

# BioDefense 24/7™

Marine Nano-Sealer – All surfaces, Below Water Surface, Reduces Biofouling



#### **Product Info**

Protect your vessel from stem to stern with **BioDefense 24/7™** and reduce maintenance costs, extend the life of your surfaces for an immediate appearance enhancement, and long-term return on investment. Is designed with additional rust and corrosion resistance components for use on metals and all surfaces in the most extreme atmospheres, high altitude, high temperature, such as below water surface, caustic or acidic conditions, and saltwater.

DevMar® has successfully combined two emerging technologies to address multiple problems of surface protection against corrosion, soil adhesion, atmospheric fouling, abrasion, static, and UV degradation with "liquid nano-metal" penetrating sealing. Employing a proprietary water-based fusion of nanotechnology-sized polymeric particulates, **BioDefense 24/7™** protectant works on all hard and soft surfaces to seal, protect, enhance appearance, and extend asset life. BioDefense 24/7™ also utilizes nano-metal oxides to densify and strengthen surfaces without hardening to further enhance UV protection, reducing biofouling and increasing surface protection.



Biofouling build-up on marine data collection instruments without BioDefense 24/7™ after 30 days.



Biofouling build-up on marine data collection instruments with **BioDefense 24/7™** after 150 days.

#### Where to Use

Versatile on many different hard and soft surfaces, including but not limited to metals, fiberglass, wood, tile, natural stone, glass, stainless steel, ceramic, plastics, aluminum, clear coats, painted surfaces, steel, concrete, masonry, stone, composites, ABS, polycarbonate, styrene, acrylics, grout, Plexiglas, and many more. Not intended for use on flooring surfaces as they could reduce the coefficient of friction.

**Appearance:** White liquid **Fragrance:** Sweet Lemon

**pH:** 7.0-8.0

Flash Point: Same as Water Storage: Between 40° F and 110° F Compliance: Zero VOC's

Non-pollutant for air, water, soil

## **Benefits**

- Dramatically reduces biofouling, oxidation, UV degradation, and friction.
- Eliminates mineral deposits/build-up on the surfaces.
- Surfaces remain clean and are easy to maintain after sealer treatment.
- Rejuvenate surfaces and bring out original color and luster.
- Extend the life of your surfaces and reduce maintenance costs for an immediate and long-term return on investment.
- BioDefense 24/7™ eliminates the need for other products that hide scaling and deposits.

## **Features**

- Water-based
- Non-flammable
- Non-toxic
- Non-abrasive
- Does not affect pH
- Does not etch surfaces
- Does not add weight or dimension
- Does not contain silicones, PTFE's, oils, waxes
- NO VOC's
- Viable to 662° F or 350° C
- Does not harden
- · Enhances shine and matte finishes
- 100% soluble in water
- Ozone safe

# **Confirmed Testing**

# Passes or exceeds the industry standard for:

Boeing D6-17487: (Exterior and General Cleaners and Liquid Waxes, Polishes, and Polishing Compounds)

Boeing D6-7127: (Cleaning Interiors of Commercial Transport Aircraft)

Douglas CSD #1: (Materials and Procedures for Polishing Aluminum Surfaces)

Aerospace Materials Specification (AMS) 1650C: (Polish, Aircraft Metal Type 1: Liquid)
ASTM B117: (salt spray corrosion 500+ hours)
ASTM F1110: (aviation sandwich corrosion)
ASTM F483: (aviation immersion corrosion)
ASTM F519-93: (hydrogen embrittlement)

ATM F519, Type 1c: (hydrogen embrittlement)

ASTM F485: (no stain/residue test)
ASTM F502: (acrylic crazing)

ASTM F484: (stress crazing on acrylic to 4500 psi)

ASTM D56: (flash point 140 deg. limit)

## **Use Instructions**

Always refer to SDS and product label prior to use. Do not use and/or combine with other chemicals. **BioDefense 24/7™** is ready-to-use and does not need to be diluted.

#### Thoroughly clean surfaces

- Apply sealer to dry surface with fine-mist sprayer and gentry spread with a soft cloth
- Allow to dry for 5-10 minutes
- Buff with a soft cloth if desired

## Tips

- One-gallon seals up to 3,000 sq ft of hard surface & 1,500 sq ft of soft surface
- For large applications, spray with a backpack sprayer or another fine mist applicator. An electrostatic sprayer may be used.
- For the first application, two coats is recommended
- When significant buildup, media-blast surface or use other mechanical methods

# Warning

As with all cleaning and sealing products, use protective wear (gloves and goggles to avoid skin and eye contact).