SUPREME XTREME
JFB HART COATINGS

HIGH PERFORMANCE TECHNOLOGY – LOW VOC URETHANE

300 Matte/Satin

TECHNICAL DATA SHEET

(March 2025)

Product Description

300 Matte / Satin are our premium two component, low VOC, low odor, high performance, water-based, water reducible, non-yellowing aliphatic acrylic polyurethane coating. The 300 offers a matte and satin finish with excellent UV, chemical and abrasion resistance. The 300 is a flexible urethane that can be used for interior and exterior applications.

- Matte & Satin Finish – Clear & Colors
- Low VOCs – Less than 50 g/l
- Upon mixing Parts A & B – mixture has no free monomers

Direct to most surfaces without the need of a primer, including:

- Metal
- Concrete
- Wood
- Fiberglass
- Aluminum
- Ferrous & Non-Ferrous Metal
- Steel
- Previously Painted Surfaces

Recommended Markets For Interior & Exterior Use:

Airports / Transportation
Amusement / Theme Parks
Anti-Graffiti Systems
Auto Dealerships
Chemical & Petrochemical
Commercial Buildings
Education
Food & Beverage Industry
Healthcare / Pharmaceutical
Hospitality
Industrial Equipment
Marine Industry
Power Plants
Pulp & Paper
Railcar / Transport Vehicle
Restaurant / Food Service
Storage Tanks
Transmission Pipelines
Warehouse / Manufacturing
Waste Water / Municipal

Antimicrobial Protection Technology

JFB Hart & Microban® Antimicrobial Product Protection have partnered to provide innovative coatings with antimicrobial protection. Microban's technology is built-in antimicrobial protection that gives JFB Hart's products an added level of protection against microbes such as stain and odor causing bacteria, mold and mildew.

Product Characteristics

Finish:	Matte: ~ 25° Gloss (60° Angle) Satin: ~55° Gloss (60° Angle)
Color:	Clear & Colors (see color card)
Weight Solids (Clear):	51% ± 3% before reduced
Weight Solids (Color):	55-65% ± 3% before reduced
Volume Solids (Clear):	49% ± 3% before reduced
Volume Solids (Color):	47-58% ± 3% before reduced
VOCs (Clear):	<50 g/l
VOCs (Color):	<50 g/l (note 2)
HDI Monomer Content:	<0.04
Recommended Spreading Rate Per Coat:	
• Vertical Surfaces	Wet mils: 4.0 – 5.0 Dry mils: 2.4 – 3.0
• Horizontal Surfaces	Wet mils: 6.0 – 8.0 Dry mils: 3.6 – 4.8
• Actual Spread Rate:	200 – 400 sq. ft. per gallon
Application Viscosity:	65-75 KU catalyzed & reduced
Drying Schedule at 75° F:	
• To Touch:	6-8 Hours
• To Handle:	8-10 Hours
• To Walk On:	10-12 Hours
• Full Cure:	2 Days
Pot Life at 75° F:	1 Hour (60 minutes)
Sweat-In/Induction Time:	2 Minutes
Shelf Life:	12 Months @ 75° F
Flashpoint:	> 185 ° F
Recoat Times at 75° F:	Within 24 hours lightly abrade with 160 mesh screen. After 24 hours, sand with 120 mesh screen.

Note 1: Depends on the color
Note 2: Excludes the colorant and depends on the color

Performance Characteristics

Substrate Tested:	Steel
Surface Preparation:	Wash with water-based biodegradable neutral cleaner
Application:	Direct to Surface
Pencil Hardness: (ASTM D3363)	Scratch: 2H Gouge: 3H
Abrasion Resistance: (ASTM D4060)	33 mg loss
Tensile Adhesion:	1,600 – 1,800 psi
Impact Resistance:	100 in-lbs
QUV 1,000 Hours: (ASTM D4587)	Passed SSPC Paint 36 Standard of:
• Color Change:	Less than 2.0 Delta E Change
• Gloss Change:	Less than 30% Gloss Change
Flexibility – Conical Bend: (ASTM D522)	% Elongation: in testing Resistance to Cracking: in testing
Condensing Humidity 1000 Hours: (ASTM D2247)	Rusting: in testing Blistering: in testing
Salt Fog 1,000 Hours: (ASTM B117)	In testing

Recommended Systems For 300 Matte / Satin

Vertical Structure: 1 coat of HP-300 at 3.0 – 5.0 mils WFT – Depending on porosity or profile of structure a second coat may be required.
Anti-Graffiti System: 1 coat of HP-300 Pigmented followed by 1 coat of HP-300 Clear. Alternative System is 2 coats of HP-300 Clear.
Horizontal Surfaces: 1 coat of HP-300 at 3.0 – 5.0 mils WFT – Depending on porosity and profile a second coat may be required.
Concrete: 1 coat of HP-300 Pigmented followed by 1 coat of HP-300 Clear. Alternative System is 2 coats of HP-300 Clear.
Rough/ Uneven Concrete: 1 coat of HP-330 (100% Solids) Epoxy followed by 1 coat of HP-300 Clear or Pigmented.
New Wood: 1 coat of HP-1K then lightly sand followed by 1 coat of HP-300 Clear. Alternative System is 2 coats of HP-300 Clear.
Finished Wood: Sand first then 1 or 2 coats of the HP-300 Clear depending on desired appearance.
Steel: 1 coat of HP-300 Clear or Pigmented. For extra corrosion protection, first apply 1 coat of HP-200 Epoxy Primer.
Galvanized: 1 coat of HP-300 Clear or Pigmented.
Aluminum: 1 coat of HP-300 Clear or Pigmented.
Inorganic Zinc Primers: 1 coat of HP-300 Clear or Pigmented.

The product can be applied direct to most surfaces. If applying over a solvent-borne primer, allow the primer to adequately cure in order for all solvents to evaporate according to manufacturer recommendations for recoat times for water-based urethanes. **Recoat Note**: When applying multiple coats of JFB 300, lightly abrade between coats using a 160 mesh screen within 24 hours. After 24 hours, sand between coats with a 120 mesh screen. Abrading and sanding is done to ensure successful adhesion between coats.

Application / Storage Conditions

Conditions	Material	Surface / Ambient	Humidity	Pot Life / Dry Time	Product Storage
Normal	65° – 85°F	65° – 85°F	35 – 65%	None	75° F
Minimum	40° F	40° F	0%	These temps increase dry to touch and full cure times	40° F
Maximum	85° F	100° F	90%	These temps decrease working pot life	90° F
Do not apply the products when the substrate temperature is less than 5° F above the dew point.					

Equipment

Airless Spray: **Unit:** 2,000 – 2,400 psi **Tip:** 0.015 – 0.017
Hose: 1/4" or 3/8" **Note:** Do not use over 50 ft. hose
Air-Assist Sprayer: **Unit:** 500 – 600 psi **Tip:** 0.015 – 0.017
Tip Pressure: As needed for proper atomization
Conventional: DeVilbiss pressure pot with ± GA 503 gun and FF needle assembly with 777 air cap.
Roller: Vertical surfaces use ¼" woven nap, phenolic core. Horizontal surfaces use 3/8" woven nap, phenolic core.
Brush: Nylon polyester blend

Mixing Instructions (All products have a 3:1 ratio)

DO NOT SHAKE. Separately stir each component thoroughly. The flattening agents in the Part A resin may settle to the bottom of the can and cause a clumpy appearance; even more so in the Matte. Stir the Part A for 2 minutes or until the flattening agent suspends into the mixture and no clumps are present. Then mix the premeasured Part B with the Part A. Mix combined Parts A & B thoroughly by hand or slow speed drill to ensure they are blended together, but avoid incorporating air during mixing. DO NOT MIX THE PRODUCT WITH A HIGH SPEED MIXER. Allow a 2 minute "induction time" for the mixture of Parts A & B. After the 2 minutes, the mixture of Parts A & B should be poured into a larger container for water reduction and to maximize pot life.

Reduce the combined mixture of Parts A & B by slowly adding Clean Tap Water at 2% to 15% depending on application method and surface. Reduce less for vertical surfaces, high humidity and more porous substrates. Reduce more for horizontal surfaces, low humidity and smooth substrates. Do not mix more than 2 gallons of the 300 at a time in a 5 gallon container because the product is mass sensitive; increasing mass will reduce pot life.

To commence applying the product, once properly mixed per above instructions, the product should be poured off (increasing surface area) into a roller pan or other suitable containers in order to maintain the 60 minute pot life. If spraying the product from 5 gallon containers the pot life will be reduced to 20 minutes; therefore it must be sprayed within 20 minutes. Do not mix product towards the end of or past its pot life with freshly catalyzed material; discard unused product at the end of pot life. Do not reseal containers once product is catalyzed. Clean up with Acetone or Xylene.

Surface Preparation

Steel: Remove all loose rust, dirt, grease or other contaminants per SSPC-SP1, SSPC-SP2 and SSPC-SP3 (e.g., low or high pressure with cleaner).

Aluminum: Remove all oil, grease or soap film with a neutral biodegradable detergent or emulsion cleaner.

Galvanized Metal: Remove all oil, grease or soap film with a neutral biodegradable detergent or emulsion detergent.

Concrete / Masonry / Concrete Blocks: Clean masonry substrates with neutral biodegradable detergent or emulsion cleaner to remove laitance using low or high pressure washer. For high build systems, use Acrylic/Epoxy Primer for first coat (Note: Due to the vast differences in concrete substrates consult your sales representative for the proper coating system specifications).

Wood: Sand new wood to remove any surface contaminant and to lower grain. Previously finished wood should be sanded to provide good adhesion. Test patches are recommended.

Previously Painted Surfaces: Properly clean the surface of all dust, dirt, grease and foreign matter. Apply a test patch of the 300 to ensure adhesion of the 300 to the previously painted surface and also to ensure there will not be any delamination of the previously painted coating from the substrate.

Note: In order to insure optimum performance, remove the previous coating to bare substrate and then apply the proper coating system as specified by your sales representative.

Anti-Graffiti System: Follow appropriate surface preparation as noted above. For optimum performance use two coats of the 300 Matte / Satin.

THIS PRODUCT IS TO BE USED BY THOSE KNOWLEDGEABLE ABOUT PROPER APPLICATION METHODS. THIS PRODUCT IS FOR INDUSTRIAL USE ONLY. Read each component's Material Safety Data Sheet (MSDS) before use. Mixed materials may have the hazards of each individual component. Safety precautions must be strictly followed during storage, handling and use.