

PROGRAMMED SYSTEM TECHNIQUE (PST) **BASECOATS NORTH AMERICA**

VALOREM SB MM

Valorem SB MM solvent-based basecoat is a productive, high-performance system that achieves a fast, accurate color match for OEM solid, metallic, and pearl color effects. It delivers strong hiding power and fast coverage for use in National Rule areas.



SAFETY CONSIDERATIONS

Use suitable protection.



SURFACE ABRADING

- Complete panel
- Sand with P500 to P600 dry or P800 to P1000 wet Color blend area
 - De-gloss using P1000, dry or a gray scuff pad.



SURFACE CLEANING

Use suitable surface cleaners and technique to ensure a clean surface



MIXING - BY VOLUME

Standard Mix Mix

Part Valorem SB MM

Part Valorem Reducer (VR-70, VR-80, VR-90, VR-95) 1



EQUIPMENT

- HVLP Gravity Feed 1.3-1.5mm
- Compliant Gravity Feed 1.2-1.4mm
- HVLP 10 psi at the air cap maximum
- Consult spray gun manufacturer specifications.



APPLICATION

✓ 2-3 single coats or until opacity is achieved.



FLASH OFF at 70°F (21°C)

Flash Drying Between Coats

Flash 3-5 minutes between coats.

Flash Drying Before Clearcoat

Flash 15 minutes before clearcoat.



RECOATING

May be clearcoated with any Valorem clearcoat

Read the complete TDS and the product Safety Data Sheet (SDS) for detailed product information



TECHNICAL DATA SHEET (TDS) BASECOATS NORTH AMERICA Page 2 of 5

DESCRIPTION

Valorem SB MM solvent-based basecoat is a productive, high-performance system that achieves a fast, accurate color match for OEM solid, metallic, and pearl color effects. It delivers strong hiding power and fast coverage for use in National Rule areas.



SUITABLE SUBSTRATES

- Cleaned and properly prepared
 - Existing OEM finishes except for thermoplastic acrylic lacquer finishes.
 - o All Valorem primers and sealers.



PRODUCT AND ADDITIVES

- Valorem SB MM
- Valorem VR-70 Reducer Fast
 - o 65° 75° F (18°C 24°C)
- Valorem VR-80 Reducer Medium
 - o 75° 85° F (24°C 29°C)
- Valorem VR-90 Reducer Slow
 - 85° 95° F (29° 35°C)
- Valorem VR-95 Reducer Extra Slow
 - o 95+° F (35+° C)
- Valorem VH-302 Hardener

- Per OEM code formula
- Item #594507 (Gallon)
- Item #594516 (Gallon)
- Item #594515 (Gallon)
- Item #597819 (Gallon)
- Item #594462 (Quart)
- Stock unopened or used products in approved closed containers with proper labeling.
 Store in moderate temperatures. Optimum storage temperature is approximately 70°F (21°C). Avoid too much temperature fluctuation. The maximum temperature range for storage is 40°F 95°F (5°C 35°C).
- Shelf-life Valorem SB MM 2 years
 - o Refer to the price list for the most up-to-date shelf-life information.



BASIC RAW MATERIALS

- Valorem SB MM
- Valorem Reducers
- Valorem Hardeners
- Physically drying resins, solvents and pigments.
- Special solvent blends.
- Polyisocyanate resins.



SUBSTRATE PREPARATION

Pre-Cleaning

 The surface must be dry and free from grease, oil, and other foreign matter contaminants.



Surface Abrading

- Complete Panel
- Sand with P500 to P600 dry or P800 to P1000 wet.
- Color Blend Area De-gloss using a gray scuff pad.



Final Cleaning

 The surface must be dry and free from grease, oil, and other foreign matter contaminants.



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MIXING

Mix Standard Mix

1 Part Valorem SB MM

1 Part Valorem Reducer (VR-70, VR-80, VR-90, VR-95)

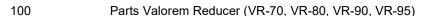


system hardness is desired, Valorem SB may be mixed with hardener.

Mix Hardened Basecoat Mix 100 Parts Valorem SB MM

10% Parts Valorem 56 Mivi 10% Valorem Hardener (VH-302 Hardener)

- Stir together, THEN-



✓ For the first layer of a 3-stage color, use 80% reducer.

If improved system robustness including stone chip resistance, adhesion, flexibility, and



BY VOLUME

VISCOSITY Ready to Spray

Valorem SB (1:1)

DIN # 4 At 70°C (21°C)

13 – 16 seconds



DIN #4

POT-LIFE WHEN MIXED

Product Mix

- Valorem SB colors, reduced
- Valorem SB colors, hardened and reduced

At 70°F (21°C)

- 6 months in a sealed container
- 4 hours



SPRAY GUN SETUP

HVLP or Compliant Spray Gun Setup

- HVLP Gravity: 1.3 1.5mm
- Compliant Gravity: 1.2 1.4mm

Application Air Pressure

- HVLP 10 psi (<0.7 bar) at cap maximum.
- Consult manufacturer specifications.



APPLICATION

Solid Colors

Apply 2-3 single coats or until opacity is achieved. Flash off between coats.

Metallic & Effect Colors

- Apply single coats until opacity is achieved. Flash off between coats.
 - When needed, apply an orientation coat.
 - o Increase the distance to approximately 8-12 inches and apply a light coat.



Spot Repairs

- VX-500 Blending Additive may be used as a clear foundation coat before starting the metallic spot repairs.
 - VX-500 Blending Additive is ready to spray. Apply one thin flowing coat as a blending foundation to allow for easier metallic orientation. Flash until dry.
- Apply thin coats until opacity is achieved. Flash off between each coat.
 - Extend each coat until coverage is obtained.
 - In the case of metallic colors, air pressure adjustments may be required to achieve the correct color control.
- After coverage is achieved, fade color into existing finish.



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FLASH OFF at 70°F (21°C) Flash Drying Between Coats

Flash 3-5 minutes between coats.

Flash Drying Before Clearcoat

Flash 15 minutes before clearcoat.



DRYING / CURING TIME at 70°F (21°C)

- Allow Valorem SB to dry for a minimum 15 minutes before applying the clearcoat.
- The maximum time Valorem SB may be left before clearcoat application:
 - Valorem SB Metallic colors: 48 hours
 - Valorem SB Solid colors: 5 hours
 - ✓ Recoat time may be extended to 48 hours with the proper addition of hardener.
- If maximum time is exceeded, scuff the dried color and reapply Valorem SB MM color before clearcoating.
 - Drying times are stated at recommended application method, film thickness, and object temperature.



TAPING AND MASKING

- After 20 minutes flash at 70°F (21°C), Valorem SB may be taped.
 - ✓ If heat is used, let the object cool down to ambient temperature before masking.



DENIBBING

- Allow the basecoat to flash sufficiently (≈20 minutes at 70°F (21°C))
 - Lightly sand the damaged area with P600 grit paper dry. Care must be taken to clean all sanding residue from surface.
 - ✓ Reapply color to the affected area, as needed.



RECOATING

· Clearcoat with any Valorem Clearcoat.



FILM THICKNESS

Using suitable application, 1 coat will achieve a thickness of ≈0.3-0.4 mils (≈8-10 µm).



THEORETICAL COVERAGE

- Actual coverage is dependent on many factors. These may include: the shape of the object, surface smoothness, application technique and other application variables.
 - Theoretical coverage: ≈175 ft²/gallon (≈4.3m²/liter) ready to spray per coat with 100% transfer efficiency at 1 mil (25.4 μm) dry film thickness.



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VOC / REGULATORY INFORMATION

Notice: Do not handle until the Safety Data Sheets have been read and understood. Regulations require that all employees be trained on Safety Data Sheets for all chemicals with which they come in contact. The manufacturer recommends the use of an air-supplied respirator when exposed to vapors or spray mist.

Valorem SB MM ready to spray
 Valorem VX-500 Blending Additive
 VOC: ≤5.0 lb./gal. (≤600 g/L)
 VOC: ≤6.4 lb./gal. (≤770 g/L)

AkzoNobel Inc., North America

Address: 1845 Maxwell Street - Troy, MI USA

Tel: 800.618.1010

FOR PROFESSIONAL USE WITH SUITABLE HSE EQUIPMENT

IMPORTANT NOTE The information in this data sheet is not intended to be exhaustive and is based on the present state of our knowledge and on current laws: any person using the product for any purpose other than that specifically recommended in the technical data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. Always read the Safety Data Sheet and the Technical Data Sheet for this product if available. All advice we give or any statement made about the product by us (whether in this data sheet or otherwise) is correct to the best of our knowledge but we have no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing otherwise, we do not accept any liability whatsoever for the performance of the product or for any loss or damage arising out of the use of the product. All products supplied and technical advices given are subject to our standard terms and conditions of sale. You should request a copy of this document and review it carefully. The information contained in this data sheet is subject to modification from time to time in the light of experience and our policy of continuous development. It is the user's responsibility to verify that this data sheet is current prior to using the product.

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