

Programmed System Technique (PST)
Basecoat
11/09/2021

DESCRIPTION

Basecoat WB is the color for the Lesonal[™] waterborne two-stage paint system. It provides color accuracy and ease of application. Basecoat WB is easily blended to provide the "invisible repair." When used with the Lesonal[™] clearcoat system a glossy and durable surface is achieved.

Safety
Considerations

Use suitable personal protection



AkzoNobel recommends the use of a fresh air supply respirator

Refer to the product Safety Data Sheet (SDS) for more complete safety information.

Surface Prep



Sand repair area using #P500-600 dry.

Mixing



100 Basecoat WB Color5-40 Lesonal Activator WB

Stir color formula mix thoroughly prior to adding Lesonal Activator WB

Equipment



Spray gun set up:

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

Application Air Pressure:

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

<u>Application</u>



Application-Metallic Colors

• 3 x 1 Coats

Application - Solid Colors

2-3 x 1 Coats

Flash-off



Flash Between Coats at 70°F (20°C)

Until completely matte in appearance

Flash Before Clearcoat at 70°F (20°C)

15-20 minutes

Recoatable With



Lesonal has a selection for clearcoats for application over Basecoat WB.
 The selection may be based on many considerations including environment, size of the repair, or time.

Read complete TDS for detailed product information



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PRODUCT AND ADDITIVES

Toners	Basecoat SB MM (Mixing Machine) toners Item number by color		
SEC Colors	• WB MM 307BA 0.5L	SEC Blue to Red	Item # 551410
	 WB MM 307BB 0.5L 	SEC Cyan to Purple	Item # 551412
	 WB MM 307GA 0.5L 	SEC Green to Purple	Item # 551413
	 WB MM 307RA 0.5L 	SEC Red to Gold	Item # 551952
	 WB MM 307RB 0.5L 	SEC Magenta to Gold	Item # 551327
	 WB MM 307WA 0.5L 	SEC Silver to Green	Item # 551135
	 WB MM 307YA 0.5L 	SEC Gold to Silver	Item # 551340
	 WB MM 308NB 0.5L 	SEC Orange (Red) Metallic	Item # 551342
	 WB MM 308NC 0.5L 	SEC Coarse Sparkling Silver	Item # 551343
	 WB MM 308ND 0.5L 	SEC Blue Metallic	Item # 551341
	 WB MM 308NF 0.5L 	SEC Fine Sparkling Silver	Item # 551344
	 WB MM 308NM 0.5L 	SEC Medium Sparkling Silver	Item # 551353
	 WB MM 308NS 0.5L 	SEC Sparkle Silver Rainbow	Item # 551371
	 WB MM 308SA 1.0L 	SEC Silver Argentum*	Item # 551544
	 WB MM 309NA 0.5L 	SEC Lilac to Blue	Item # 551354
	 WB MM 309NC 0.5L 	SEC Green to Orange	Item # 551356
	 WB MM 309ND 0.5L 	SEC Lilac Sparkle	Item # 551352
	 WB MM 309NE 0.5L 	SEC Green Sparkle	Item # 551402
	 WB MM 309NG 0.5L 	SEC Turquoise to Gold	Item # 551397
	 WB MM 309NJ 0.5L 	SEC Gold to Blue	Item # 551400



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- *SEC Argentum uses unique application. Please refer to the WB Argentum TDS for specifics.
- Lesonal SEC Colors are used in many OEM color formulas. In addition, they may be used to add interesting color effect to special projects. If an OEM formula is not used for custom applications, the SEC toner must be mixed with MM02 and reduced to maintain VOC compliance.
- Generally, these special effects are most vivid when used in or over black or darker colors. For this, Lesonal Primer Pro Black, Primer Pro LV Black, or Lesonal 23 toner can be used for the foundation.
- If used over a Basecoat WB 23 application, the first layer color mix must contain 5-10% Hardener WB.

Hardeners

- Lesonal Hardener WB (0.5 Liter)
- Item # 553736
- Recommended for use to improve system robustness including stone chip resistance, adhesion and system hardness.
- Add 5-10% Lesonal Hardener WB in the first layer of tri-coat systems or where the recommended film thickness of the entire system may be exceeded.

Activator

Lesonal Activator WB

- Item # 391583

- **Additives**
- Basecoat WB Ready Mix Additive

Suitable for all temperatures.

- Item # 391584
- Lesonal Gun Cleaner WB
- Item # 391581

METHOD OF USE

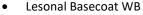
Suitable substrates





- Stable existing finishes
- Lesonal primer surfacers and sealers
- Do not apply over thermoplastic acrylic lacquers
- Do not apply directly over acid containing washprimers or pre-treatments.

Basic Raw Materials •



- Physically drying binders Polyisocyanate resins
- Lesonal Hardener WB
- Lesonal Activator WB
- Water / Glycol mixture
- Lesonal Gun Cleaner WB
- Water / Special chemical blend



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Substrate preparation

Pre-cleaning

- If needed pre-wash the repair with warm soap and water. Rinse completely with clean water.
- Clean with Lesonal Surface Cleaner, Autoprep UltraPrep (VOC compliant) or Plastic Surface Cleaner.











Sanding Preparation

	Sanding	Additional Information
Existing Finishes - Dry	Initial - #P360-P400Final - #P500-P600	 Respect a maximum 100 sanding grit step difference or less throughout the sanding process.
Existing Finishes - Wet	Initial - #P360-P400Final - #P600-P800	 Respect a maximum 200 sanding grit step difference or less throughout the sanding process.
Blend Area - Dry	• #P800-P1000	 On an interface pad and D/A sander.
Blend Area - Wet	 Gray scuff pad 	 Abrade with pad using quality scuffing paste and water



Surface Cleaning – Prior to Paint Application

Clean with Lesonal Surface Cleaner, Autoprep UltraPrep (VOC compliant) or Plastic Surface Cleaner.

Product



Mixing Toner Prep and Use

- Shake paint on a paint shaker or vigorously by hand for 45 seconds before first use.
- For metallic, pearl or effect toners, also stir the mixing color before first use.
- Gently shake Lesonal Basecoat WB toner before each pour.
- Once all the toners in a formula have been combined, stir the paint prior to reduction and then stir again after the Activator WB has been added.

Mixing color formulas



Formulas

- A wide range of formulas are available to match the most popular OEM colors. These are available in MIXIT or Color Manager.
 - o Reduction and addition of additives can also be done through MixitPro Color Manager.

Custom Colors

Colors can also be custom mixed.



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APPLICATION TECHNIQUE

Basecoat WB

Mixing - General Recommendations



Mix 100

Basecoat WB

5-40 **Activator WB**

- It is important to stir the color formula before reduction.
- As a guide, reduce solid colors 5-20%, pearl colors 10-20% and metallic colors 20-40%.
- For colors containing mostly or all MM25 black, a maximum of 5% Activator WB is allowed.
- For easy mixing, final reduction may be done with MIXIT or Color Manager while the color formula is being mixed.

Basecoat WB **Mixing Custom Metallic Colors or SEC Toners**



- Basecoat WB MM Metallic or SEC Toner 1
- 4 Basecoat WB MM02 Correction Binder



MEASURING STICK

- Stir together and then reduce as normal with 20-40 parts of Activator WB.
- Solid toner colors may simply be combined without the addition of MM02 before reduction.

Note: When mixing metallic colors, please follow the recommended mixing directions. This will ensure that the material will function as intended and not produce any unanticipated results.

Basecoat WB Mixing - Using Ready Mix Additive (to extend

mixed metallic color pot-life)

100 grams Basecoat WB MM Metallic color formula (Stirred)

Basecoat WB Ready Mix Additive 5 grams

- Stir together and then reduce as normal with 20-40 parts of Activator WB.
- Ready Mix Additive should only be used in metallic colors. Do not use with solid colors.

Basecoat WB Mixing - Using **Hardener WB** (for optimum system

robustness)

BY VOLUME #9 MEASURING STICK

Mix

Mix

100 Basecoat WB 5-10 Hardener WB

- Use the dashed (centimeter) scale on the right side of the Lesonal measuring stick to add Hardener WB to the Basecoat WB. Stir together before adding Activator WB.
- After stirring further mix by reducing as normal with the Lesonal #9 measuring stick.



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Viscosity -When Mixed



20-35 seconds

Measured with a DIN #4 viscosity cup at 70°F (21°C).

Pot-life when

Mixed



Product Mix

- Basecoat WB, Solid or Pearl colors (mixed)
- Basecoat WB, Metallic colors
- Basecoat WB, Metallic colors with Ready Mix Additive
- Basecoat WB, SEC colors or those containing MM03
- Basecoat WB Colors containing 5-10% Hardener WB

70°F (21°C)

- 3 months
- 1 week
- 3 months
- 24 hours
- 1.5 to 3 hours

Spray Gun Set-Up



Consult spray gun manufactures instructions for specific spray gun pressure specifications.

Spray Gun Fluid Tip **Application Pressure** HVLP Gravity Fed 1.3 – 1.5mm <10 psi (<0.7 bar) at cap.

Compliant Gravity Fed psi per spray gun manufacturer. 1.2 - 1.4mm

Paint cups that include 125-micron paint filters for waterborne coatings are recommended for suitable straining

Basecoat WB

Application



Basecoat WB Solid Colors

- Apply 3 single coats or until opacity is achieved.
- Use increased air-flow to flash off between coats or until matte in appearance.



Basecoat WB Metallic Colors

- Apply 1 full coat, 100 % closed. If needed apply intermediate coats, 80% as wet as the first coat until coverage is achieved. Flash dry between coats until the basecoat dries completely to a matte finish.
- If needed, apply an orientation coat -
 - Increase the distance to approximately 12 to 14 inches and apply a damp coat with no wet areas. The finish should look like "satin" when completed.



Basecoat WB Spot Repair (Blending)

- MM02 Correction Binder may also be used as a clear foundation coat before commencing the metallic spot repairs. Reduce 10-20% with Activator WB and apply one thin single coat of this blending foundation to allow for an easier metallic orientation.
- When making spot repairs, apply thin color coats until opacity is achieved. Extend the area slightly with each coat. Dry until matt between each coat before fading out.



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- Metallic colors may require air pressure adjustments for the best color match.
- Finally, apply 1-2 orientation coats fading out well beyond the coverage coats.
- In the case of high hiding colors and fading out, the color transparency can be increased by adding reduced MM02 to the ready to spray (RTS) mixed color prior to blending, at a ratio of 100 parts RTS color with 50 parts RTS MM02.

DRYING / CURING TIME

Basecoat WB Application



Flash Between Coats at 70°F (21°C)

Flash Before Clearcoat at 70°F (21°C) 20-30 minutes.

- 3-5 minutes between coats
- 15-20 minutes prior to special effect or pearl.

Flash and Drying • Notes



- Humidity and airflow influence the Basecoat WB flash off and drying times.
- Flash can be reduced to a minimum by using air accelerator systems at approximately 3 feet (≈ 1 meter) from the repair, thus increasing the airflow over the object.
- Introducing heat is also an option. When heat is used for drying, allow object to cool down to application temperature before proceeding with color or clearcoat application.
 - o Infrared heating is not recommended for flash drying of Lesonal Basecoat WB.

Film Thickness – Using Suitable Application



- Basecoat WB solid, metallic and pearl colors: 0.4-0.9 mils. (10-20μm)
- The total dry layer thickness of Basecoat WB should not exceed 1.2 mils (30µm)

Drying / Curing



- Allow Basecoat WB to dry for 15 to 20 minutes at 70°F (20°C) before applying the clearcoat.
 - Drying times are stated at recommended application method, film thickness, and object temperature.
- The maximum time Basecoat WB may be left before clear is 24 hours after which the basecoat must be abraded and color re-applied.

Two Tone
Applications



- Basecoat WB colors can be taped (i.e., two-toning) after 20 minutes flash-off at 75°F (24°C).
- Increasing temperature especially in combination with air movement improves the ability to apply masking to Basecoat WB. If heat is used let the object cool down to ambient temperature before masking.



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POST-APPLICATION

Recoating



 All Lesonal clearcoats. Lesonal has a selection of clearcoats for application over Basecoat WB. The selection is based on many considerations including environment, size of the repair, and time available.

What to Do



Second Repair

• If during the application of Basecoat WB Solid or Metallic color, some damage occurs such as dust impregnation or perspiration spots, allow the Basecoat WB to flash off for 20 minutes at 70°F (20°C). Lightly sand the damaged area with #P600 grit paper dry. Care must be taken to clean up all sanding residue. Re-apply color to the affected area as needed.

Fisheyes / Craters

• Fisheyes maybe caused by silicones or other contamination. In that event apply 2 mist coats of Basecoat WB over the contaminated area and proceed with the repair allowing longer flash times. If severe, it may be necessary to allow a dry time of 20-30 minutes, sand, and continue to spray Basecoat WB. Adding Anti-Silicone to Lesonal WB is not recommended.

ADDITIONAL INFORMATION

Cleaning of Equipment



- Clean and rinse the spray gun thoroughly after use with Lesonal Guncleaner WB.
 - o Do not use any conventional thinner unless removing dried Basecoat WB deposits.
 - Do not soak the spray gun for long periods either with Lesonal Guncleaner WB or Activator WB.
- Purge the spray gun with Lesonal Activator WB prior to Basecoat WB application.

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 among others.

• 150 ft²/liter of unmixed paint per single coat

TECHNICAL DATA SHEET NORTH AMERICA



Basecoat WB™

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voc/ Regulatory

Product

VOC Pounds per Gallon

VOC Grams per Liter

Information



Basecoat WB ready to spray

<3.4

<407

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.

Product Storage



Product shelf-life is determined when products are stored unopened at 70°F (20°C). Please reference the Lesonal Shelf-Life TDS and Lesonal Product Price List for the shelf life limits for each Basecoat WB component.

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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 Material 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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