

BZ600AM 2-K Nano-Ceramic Long Life Color Coating

BZ600AM is a Non-Toxic, Non-Leaching Antimicrobial*, High-Performance, UV resistant Nano Ceramic Color Coating. It creates an extremely hard, durable, super-slick finish for marine and industrial applications, for use above and below the waterline. It is an inert (benign) material when cured. It will not harm marine life or waterways and lasts for years without flaking or ablating.

Antifoul abilities. **BZ600AM** is a non-leaching, non-toxic antimicrobial nano-ceramic coating, that fills in the surface porosity, creating a beautifully smooth super-slick, porous-free surface. When used as a hull coating it prevents biofilm build-up, and inhibits both microfouling and macrofouling, making the hull simple to keep clean. Its antifoul properties help to prevent the growth of mollusks, marine scum, seaweed, slime buildup, dirt, etc. This keeps boats lighter and moving faster, increasing performance and fuel economy. It also helps prevent hard water mineral buildup and hull stains, making it ideal for marine and offshore structures.

BZ600AM creates a covalent bond to the substrate making it an intrinsic part of the material. It is self-priming to most substrates** reducing time and labor required for application. Ideal for appliances, architectural, industrial, agricultural and heavy service land-based equipment, marine, and offshore structures.

BZ600AM is Thermally stable to 1,100°F/600°C. It is available in a wide range of over 40 standard colors (refer to the **BZ600 color chart**) with custom colors also available. Nanoceramic coatings are naturally UV resistant maintaining their color accuracy. Saves time and money by reducing labor and material costs.

BZ600AM used as a hull coating is naturally hydrophobic, reducing the coefficient of friction, reducing drag, increasing top speed, and improving fuel economy. It is extremely long-lasting and takes a beating. It is used by offshore oil platforms, Naval, Coast Guard, Police, and manufacturers of boats up to beautiful luxury mega yachts. Used on a fleet of police pursuit boats, the average top speed increased by 4-6 knots.

** **BZ600AM** can be used with **BX520HT primer** to improve the adhesive bond to difficult-to-bond-to substrate materials and/or silicone contaminated surfaces. For surfaces that may be questionable or have hard-to-remove contamination, be sure to use the **BX520HT** nano-ceramic adhesion primer. **BZ600AM** can also be used over tight rust by first using the **TL780** Rust-Tight coating.

BZ600AM 2-K Properties

• Color_____	Refer to BZ600 color chart
• Viscosity_____	>0.21 cm ² /s (104 F/4)0
• Percent of Solids_____	Part A Resin 96% ±2%
Mixed (90-91%)_____	Part B Hardener 71% ±2%
• Mix ratio_____	4:1 (80:20)
• Odor Liquid_____	Slight Solvent
• Odor Cured_____	None
• NFPA flame spread_____	Class A
• V.O.C. (compliant)_____	0.9 per/US Gal
• Adhesion_____	5B (ASTM D3359-02)*
• Mass density_____	11.3 lb/US Gal
• Recommended DFT_____	3.0 – 7.0 Mils per coat
• Thermal Stability, resin (cured)_____	1100°F + (593.3°C)*
• <u>Theoretical coverage rate</u> _____	~289 FT ² /US Gal for 5.0 mils
• Pot life (@ 65-70°F)_____	4 hr.
• Dry to the touch (@ 65-70°F)_____	1.5-2 hr.

The manufacturer and supplier are not responsible for the use and application of this material. At the time of this publication all information contained within was determined to be valid and true. It is up to the end user to determine the suitability of this product for their own application. No warranty is written or implied regarding application and use of this material.

- Recoat time(@ 65-70°F) _____ 1.5-2 hr. minimum
- Cure time (@ 65-70°F) _____ 4-4.5 hr.
- Force dry (after dry to the touch) _____ 140°F max*
- Salt Spray (5% solution) _____ 5500 Hours
- UV resistance _____ Excellent
- Application temperature _____ 5° above dew point
- Relative humidity during application & cure _____ at 40% minimum
- Proprietary *Antimicrobial product blend/mixture _____ EPA Reg. No. 83019-1-98175

Application

- Application method: Spray, roller, or brush.
- Power mix components **BZ600AM A & B** together to create a uniform consistency.
- Product is flammable, use appropriate mixing equipment and proper ventilation when working with this product. Review product SDS before working with this product.
- There is no induction time required after mixing before applying this product.

Surface preparation

For **Metal** or non-ferrous surfaces

- A clean and dry surface is always best; a white blast is preferred for metal surfaces. After all your sanding and prep is completed, air blast clean, and for a finer finish wipe with a good cleaning solution to remove contaminants off the surface. Follow this with the coating process, as quickly as possible, to prevent flash-rusting. If abrasive blasting is not possible, mechanical or use of a hand descaling brush to remove any loose rust scale or flaking paint, etc.
- Tight rust maybe seal-coated with **BL780 Rust-Tight**, (refer to product TDS), then it may be top coated with the **BZ600** series topcoat

For **Gelcoat** or composite surfaces

- Be sure to air blast off any dust and clean the surface with a good cleaning solution, or sand to get a good prepared surface, be sure to remove any oils, dust or other foreign matter.
- **BZ600** series coating may also be top coated with a **BL212AM** nano ceramic clear coat for extra protection from the elements. Contact us or your Tecmari dealer if you have questions.

Tips to improve your finish when using spray equipment

Although the **BZ600** is a one coat product giving you excellent results, here are some further tips:

- Seam seal where all the welds are at using 3M Bare-Metal Seam Sealer 08310.
- After all your sanding and prep is completed, use an air nozzle to blast off the dust.
- Preclean and wipe down to remove all the grime, this helps your masking tape stick better, which makes prepping for your paint much better.
- Tape and mask anything you don't want to get paint on.
- Give it a final clean to remove any contaminants that came off your fingertips or anything in the air. This may help eliminate any fisheyes of anything like that when you go to prime or paint it.
- Static Control: If you want a really fine finish regardless of the paint you use, we always recommend using this on everything you paint, every time. Use a STAT-GUN SG-1000 on your surfaces. Most of the dirt and stuff you get onto your paintjobs that make it look bad is from static electricity. A Stat-Gun puts positive and negative charged ions on the panel and eliminates the static charge from attracting airborne impurities onto the surface.

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Spray Equipment

- Recommended spray nozzle orifice is 1.5 to 2.0mm
- Recommended nozzle pressure is 0.3 to 0.4 MPa or 58psi

Always pre-evaluate a new product and its application. Testing of **BZ600** should be on a sacrificial substrate piece, before using on a finished part, to be sure that the application technique is giving the desired result.

- It is recommended to apply the coating with a thin tack coat followed by the typical box coat application method to be assured of a uniform coating thickness.
- If spraying – apply in 50% overlapping passes to be assured of a “holiday free” coating.

Clean Up?

- Tool clean up - use MEK or similar solvent.
- Any overspray cleaning and/or equipment cleaning – must be cleaned immediately with acetone, toluene, xylene, or MEK.

Thinning

Normally thinning is not required for most applications. If thinning is required the “**BZ600-T Thinner**” can be ordered, which will then allow for a thinner film build and smoother flow out. The “**BZ600-T Thinner**” can be added after initial mixing of Parts A & B at a (5 to 15% Maximum by volume). You can apply another coat after 1.5 to 2 hours curing. *This thinner is explicitly formulated to work with our **BZ600** paints.* Substituting other thinners may compromise the finished product!! Before thinning, we highly recommended you experiment with a small volume of material and test, and re-test until you are happy.

Other recommendations

Tecmari TL200AM is a similar coating as the **BZ600AM**. It is clear, and is designed for *inflatables*. It is an extreme hydrophobic coating with super slick properties, greatly reducing drag. It can also be applied to out-boards, drives and props to improve performance.

Tecmari TL214AM-FT-WG Non-Slip Deck Coat used on the walkways to prevent slipping, clear with a fine texture and wet grip to ensure good footing when your feet are wet.

Tecmari TL206AM-WG Dry Line Coating is designed for ropes to help keep them clean and float near the surface while providing extra grip. It can also be used on **Canvas covers for UV protection** and waterproofing. It creates a slight stiffness when first cured, a quick shake and the material is pliable again. This coating is ideal for keeping your canvas clean and free from grime throughout the year.

Tecmari TL205 Wood Sealer – keep your wood looking fresh and beautiful, provides UV resistance and fire retardation.