

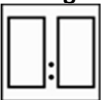



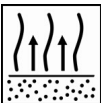



LV Matt Effect Clearcoat

Programmed System Technique (PST)
Clearcoat
08/04/2020

DESCRIPTION

LV Matt Effect Clearcoat is an easy to use three-component matting finish for application in regulated markets. With a ready to spray VOC level of less than 2.1 lb/gal (<250 g/l), the desired gloss level can be achieved by mixing combinations of LV Matt Effect Low Gloss and Semi-Gloss.

<div>Safety Considerations</div> <div></div>	<ul style="list-style-type: none">• 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.
<div>Suitable Substrates</div> <div></div>	<ul style="list-style-type: none">• Basecoat WB• Basecoat WB GT• Properly prepared existing finishes
<div>Mixing</div> <div></div>	<div><div>Mixing</div><div>To Make M3 Matt Gloss (25-30 Gloss Units) clearcoat, combine:</div><div><div>100</div><div>Parts LV Matt Effect Clearcoat LG (Low-Gloss)</div></div><div><div>100</div><div>Parts LV Matt Effect Clearcoat SG (Semi-Gloss)</div></div></div> <div>-THEN-</div> <div><div>RTS Mixing</div><div><div>100</div><div>Parts LV Matt Effect Clearcoat LG + SG combination</div></div><div><div>50</div><div>Parts LV Matt Effect Clearcoat Hardener</div></div><div><div>50</div><div>Parts LV Matt Effect Clearcoat Reducer</div></div></div>
<div><div>BY WEIGHT</div></div>	
<div>Equipment</div> <div></div>	<div><div>HVLP or Compliant Spray-Gun</div><div>Set-Up:</div><ul style="list-style-type: none">• 1.3-1.4 mm</div> <div><div>Application Air Pressure:</div><ul style="list-style-type: none">• Consult spray gun manufacturer specifications.• HVLP – 10 psi (<0.7 bar) at the air cap maximum.</div>
<div>Application</div> <div></div>	<ul style="list-style-type: none">• Apply 2 coats allowing for complete flash-off until matt.
<div>Flash-off</div> <div></div>	<div><div>Flash Between Coats at 70°F (21°C)</div><ul style="list-style-type: none">• 15 minutes or until matt.</div> <div><div>Flash at 70°F (21°C) Before Force Curing</div><ul style="list-style-type: none">• 15 minutes</div>
<div>Drying time</div> <div></div>	<div><div>Drying at 140°F (60°C)</div><ul style="list-style-type: none">• 30 minutes</div> <div><div>Shortwave Infrared</div><ul style="list-style-type: none">• 4 minutes low power followed by an 8-minute full power cure</div>

Read complete TDS for detailed product information

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PRODUCT AND ADDITIVES

Product	• LV Matt Effect Clearcoat LG (Low Gloss)	– Item #579636
	• LV Matt Effect Clearcoat SG (Semi-Gloss)	– Item #579693

Hardener	• LV Matt Effect Clearcoat Hardener	– Item #579673
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Reducer	• LV Matt Effect Clearcoat Reducer	– Item #579674
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Additives	• Flex additive is not required for application on plastic parts.
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METHOD OF USE

Suitable substrates



- Lesonal Basecoat WB
- Lesonal Basecoat WB GT
- Properly prepared existing finishes.

Basic Raw Materials



- LV Matt Effect Clearcoat – Polyester and polyacrylate resins
- LV Matt Effect Hardener – Polyisocyanate resin
- LV Matt Effect Reducer – Special solvent and additive blend

Substrate Preparation



Surface Cleaning – Prior to Paint Application

- Clean with Surface Cleaner, Autoprep UltraPrep, or Plastic Surface Cleaner.

Mixing



Desired Gloss Level

All gloss levels between M1-M5 can be achieved by mixing LV Matt Effect Clearcoat LG (Low Gloss) and SG (Semi-Gloss) Clearcoat by weight. The gloss level should be determined by creating a reference spray out.

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Gloss levels will vary depending on the following:

- Basecoat type.
- Application technique.
- Flash time between coats.
- Flash time before bake.
- Surface preparation.
- Temperature and humidity.
- Accuracy of mixing.
- Clearcoat film build – the higher the film build, the higher the gloss.



- For easy mixing, it is suggested to use the mixing function within the AkzoNobel MixitPro, Color Manager computerized mixing system.
- If computerized mixing is not available, use the tables below to mix LV Matt Effect Clearcoat by weight (absolute).



BY WEIGHT

Pint Mixing	M1 Low-Gloss (5-10GU)	M2 (10-15GU)	M3 Matt-Gloss (25-30GU)	M4 (40-45GU)	M5 Semi-Gloss (80-85GU)
LV Matt Effect LG	282	225	141	57	X
LV Matt Effect SG	X	57	141	225	282
LV Matt Hardener	141	141	141	141	141
LV Matt Reducer	141	141	141	141	141



BY WEIGHT

Quart Mixing	M1 Low-Gloss (5-10GU)	M2 (10-15GU)	M3 Matt-Gloss (25-30GU)	M4 (40-45GU)	M5 Semi-Gloss (80-85GU)
LV Matt Low-Gloss	562	450	281	112	X
LV Matt Semi-Gloss	X	112	281	450	562
LV Matt Hardener	281	281	281	281	281
LV Matt Reducer	281	281	281	281	281

Mixing Notes:

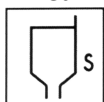
- Gloss units (GU) listed in the tables above are the 60° gloss achieved with each mix.
- Stir LV Matt Effect Clearcoat before use and use a 125-micron paint strainer prior to painting.

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Viscosity When Mixed

- **12-16 seconds** Measured with a DIN #4 viscosity cup at 70°F (21°C).



DIN #4

Potlife when Mixed

- **Product Mix**
• LV Matt Effect Clearcoat Ready to Spray
- 70°F (21°C)**
30 minutes



Spray Gun Set-Up



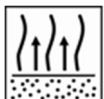
- | Spray Gun | Fluid Tip | Application Pressure |
|--------------------------------|------------|---------------------------------|
| • HVLP Gravity Fed | 1.3-1.4 mm | Max 10 psi (<0.7 bar) at cap |
| • Compliant Gravity Fed | 1.3-1.4 mm | Per manufacturer recommendation |

Application



- Apply 2 coats allowing complete flash-off until matt. For horizontal panels, apply 1 coat and allow to flash followed by a cross coat. This product is designed for total respray or edge to edge application.

Flash Between Coats



- Allow a flash-off time between coats of 15 minutes. Flash time will be dependent on ambient temperature, applied paint wetness/thickness and available air-flow.
 - Do not use any accelerated flashing methods to shorten the flash dry time.

Film Thickness



Using Suitable Application

- 2 Coats will achieve a thickness of 1.6-2.0 mils (40-50 μm) when using suitable application.
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DRYING / CURING TIME

Drying Curing Time



Drying at 140°F (60°C)

- 30 minutes
 - Allow LV Matt Effect Clearcoat to flash until completely matt before force-dry curing.



Drying / Curing with short wave light IR equipment and a surface distance of 20 – 27 inches (50 – 70cm). The object temperature must not reach a temperature above 212°F (100°C).

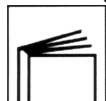
- Allow 15-minute flash-off before infrared curing.
- Cure 4 minutes on low power followed directly by an 8-minute full power cure.



- Drying times are stated at recommended application method, film thickness and object temperature.
- Dry to handle – Following the drying cycle, allow the object to cool down fully to ambient temperature.
 - ✓ To ensure proper performance characteristics, LV Matt Effect Clearcoat should be force cured.

POST-APPLICATION

Recoating



- Recoating matt clears is not recommended without properly sanding and preparing the surface and repeating the repair process.

Polishing & De-Nibbing



- De-nibbing is not recommended as dust inclusion cannot be removed by polishing.

ADDITIONAL INFORMATION

Cleaning of Equipment

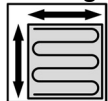


- Clean equipment following local and federal regulations. In compliant localities, use Sikkens LV Cleaning Solvent or high-quality solvent borne gun cleaner. For national rule regions, use Sikkens Cleaning Solvent or high-quality lacquer thinner.

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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. Coverage is given at 1 mil of applied ready to spray paint with 100% transfer efficiency.

- 586 ft² / gallon
- 14.5 m² / liter

VOC / Regulatory Information



Ready to Spray VOC

- LV Matt Effect Clearcoat yields a VOC content of: 2.05-2.07 lb/gal (246-248 g/liter)

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



Stock unopened or used products in approved closed containers with proper labeling. Store in moderate temperatures between 40°F - 95°F (5°C – 35°C). Avoid too much temperature fluctuation. Optimum storage temperature is approximately 70°F (21°C).

- LV Matt Effect Clearcoat Low Gloss 1 year
- LV Matt Effect Clearcoat Semi-Gloss 1 year
- LV Matt Effect Hardener 1 year
- LV Matt Effect Reducer 2 years

CLEANING METHOD AND MAINTENANCE



When:

- When a vehicle is freshly painted, the paint film is at its most sensitive with respect to attack by chemical cleaners and the cleaning process. It is recommended that freshly painted vehicles be allowed a minimum of 7 days before being subjected to any form of chemical cleaning process, ideally extended to 21 days.



Method:

1. Thoroughly rinse the vehicle with clean cold water preferably using a hose or a pressure washer to remove any loose road traffic film and dust particles. The use of a high-pressure steam cleaner is not recommended.
2. The vehicle can then be washed by using a PH neutral based soap and soft sponge to minimize the risk of any type of abrasions. Use a cleaning soap that is PH neutral possibly a good quality wash-n-wax will be ideal for this operation. At all times avoid excessive rubbing of the paint surface as this could lead to the surface increasing in gloss as compared to other areas.
3. Rinse thoroughly with clean cold water preferably using a hose or a pressure washer. Allow the vehicle to dry naturally until only a few water drops are present on the surface. To remove the remaining water drops and to prevent any water marking dry gently using a soft chamois avoiding excessive rubbing of the paint surface.

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Notes:

- Avoid washing the vehicle in direct sunlight and or when the vehicle surface temperature is excessive i.e. above 77°F (25°C).
- Any contamination found on the paint surface should be removed immediately i.e. bird droppings or insects. Thoroughly soak the affected area with clean water preferably with a hose or high-pressure washer to soften the contaminated area and remove gently using a soft sponge and PH neutral soap. For difficult to remove contamination it might be necessary to use a solution designed specifically to remove insects found in car care shops. Care should be taken not to allow any type of solution to dry on the paint surface as this can damage the surface even further. Always follow the manufacturer's instructions on use.
- Automatic car washes and wax cannot be used.
- Do not use rough cloth or paper towel to clean the repair surface.

*** Never use an automatic car wash or any type of brush to wash or clean matt finishes.**

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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 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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