BMA MARINO GUARD PRIMER

TECHNICAL DATA SHEET

Product Code: 1BM-MGP
Hardener Code (if applicable): Not Applicable

I. Product Description

BMA Marino Guard Primer is a modified zinc phosphate alkyd primer designed to protect metal surfaces from corrosion and rust, especially in marine environments. It serves as a great industrial primer for marine steel applications, offering good adhesion for the final topcoat.
1BM-MGP is ideal for use on clean ferrous metal surfaces, both indoors and outdoors. It is especially suitable for marine structures, marine equipment, and shipboard applications, ensuring long-lasting protection and durability.

II. Product Performance Characteristics

- Long lasting and relatively fast drying
- Supreme anti-corrosive protection
- Great adhesion on steel surfaces with good coverage and a matt finish
- Suitable for mild to moderate marine environments, not suitable to prime galvanized steel unless its treated with BMA wash primer
- Can be topped with marine paints
- Free of Chrome and Lead pigments
- A thickness of 75 µm could be obtained by one operation of spray application

III. Areas of Application

BMA Marino Guard Primer can be used for:

- Steel surfaces
- Boats and marine equipment
- Fuel and water tanks

IV. Technical Specifications

Data for BMA Marino Guard Primer 1BM-MGP:

Parameter	Norm/Standard	Result
Total Solids, by weight (%)	ASTM D1259	78

Total Solids, by volume (%)	ISO 3233	62
Viscosity at 25°C (Poises)	ASTM D562	20
Specific Gravity (g/cm^3)	ASTM D1475	1.6
Total Volatile Organic Compound (VOC) (g/L)	ASTM D3960	320
Theoretical Spreading Rate (m^2/L)	-	15-20
Recommended WFT [2] (µm)	-	60-70
Recommended DFT [1] (µm)	-	30-40
Gloss Level (%)	-	Matt
Appropriate solvent	-	BMA White Spirit
Solvent ratio by volume (%)	-	15-20

[1] DFT: Dry Film Thickness
[2] WFT: Wet Film Thickness

V. Application Procedure

Surface Preparation

Before applying BMA Marino Guard Primer, all necessary pretreatment must be done. Surface should be clean, dry and free of all contaminants (oils, dust, dirt, etc…) in order to avoid the risk of surface failing.

Metal Surfaces

For new steel, clean the surface from any oil or grease residues using SAMA chemical 3 in 1 phosphating additive (1L:35L water). Sand the substrate to Sa 2½ until smoothing then remove all sanding dust and let it dry before any primer application.

For painted steel, remove loose and peeling paint using mechanical methods such as sanding or sandblasting of the entire surface until smoothing so the new coating can adhere properly. When the old paint is compatible with the new one, only light sanding is required. Then, remove persistent dirt, sanding residues, and zinc salts with a detergent solution and water.

For non-ferrous metal (galvanized steel, aluminum, stainless steel, etc…), remove corrosion residues and promote adhesion to the subsequently applied coatings, use a thin layer (8-10 µm) of BMA Wash Primer in order to etch the substrate. In case of unetched surface or when etching is not possible, apply a sweep or brush blast cleaning using a non-metallic abrasive in order to lightly roughen the surface. Let the surface dry before coating application.

To adjust the surface unevenness, BMA putty polyester should be applied.

For corrosion prevention, the cleaned surface should directly be primed.

Thinning

If thinning is necessary, a maximum of 15% of BMA Thinner Super may be added for brush or roller application, and up to 20% for airless spraying systems. This adjustment helps to achieve the required viscosity of the mixture and ensures proper application performance.

Application

BMA Marino Guard Primer should be applied in a well-ventilated area where the humidity does not exceed 75% and the temperature varies between 5°C and 35°C.

Application Method	Details
Spray	Application must be carried out on a clean, dry surface using an air spraying system.
Brush	Application must be carried out on a clean, dry surface using a brush.
Roller	Application must be carried out on a clean, dry surface using a roller.

Spray one coat of BMA Marino Guard Primer, diluted with 25% solvent for brush application or 10% solvent for spray application, on a clean and dry substrate and let it dry for 4 hours.

Apply a second coat of BMA Marino Guard Primer, diluted with 20% solvent for brush application or 5% solvent for spray application and let it dry for at least 4 hours.

Overcoat the fully dry primer with BMA Marino Guard top coat.

Allow the substrate to cure for 12–24 hours before exposure to severe marine conditions.

VI. Drying Conditions

Condition	Time
Surface Touch Dry	30 minutes
Dry to handle	12 hours
Dry to over coat	4 to 6 hours

VII. Color Range

Available in White, Black, Grey and Yellow colors. Custom colors are available upon request.

VIII. Packaging

Available in:
Kilo, Gallon & Pail kits.

IX. Shelf Life & Storage Conditions

Shelf Life	Storage Temperature & Humidity	Storage Conditions
▪ 2 years from the manufacturing date.	▪ **Temperature:** Between 5ºC and 35ºC ▪ **Humidity:** Should not exceed 85%	Store in undamaged, unopened containers. The product must be kept away from direct sunlight and any sources of heat or flame.

X. Safety, Health, and Environmental Compliance

Aspect	Details
Environmental Impact	Contains volatile organic compounds (VOCs); avoid release into the environment. Dispose of in accordance with local environmental regulations. Prevent contamination of soil and waterways.
Health Hazards	Harmful by inhalation, skin contact, and if swallowed. May cause allergic skin reactions, respiratory irritation, or eye damage. Prolonged exposure may affect the central nervous system.
Safety Precautions	Use only in well-ventilated areas. Wear appropriate personal protective equipment (PPE) including gloves, goggles, and a respirator. Avoid direct contact with skin and eyes. Do not eat, drink, or smoke while using the product.
First Aid Measures	**Inhalation:** Move to fresh air; seek medical attention if symptoms persist. **Skin Contact:** Wash immediately with soap and water. Remove contaminated clothing. **Eye Contact:** Rinse cautiously with water for several minutes. Seek medical advice. **Ingestion:** Do not induce vomiting. Rinse mouth and seek immediate medical assistance.

XI. Certifications and Test Reports

BMA Commercial & Industrial s.a.l holds ISO 9001:2015, ISO 45001:2018, and ISO 14001:2015 certifications, ensuring that all operations are conducted in compliance with international standards.

XII. Disclaimer

The statements, technical information, and recommendations contained herein are believed to be accurate. However, as the conditions and methods of use of the product and the information provided are beyond our control, BMA Commercial & Industrial s.a.l expressly disclaims any and all liability for any results obtained or consequences arising from the use of the product or reliance on this information.