Stability (cured) | 1200°F / 648.8°C |
| Conical Bond (1/8" Mandrel) (ASTM D522-93a) | Passed |
| Cross Cut Adhesion (ASTM D3359) | 5B |
| Coefficient of Friction (ASTM D2047) | 0.03μ |
| Specific Gravity (ASTM D891-09) | 0.889 |
| Pencil Hardness (ASTM D3363) | 8h |
| Odor (liquid) | Slight Solvent |
| Odor (cured) | None |

Drying and Coverage Rate

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|---|--|
| Average Applied Dry Film Thickness | 2 to 3 microns |
| Estimated Coverage Rate (@ 2 microns) | 3,870 ft ² (360 m ²) per gallon |
| Dry to Touch Time (@ 77°F / 25°C) *Warm airflow and/or exposure to sunlight will decrease drying time | 1 – 5 minutes (average) |
| Ambient Cure (Full Properties) | 5 days |

Key Performance Properties

- Hydrophobic, water repellent surface.
- Significantly reduces friction & drag.
- Optically clear.
- Self-cleaning.
- Reduced maintenance.
- Anti-icing.
- UV resistance.
- Excellent adhesion. Creates intrinsic bond with the substrate.
- Durable.
- Non-flammable.
- Excellent coverage rate.
- Single component.
- Easily re-applied.
- Ambient cure, short dry time.
- Application by spray or wipe (roller).
- Environmentally friendly. VOC exempt. Will not harm marine life.
- RoHS and REACH compliant.

Common Applications

- Boats hulls (over gel-coat if required)
- Automobile windows and screens
- Scuba propulsion vehicles
- Glass windows (inside and outside)
- Solar panels
- Mirrors (interior or exterior)
- Aircraft windscreens

Supplemental Information

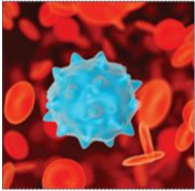
AM OUTDOOR is best suited for recreational or lower use vehicles. AM OUTDOOR is suited for cold climates, with mild and warm climate grades. AM OUTDOOR PRO is a higher solids, longer lasting slick coating best suited for commercial and military applications.

ALPHATEK ALPHASAFE – ANTIMICROBIAL ADDITIVE INFORMATION

PROTECTING LIFE'S SURFACES

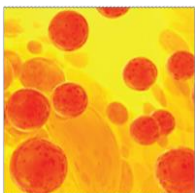
ALPHATEK MATERIALS IS A LEADING INNOVATOR IN ADVANCED MATERIALS, PERFORMANCE COATINGS, AND SURFACE DISINFECTION & SANITATION SOLUTIONS. ALPHATEK'S ANTIMICROBIAL SURFACE DISINFECTANT SPRAYS AND COATINGS COMBINE LEADING EDGE TECHNOLOGIES TO DISINFECT, SANITIZE, AND PROTECT NON-BIOLOGICAL SURFACES FROM DANGEROUS MICROORGANISMS.

ALPHATEK'S ANTIMICROBIAL COATINGS PROTECT ALMOST ANY SURFACE INCLUDING FLOORS, WALLS, DOORS, COOKWARE, COUNTERS, TABLES, VEHICLES, OPERATING ROOMS, HANDRAILS, ELEVATORS, CLEAR PLASTICS, TEXTILES, AND FABRICS.



ALPHATEK'S HIGH-PERFORMANCE NANO-CERAMICS

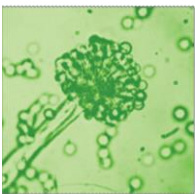
AlphaTek utilizes proprietary aerospace nano-ceramics to create a range of high-performance coatings. The nano-ceramic coatings covalently bond to almost any surface for long-term adhesion and extreme durability. AlphaTek's nano-ceramic coatings are low-VOC, easy to apply, and air cure under ambient conditions. Treated surfaces are hydrophobic and oleophobic. The ceramic matrix protects against abrasion, chemicals, and UV-radiation for the life of the coating.



ALPHATEK MATERIALS' ANTIMICROBIAL ADDITIVE

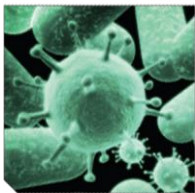
AlphaTek uses a powerful organosilicon-based antimicrobial additive that is an effective surface disinfectant and adds exceptional continuous bacteriostatic, fungistatic, and algistatic properties to coated surfaces. The antimicrobial is blended throughout the entire thickness of the coating for long-term antimicrobial durability.

The antimicrobial additive creates a network of electrically charged molecules on the exposed surface that ruptures the cell membrane of microorganisms that come into contact with the coating. The antimicrobial's physical kill mechanism is highly effective and does not promote the development of drug-resistant superbugs.



OTHER KEY PROPERTIES OF ALPHATEK'S ANTIMICROBIAL ADDITIVE:

- EPA Registered (83019-1) & NSF-51 Approved and FDA-compliant for Food Contact Surfaces.
- Protects plastics, textiles, and other coated surfaces from colonization by a wide variety of pathogens, viruses, bacteria, mold, algae, and other microorganisms.
- Proven effective to protect treated surfaces against colonization by Influenza and Human Coronavirus (untested against COVID-19).
- Does not contain any heavy metals and does not leach chemicals or metals out of the coating.
- Non-toxic and non-hazardous to humans and pets when used as directed.
- No transdermal absorption.



THE ANTIMICROBIAL PROPERTIES HELP TO CONTINUOUSLY PROTECT TREATED SURFACES FROM POTENTIAL COLONIZATION BY A GROWING LIST OF MICROORGANISMS, INCLUDING:

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|-------------------------------|-------------------------------|------------------------------|------------------------------------|
| • Coronavirus, Human | • Clonostachys rosea | • Iternaris species | • Saccharomyces cerevisiae |
| • Acinetobacter calcoaceticus | • Clostridium perfringens | • Mariannaea elegans | • Salmonella enterica |
| • Aeromonas hydrophilia | • Corynebacterium bovis | • Microsporium audouinii | • Salmonella typhi |
| • Alternaria alternata | • Corynebacterium diphtheriae | • Monilia grisea | • Salmonella typhimurium |
| • Anabaena cylindrica | • Cryptococcus humicola | • Mycobacterium tuberculosis | • Scenedesmus quadricauda |
| • Aspergillus flavus | • Cutibacterium acnes | • Oospora lactis | • Selenastrum gracile |
| • Aspergillus fumigatus | • Enterobacter aerogenes | • Oospora lactis sp | • Serratia liquefaciens |
| • Aspergillus Niger | • Enterobacter agglomerans | • Oscillatoria borneti | • Serratia marcescens |
| • Bacillus cereus | • Enterobacter cloacae | • Penicillium albicans | • Stachybotrys atra |
| • Bacillus subtilis | • Enterococcus | • Penicillium chrysogenum | • Stachybotrys chartarum |
| • Bacillus typhimurium | • Enterococcus faecalis | • Penicillium citrinum | • Staphylococcus aureus |
| • Bipolaris australiensis | • Epidermophyton floccosum | • Penicillium notatum | • Staphylococcus epidermidis |
| • Candida albicans | • Escherichia coli | • Penicillium variabilei | • Streptococcus faecalis |
| • Candida parapsilosis | • Fusarium nigrum | • Penicillium notatum | • Streptococcus pyrogenes |
| • Cephalascus fragans | • Fusarium solani | • Pleurococcus | • Trichoderma flavus |
| • Chlorella | • Geotrichum candidum | • Proteus mirabilis | • Trichophyton interdigitale |
| • Chlorophyta (green) | • Gliocladium roseum | • Proteus vulgaris | • Trichophyton mentagrophytes |
| • Chrysophyta (brown) | • Gliomastix cerealis | • Protococcus | • Trichosporon mucoides |
| • Citrobacter diversus | • Klebsiella pneumoniae | • Pseudomonas aeruginosa | • Vancomycin-resistant enterococci |
| • Cladosporium herbarum | • Klebsiella terrigena | • Pseudomonas cepacia | |



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