BASECOAT SB SOLID, METALLIC AND THREE-STEP COLORS

DESCRIPTION: Basecoat SB is the color for the Lesonal™ 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™ clearcoat system a glossy and durable surface is achieved.

PRODUCTS & ADDITIVES:

PRODUCTS:  
—Basecoat SB Solid  
—Basecoat SB Metallic and Pearl Colors

REDUCERS:  
—Lesonal Reducer Extra Fast: for spot and panel repairs.  
  Temperature range: 50°F–60°F (10°C–16°C).  
—Lesonal Reducer Fast: for spot and panel repairs.  
  Temperature range: 60°F–70°F (16°C–20°C).  
—Lesonal Reducer Medium: for panel repairs and large areas.  
  Temperature range: 70°F–80°F (20°C–27°C).  
—Lesonal Reducer Slow: for larger areas and complete paint jobs.  
  Temperature range: 80°F–90°F (27°C–32°C).  
—Lesonal Reducer Extra Slow: a specially developed reducer, which can be used in extremely hot temperatures. Temperature range: above 90°F (32°C).

ADDITIVES:  
—Lesonal Clear Hardener, Lesonal LV Clear Hardener or LV Clear Hardener Fast: hardener that can be used to extend clearcoat time of Basecoat SB solid colors. See further information in this TDS under “Drying Times.”

Note: Any one of these hardeners may also be used under extreme circumstances, while spraying soft “foam” spoilers. Then it is necessary to add 5% hardener to Basecoat SB, before continuing to add Lesonal Reducer. Lesonal Flex Additive is not needed in Basecoat SB.

NOTE: To meet National Rule VOC levels for three-stage colors. The addition of 10% Lesonal Clear Hardener, Lesonal LV Clear Hardener or LV Clear Hardener Fast must be added to the “foundation color.”

—Lesonal Basecoat SB Blending Additive: a special blending additive that may be used while making spot repairs or fading out Basecoat SB. For more information please see the TDS on “Lesonal Basecoat SB Blending Additive”.

CLEARCOATS: Lesonal has a selection of clearcoats for application over Basecoat SB. The selection is based on many considerations, including environment, VOC regulations and size of repair.

BASIC RAW MATERIALS: Basecoat SB: physically drying binders.  
Lesonal Reducers: special solvent blends.  
Hardeners: polyisocyanate resin.
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APPLICATION:

1. Contains acrylic resins and other ingredients.

2. 2:1 Basecoat SB Solid/Metallic Lesonal Reducer

3. Use the Lesonal Measuring Stick #4.

4. 3x1 HVLP—Gravity
   0.051”–0.059” (1.3–1.5 mm)
   HVLP—Siphon
   0.071”–0.087” (1.8–2.2 mm)
   Max 10 psi (0.8 bar)

5. 2–5 minutes at 70°F (20°C)

6. (Metallic Orientation Coat if necessary)
   1–2x1
   HVLP—Gravity
   1.3–1.5 mm
   HVLP—Siphon
   1.8–2.2 mm
   Max 10 psi (0.8 bar)

7. 15–20 minutes at 70°F (20°C)

8. Apply Clear

SUITABLE SURFACES:

Basecoat SB can be applied directly over:
—OEM 2-step solid and metallic systems and over existing finishes; degreased and sanded with 3M #P500 to #P600 grit paper dry or 3M #P600 to #P800 grit wet, but not over thermoplastic acrylic lacquers. In that case, the entire panel of lacquer must be sealed with a compliant Lesonal undercoat system.
—Any Lesonal preparatory product that is compliant for local regulations.

SURFACE PREPARATION:

—All products that are to be sanded, you may have to initial sand but final sanding with 3M #P500 to #P600 grit paper dry or 3M #P600 to #P800 grit wet is recommended.
—Wet-on-wet products, please follow recommendation for product in use by consulting the relevant Technical Data Sheet.
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MIXING RATIO:  Basecoat SB solid or metallic colors are mixed as follows:
   2 parts by volume of Basecoat SB Color with
   1 part by volume of Lesonal Reducer
For easy and accurate mixing, use the Lesonal Measuring Stick #4.

For example: pour Basecoat SB to the #1 in the first column and then pour Lesonal Reducer to the #1 in the second column

NOTE: As an option when fading out or applying in cold/poor airflow environments, Basecoat SB may be over-reduced with an additional 10% of Lesonal Reducer. This will aid in easier application and faster flash times. Use the centimeter side of the Lesonal measuring stick for over-reduction.

SPRAYING VISCOSITY:  The proper spraying viscosity is achieved by using the recommended mixing ratio.
Basecoat SB Solid or Metallic Color:  14–16 sec. DIN cup #4 at 70°F (20°C).

POT LIFE:  Basecoat SB Solid or Metallic Color: 6 Months
Basecoat SB Pearl colors (three stage): 24 hours
Basecoat SB with hardeners and reducers: 4 hours

SPRAY GUN & PRESSURE:

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<th>Fluid Tip</th>
<th>Spraying Pressure</th>
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| Siphon Feed      | 0.055"–0.063"
     (1.4–1.6 mm) | 40–50 psi (3–4 bar) |
| Gravity Feed     | 0.051"–0.059"
     (1.3–1.5 mm) | 40–50 psi (3–4 bar) |
| HVLP Siphon      | 0.071"–0.087"
     (1.8–2.2 mm) | max 10 psi (max 0.8 bar) |
| HVLP Gravity     | 0.051"–0.059"
     (1.3–1.5 mm) | max 10 psi (max 0.8 bar) |

APPLICATION OF BASECOAT SB SOLID:

Spray 3 single coats; allow approximately 2–5 minutes flash-off between each coat. Primed areas and over areas where extra coverage is required, first apply a single thin coat.
APPLICATION OF BASECOAT SB METALLIC: Spray 3 single coats, at 4–6 inches from the panel allow approximately 2–5 minutes flash off between each coat. If necessary even out the metallic pattern with a metallic 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.

APPLICATION OF 3-STEP PEARL: 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.

APPLICATION OF 3-STEP METALLIC: Basecoat SB Metallic (foundation color): Mix as any metallic color; 2 parts by volume of Metallic foundation color with 1 part by volume of Lesonal Reducer. Spray 2–3 single coats (until covered), allowing 2–5 minutes flash-off between coats. If necessary, even out the metallic pattern by spraying an additional lighter orientation coat (drop coat).

Mid-Coat Color: Mix the transparent mid-coat color; 2 parts by volume of Basecoat SB color with 1 part by volume of Lesonal Reducer. Spray 3–4 single wet coats, allowing a flash-off time of 5 to 10 minutes between coats.

NOTE: To meet National Rule VOC levels for three-stage colors. The addition of 10% Lesonal Clear Hardener, Lesonal LV Clear Hardener or LV Clear Hardener Fast must be added to the “foundation color.” Use the centimeter side of the Lesonal measuring stick for the 10% addition of hardener.

DRYING TIME: Allow Basecoat SB to dry for 15 to 20 minutes at 70°F (20°C) before applying the clearcoat. The maximum time Basecoat SB may be left before clear:
Basecoat SB Metallic Color: 48 hours
Basecoat SB Solid Color: 5 hours

To extend the re-coat time of solid colors to 48 hours, mix Basecoat SB as follows: add 10% Lesonal Clear Hardener, Lesonal LV Clear Hardener prior to the addition of Lesonal Reducer.

FILM THICKNESS: Basecoat SB Solid or Metallic: 0.3–0.4 mils per single coat.

COVER RATE: Approximately 150 sq. ft./liter of unmixed paint per single coat.
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TWO-TONE APPLICATION: Basecoat SB Solid or Metallic can be taped off with fine line masking tape after 20 minutes flash-off at 70°F (20°C) and a second color of Basecoat SB can then be applied.

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 3M #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. Proceed by making a spot repair as described in the TDS, "Spot Repairs with Basecoat SB."

WHAT TO DO: In the case of lifting; some substrates are not original and are unknown. Then it is reasonable to apply 2-3 coats of a sanding primer surfacer, prior to Basecoat SB, over the whole panel. A pigmented sealer may also be used as a wet-on-wet process. In blending situations, it is necessary to first apply Lesonal 1K Basefix.

In the case of fisheyes caused by silicones, the best thing to do is spray 2 mist coats over the contaminated area, then proceed, allowing longer flash off times. If severe, it may be necessary to allow a dry time of 20-30 minutes, sand and continue to spray Basecoat SB. Adding anti-silicone to Lesonal SB is not recommended, as this may lead to a risk of poor adhesion of the clearcoat.

STOCK KEEPING:

AVAILABILITY: Basecoat SB Solid and Metallic is available ready-mixed or can be mixed by means of the Lesonal Color Mixing System.

COLOR RANGE: See the Lesonal Color Listing or the computerized MIXIT System.

SHELF LIFE: Basecoat SB MM Toners: Four years if stored unopened at room temperature.

SAFETY ASPECTS:

READY TO SPRAY VOC: Basecoat SB, 2:1 with Lesonal Reducer: 6.6 lb/gal 794 g/liter
   Basecoat SB, 2:1 plus additional 10% Lesonal Reducer: 6.7 lb/gal 805 g/liter

NOTICE: Do not handle until the Material Safety Data Sheets have been read and understood. Regulations require that all employees be trained on Material 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.