BMA INDUSTRIAL PAINT SYNTHETIC

TECHNICAL DATA SHEET

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

I. Product Description

BMA Industrial Paint Synthetic is a one-component, air-drying synthetic alkyd-based coating. It offers a durable, fast-drying solution suitable for both interior and exterior superstructures, as well as steel surfaces. The paint provides superior adhesion and outstanding resistance to weathering, cracking, abrasion, and mechanical stress.

II. Product Performance Characteristics

- Long lasting, fast drying and easy handling
- Superior adhesion ability
- High weathering, cracking, abrasion & mechanical resistance
- Great yellowing resistance, color and gloss retention
- Ideal for steel substrate which are not normally exposed to water immersion
- Hard, durable and ultra-smooth finish with high opacity and great coverage

III. Areas of Application

BMA Industrial Paint Synthetic can be used for:

- Great over well primed, indoor and outdoor ferrous metal surfaces
- Excellent economic general-purpose maintenance and new building paint
- Ideal to be used over any heavy equipment and vehicle

IV. Technical Specifications

Data for BMA Industrial Paint Synthetic 1BM-PSI:

Parameter	Norm/Standard	Result
Total Solids, by weight (%)	ASTM D1259	67.29
Total Solids, by volume (%)	ISO 3233	55
Viscosity at 25°C (Poises)	ASTM D562	20

Specific Gravity (g/cm^3)	ASTM D1475	1.2±0.01
Total Volatile Organic Compound (VOC) (g/L)	ASTM D3960	393.01
Theoretical Spreading Rate (m^2/L)	-	16.4
Recommended WFT [2] (µm)	-	100-120
Recommended DFT [1] (µm)	-	50-60
Appropriate solvent	-	BMA White Spirit
Solvent ratio by volume (%)	-	20-25
Gloss Levels	-	Glossy, Matt, Semi-Matt & 30% glossy

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

V. Application Procedure

Surface Preparation

Before applying BMA Industrial Paint Synthetic, 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.

Wooden Surfaces

For previously painted wooden surface, remove paint residues using a scraper in order to avoid the flaking of the new coating in case it is not compatible with the old one. Sand and smooth the surface then clean it well and remove the sanding dust. Let the surface dry before any primer or sealer application.

For new wood, sand the surface and all the edges lightly until smoothing. Apply BMA insulator for oily wooden substrate. Thinning of 10-15% is required for faster solvent evaporation. Then, use NC Putty or BMA Bouche Pores to close off, patch and fill all surface imperfections (cracks, holes, pores, etc…). Clean the substrate and let it dry then make sure that the moisture content does not exceed 10%. Sand until smoothing using a sanding paper with a 300-grit size. Clean it well before any coating application.

Priming

Metal substrates could be primed before BMA Industrial Paint Synthetic application using BMA antirust or BMA Marine Primer or BMA Zinc chromate primer.

Priming must be done directly after preparing, cleaning and drying the surface.

Thinning

If thinning is necessary, add 20-25% (air spraying, brush or roller) of BMA Thinner 050 could be added to obtain the required viscosity of the mixture.

Application

BMA Industrial Paint Synthetic be applied in a well-ventilated area where the humidity does not exceed 75% and the temperature varies between 5°C and 35°C.

BMA Industrial Paint Synthetic must be applied on a clean and dry surface using a brush, roller or airless spraying system.

Two coats of BMA Industrial Paint Synthetic could be applied on steel surfaces when required.

Over coating of BMA Industrial Paint Synthetic could be done using a layer of BMA Varnish, if needed.

VI. Drying Conditions

Condition	Time
Surface Touch Dry	2 to 4 hours
Dry to handle	24 hours
Dry to over coat	Overnight

VII. Color Range

According to BMA standard colors.

VIII. Packaging

Available in:
Kilo, Gallon & Pail Kits.
200L Barrel.

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.