

Programmed System Technique (PST)

Basecoat

09/12/2019

# **DESCRIPTION**

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

Safety					
Considerations					

Use suitable personal protection

Akzo Nobel Car Refinishes recommends the use of 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.



2 Basecoat SB Color 1 Lesonal Reducer

Stir color formula mix thoroughly prior to adding Lesonal Reducer

BY VOLUME #4 STICK

#### Equipment



Spray gun set up:

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

Application pressure:

- HVLP 10 psi (<0.7 bar) at cap maximum.</li>
- Consult spray gun manufacturer specifications.

# Application

### **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)

• 2-5 minutes

### Flash Before Clearcoat at 70°F (20°C)

15-20 minutes

#### **Recoatable With**



Lesonal has a selection for clearcoats for application over Basecoat SB.
 The selection is 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 – Stoc	k number by color
SEC Colors	• SB MM 307BA 0.5L	<ul><li>SEC Blue to Red</li></ul>	– Stock #551318
	<ul> <li>SB MM 307BB 0.5L</li> </ul>	<ul> <li>SEC Cyan to Purple</li> </ul>	<ul><li>Stock #551550</li></ul>
	<ul> <li>SB MM 307GA 0.5L</li> </ul>	<ul> <li>SEC Green To Purple</li> </ul>	<ul><li>Stock #551317</li></ul>
	<ul> <li>SB MM 307RA 0.5L</li> </ul>	<ul> <li>SEC Red To Gold</li> </ul>	<ul><li>Stock #551319</li></ul>
	<ul> <li>SB MM 307RB 0.5L</li> </ul>	<ul> <li>SEC Magenta To Gold</li> </ul>	<ul><li>Stock #551321</li></ul>
	<ul> <li>SB MM 307WA 0.5L</li> </ul>	<ul> <li>SEC Silver To Green</li> </ul>	<ul><li>Stock #551357</li></ul>
	<ul> <li>SB MM 307YA 0.5L</li> </ul>	<ul> <li>SEC Gold To Silver</li> </ul>	<ul><li>Stock #551358</li></ul>
	<ul> <li>SB MM 308NB 0.5L</li> </ul>	<ul> <li>SEC Orange (Red) Metallic</li> </ul>	<ul><li>Stock #555878</li></ul>
	<ul> <li>SB MM 308NC 0.5L</li> </ul>	<ul> <li>SEC Coarse Sparkling Silver</li> </ul>	<ul><li>Stock #555880</li></ul>
	<ul> <li>SB MM 308ND 0.5L</li> </ul>	<ul> <li>SEC Blue Metallic</li> </ul>	<ul><li>Stock #555904</li></ul>
	<ul> <li>SB MM 308NF 0.5L</li> </ul>	<ul> <li>SEC Fine Sparkling Silver</li> </ul>	<ul><li>Stock #555914</li></ul>
	<ul> <li>SB MM 308NM 0.5L</li> </ul>	<ul> <li>SEC Medium Sparkling Silver</li> </ul>	– Stock #555917
	<ul> <li>SB MM 308NS 0.5L</li> </ul>	<ul> <li>SEC Sparkle Silver Rainbow</li> </ul>	<ul><li>Stock #555862</li></ul>
	<ul> <li>SB MM 308SA 1.0L</li> </ul>	<ul><li>SEC Silver Argentum*</li></ul>	<ul><li>Stock #551373</li></ul>
	<ul> <li>SB MM 309NA 0.5L</li> </ul>	<ul> <li>SEC Lilac To Blue</li> </ul>	<ul><li>Stock #551359</li></ul>
	<ul> <li>SB MM 309NC 0.5L</li> </ul>	<ul> <li>SEC Green to Orange</li> </ul>	<ul><li>Stock #556065</li></ul>
	<ul> <li>SB MM 309ND 0.5L</li> </ul>	<ul> <li>SEC Lilac Sparkle</li> </ul>	<ul><li>Stock #555882</li></ul>
	<ul> <li>SB MM 309NG 0.5L</li> </ul>	<ul> <li>SEC Turquoise To Gold</li> </ul>	<ul><li>Stock #551320</li></ul>
	<ul> <li>SB MM 309NJ 0.5L</li> </ul>	<ul> <li>SEC Gold to Blue</li> </ul>	<ul><li>Stock #555865</li></ul>



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# SEC Colors Continued

- \*SEC Argentum requires unique application. Please refer to the SB 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.
- 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 SB application, the first layer color mix must contain 10% hardener to remain within VOC regulations.

#### Hardeners

- Lesonal Clear Hardener (Quart)
- Stock # 395734
- ✓ To maintain National Rule VOC for 3 stage colors, 10% hardener must be added to the foundation color.
- ✓ Hardener may be added to extend clearcoat time of Basecoat SB Solid colors.
- ✓ Hardener should be added to Basecoat SB when spraying soft, foam parts.

#### Reducers

- Lesonal Reducer Extra Fast (Gallon)
- Stock # 394318
- Lesonal Reducer Fast (Gallon)
  - onal Reducer Fast (Gallon)

50°F – 60°F (10°C – 16°C)

- 60°F 70°F (16°C 21°C)
- Lesonal Reducer Medium (Gallon)
  - onal Reducer Medium (Gallon) Stock # 394295 ○ 70°F – 80°F (21°C – 27°C)
- Lesonal Reducer Slow (Gallon)
  - 80°F 90°F (27°C 32°C)
  - Lesonal Reducer Extra Slow (Gallon)
    - Above 90°F (32°C)

Stock # 394695

Stock # 394893

- Stock # 394938

#### **Additives**

- Basecoat SB Blending Additive
- Stock # 390166

### **METHOD OF USE**

#### **Suitable substrates**

- OEM finishes
- Stable existing finishes
- Lesonal primer surfacers and sealers.
- Lesonal SB Blending Additive
- Do not apply over thermoplastic acrylic lacquers, in the case of lacquer, the entire lacquer finish should be removed or must be sealed with a Lesonal undercoat system.



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### Basic Raw Materials

- Lesonal Basecoat SB
- Lesonal Reducers
- Lesonal Clear Hardener
- Physically drying binders
- Special solvent blends
- Polyisocyanate resin

#### 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 Ultra Prep (VOC compliant) or Plastic Surface Cleaner.



#### **Sanding Preparation**

Existing Finishes - Dry

#### Sanding

- Initial #P360-P400
- Final #P500-P600
- Existing Finishes Wet
- Initial #P360-P400
- Final #P600-P800

#### **Additional Information**

- Respect a maximum 100 sanding grit step difference or less throughout the sanding process.
- Respect a maximum 200 sanding grit step difference or less throughout the sanding process.

# Surface Cleaning – Prior to Paint



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

## Product Agitation



#### Stirring

- Shake paint on a paint shaker for 5-10 minutes before first use.
- Stir mixing machine toners twice a day for 15 minutes.
- Stir or shake vigorously before each use.

# Mixing color formulas



#### **Formulas**

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

### **Hand Mixing Colors**

Colors can also be custom mixed.



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# Basecoat SB



MEASURING STICK

#### Mix

- 2 Basecoat SB
- 1 Lesonal Reducer
- For easy mixing final reduction may be done with Mixit while the color formula is mixed.
- As an option in cooler or poor airflow situations, Lesonal SB may be over-reduced a maximum of 10%. This will aid in easier application and flash time.
- If the mix is for the first layer of a 3-Stage color, the mix must contain 10% hardener.

# Basecoat SB Mixing with



#### Mix

- 10 Basecoat SB
- 1 Clear Hardener
  - Stir Then -
- 2 Basecoat / Hardener combination
- 1 Lesonal Reducer
- Use the dashed (centimeter) scale on the right side of the Lesonal measuring stick to add hardener to the Basecoat SB. Stir together before adding reducer.
- Further mix by reducing 2:1 as normal with the Lesonal #4 measuring stick.

# Viscosity – When Mixed



14-16 seconds

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

### Pot-life when Mixed



### Product Mix

- Basecoat SB (solid, metallic or pearl colors mixed)
- Basecoat SB 3-Stage pearl colors
- Basecoat SB Special Effect Colors (SEC)
- Basecoat SB Colors containing 10% hardener

## 70°F (21°C)

- 6 months
- 24 hours
- 24 hours
- 4 hours

### Spray Gun Set-Up



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

Spray GunFluid TipApplication Pressure● HVLP Gravity Fed1.3 − 1.5mm<10 psi (<0.7 bar) at cap.</td>

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



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# **APPLICATION TECHNIQUE**

# **Basecoat SB Application**



#### **Basecoat SB Solid Colors**

- Apply 3 single coats or until opacity is achieved. For primed areas or areas where extra coverage is required, first apply a single thin coat.
- Flash off 2-5 minutes between coats.

#### **Basecoat SB Metallic Colors**

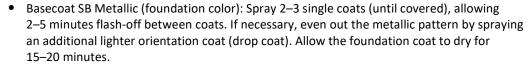
- Apply 3 single coats or until opacity is achieved. Spray second and third coat somewhat thinner than the first to promote metallic orientation. Allow approximately 2-5 minutes flash off between each coat.
- If necessary, even out the metallic pattern with an orientation coat after the third coat has flashed off completely. This is achieved by pulling the gun an additional two to four inches from the panel and applying a lighter orientation coat (drop coat). Do not make this coat too wet. With HVLP equipment, it is not necessary to lower the pressure, although this may be done in order to control the color.

### **Basecoat SB Three Step Pearls**



- Basecoat SB Solid Color (foundation coat): Spray 3 single coats, allowing approximately 2-5 minutes flash-off between each coat. Over primed areas and areas where extra coverage is required, apply first a single thin coat. Allow the foundation coat to dry for 15–20 minutes.
- Basecoat SB Pearl Color: Spray three to four even thin coats, allowing 2-5 minutes flash-off between coats. Do not lower the air pressure for the final coat.

### **Basecoat SB Three Step Metallic**



Midcoat Color: Spray 3-4 single wet coats, allowing a flash-off time of 5 to 10 minutes between coats.

#### **Basecoat SB SEC Colors**

- Basecoat SB Solid Color (foundation coat): Spray 3 single coats, allowing approximately 2-5 minutes flash-off between each coat. Over primed areas and areas where extra coverage is required, apply first a single thin coat. Allow the foundation coat to dry for 15–20 minutes.
- Basecoat SB SEC Color: Spray three to four even thin coats, allowing 2-5 minutes flash-off between coats. Do not lower the air pressure for the final coat.
  - As there is some transparency with the Special Effect Color, it is advised to apply as evenly as possible trying to avoid repeating overlaps.









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#### **Film Thickness**



## **Using Suitable Application**

Basecoat SB solid, metallic and pearl colors: 0.3-0.4 mils

#### **Drying / Curing**



- Allow Basecoat SB to dry for 15 to 20 minutes at 70°F (20°C) before applying the clearcoat.
  - Drying times are stated at recommended application, film thickness and object temperature.
- The maximum time Basecoat SB may be left before clear:
  - o Basecoat SB Metallic Color: 48 hours
  - Basecoat SB Solid Color: 5 hours
    - To extend the recoat time of solid colors to 48 hours, add 10% Lesonal Clear Hardener prior to the addition of Lesonal Reducer

# Two Tone Applications



 Basecoat SB Solid or Metallic colors can be taped off with fine line masking tape after a 20-minute flash-off at 70°F (20°C) and a second color of Basecoat SB can then be applied.

### **POST-APPLICATION**

### Recoating



- Lesonal Universal Clear
- Lesonal ProAir 2 Pack
- Lesonal ProAir LV 2 Pack
- Lesonal Universal Eco Clear LV

#### What to Do



#### **Second Repair**

• If during the application of Basecoat SB Solid or Metallic color, some damage occurs such as dust impregnation or perspiration spots, allow the Basecoat SB to flash off for 20 minutes at 70°F (20°C). Lightly sand the damaged area with #P600 to #P800 grit paper wet. As there is no clearcoat to protect the base coat at this stage, care must be taken to clean up all sanding residue.

#### Lifting / Wrinkling

 Some substrates are not original or are unknown. Then it is reasonable to apply 2-3 coats of sanding primer surfacer, prior to Basecoat SB, over the whole panel. A pigmented sealer may also be used as a wet-on-wet process.

#### Fisheyes / Craters

• Fisheyes maybe caused by silicones or other contamination. In that event apply 2 mist coats of Basecoat SB 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



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to spray Basecoat SB. Adding Anti-Silicone to Lesonal SB is not recommended, as this may lead to risk of poor clearcoat adhesion.

### ADDITIONAL INFORMATION

# Cleaning of Equipment



- Clean equipment following local and federal regulations.
- In compliant localities, use a VOC compliant high-quality solvent borne gun cleaner. For national rule regions, a use high quality lacquer thinner.
- For efficient cleaning and less evaporated cleaning solvents, an enclosed automatic gun cleaning machine is suggested.

# Theoretical Coverage



Theoretical coverage is dependent of many factors. These may include: the shape of the object, surface smoothness, application technique and other application variables among others.

• 150 sq. ft./liter of unmixed paint per single coat

# VOC / Regulatory Information



Product	VOC Pounds per Gallon	VOC Grams per Liter
<ul> <li>Basecoat SB mixed 2:1 with Lesonal Reducers:</li> </ul>	6.70	<800
<ul> <li>Basecoat SB SEC mixed 2:1+10% Lesonal Reducers:</li> </ul>	6.70	<805
<ul> <li>Basecoat SB+10% Clear Hardener mixed 2:1 with Lesonal Reducers:</li> </ul>	6.50	<780

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  $^{\circ}$  C). Please reference the Lesonal Shelf Life TDS for the shelf life limits for each Basecoat SB component

TECHNICAL DATA SHEET NORTH AMERICA

# **LESONAL®**

# Basecoat SB™

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### FOR PROFESSIONAL USE ONLY

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 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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#### **Head Office**

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